SUSTAINABILITY REPORT 2022

Key Indicators of the Wienerberger Group

Financial Indicators

Corporate Indicators		2020	2021	2022	Chg. in %
Revenues	in MEUR	3,354.6	3,971.3	**4,976.7**	+25
EBITDA	in MEUR	558.0	694.3	**1,026.2**	+48
Operating EBITDA	in MEUR	561.4	693.9	**1,020.9**	+47
EBIT	in MEUR	192.5	420.4	**721.2**	+72
Profit before Tax	in MEUR	148.7	374.3	**688.3**	+84
Free Cashflow	in MEUR	397.3	420.6	**597.7**	+42
Net debt	in MEUR	882.1	1,134.5	**1,079.3**	–5
Gearing	in %	50	53	**44**	–

Non-Financial Indicators [1)]

Non-Financial Indicators - Environment		2020	2021	2022	Chg. vs. base year 2020 in %
Index of specific direct and indirect CO_2 emissions, Scope 1 and 2 (2020 = 100%) [2) 3) 4)]	**in %, based on kg CO_2/quantity of products ready for sale (2020 = 100%)**	**100**	**92**	**87**	**–13.2**
in % based on production volume (2020 = 100%)	Index in % based on production volume (2020 = 100%)	100	107	**120**	+20
Index of specific direct CO_2 emissions, Scope 1 (2020 = 100%) [2) 3)]	in %, based on kg CO_2/quantity of products ready for sale (2020 = 100%)	100	97	**94**	–6
Index of specific indirect CO_2 emissions, Scope 2 (2020 = 100%) [4)]	in %, based on kg CO_2/quantity of products ready for sale (2020 = 100%)	100	95	**93**	–7
Absolute direct and indirect CO_2 emissions, Scope 1 + Scope 2 [4) 5)]	in kilotons	2,649.4	2,659.2	**2,922.9**	+10
Absolute direct CO_2 emissions, Scope 1 [5)]	in kilotons	2,353.3	2,483.5	**2,767.7**	+18
Absolute indirect CO_2 emissions, Scope 2 [4)]	in kilotons	296.2	175.6	**155.2**	–48
Index specific energy consumption [6)]	in %, based on kg CO_2/quantity of products ready for sale (2020 = 100%)	100	99	**97**	–3
Absolute energy consumption [6)]	in gigawatt-hours	7,431.2	7,992.7	**9,482.9**	+28
Implemented Biodiversity Action Plan	**Number of sites with biodiversity action plan**	**0.0**	**5.0**	**67.0**	
Specific water use	in m^3/ton	–	0.243	**0.226**	–7
Waste	in kilotons	104.6	126.7	**105.8**	+1

1) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included for the 2022 reporting year (for details, see page 53). // 2) Direct specific CO_2 emissions (Scope 1) refer to CO_2 emissions from raw materials (in ceramic production) as well as the fuel emissions of the entire Wienerberger Group. // 3) The calculation excluded CO_2 emissions from biogenic input materials. // 4) The calculation of indirect CO_2 emissions from purchased electricity is based on the current CO_2 emission factors of Corporate Procurement. // Direct CO_2 emissions (Scope 1): ETS and non-ETS. ETS source: EU Transaction Log (EUTL). Non-ETS: Calculation in accordance with national rules (Switzerland) or on the basis of EU standard emission factors. For plants in the USA CO_2 emissions from the production process are also reported. Including CO_2 emissions from biogenic input material. Quantities from Wienerberger's CO_2 monitoring corresponding to national rules. // 6) Total energy consumption includes energy consumed in production, but excludes administration (except in a few individual cases where separate invoicing is not possible).

General remarks applying to all parts of the 2022 Sustainability Report:
All non-financial indicators and their rates of change are calculated on the basis of non-rounded values. // Electronic data processing may result in rounding differences. // Some of the differences vs. the previous year are in the decimal range. // The calculation methods used and the reporting scope are explained in the respective chapters of the 2022 Sustainability Report.

Non-Financial Indicators - Social		2020	2021	2022	Chg. in %
Ø Employees as at 31.12. [1) 2)]	Full-time equivalents (FTEs)	16,618.6	17,624.1	**19,078.4**	+8
Employees as at 31.12. [3)]	Headcount	16,446.0	16,650.0	**18,482.0**	+11
New entrants [3)]	Headcount	1,886.0	2,716.0	**3,288.0**	+21
Employee turnover [4)]	in %	11	11	**14**	+25
Ø Training hours / employee [3) 5)]	**in hours and per year**	**10.6**	**13.1**	**16.3**	**+25**
Percentage of women [3)6)]	in %, relative to headcount	15	15	**16**	+5
Percentage of women in senior management [3)]	**in %, relative to headcount**	**13**	**15**	**15**	**–1**
Percentage of women in white-collar positions [3) 7)]	**in %, relative to headcount**	**32**	**33**	**34**	**+3**
Accident frequency [8)]	Number of occupational accidents / number of hours worked x 1,000,000	5.4	4.4	**4.1**	–6
Accident severity [8)]	Accident-related sick-leave days / number of hours worked x 1,000,000	177.6	180.0	**180.1**	+0
Number of fatal occupational accidents	Number within the Wienerberger Group	1	1	**0**	–100
Ø Sick-leave days / employee [9)]	in days	10.8	11.5	**12.3**	+6
Housing units for people in need [10)]	**Number per year**	**–**	**325.0**	**254.0**	

1) Agency and temporary workers are included from their first hour of work at Wienerberger. // 2) Including the four companies newly acquired in 2022 // 3) Employees directly employed by Wienerberger. // 4) Ratio of persons leaving the Wienerberger Group (termination by employee or employer or mutually agreed termination) to average number of employees (headcount) in permanent employment in the reporting year, excluding temporary and agency workers as well as workers under term contracts; persons retiring or on leave do not count as persons leaving the company. Excluding North America; due to special national legal provisions the indicators are not comparable to those of other business units. // 5) Internal and external initial and further training measures per employee (headcount). International training events are not included. // 6) Share of women among all employees except in production. // 7) Share of women in administration and sales (including marketing and inventories). // 8) Including temporary and agency workers (from their first hour of work at Wienerberger) and employees under term contracts // 9) Accident-related and non-accident-related sick-leave days. Agency and temporary workers are included in data on accident-related sick-leave days. Data on non-accident-related sick-leave days include all employees directly employed by Wienerberger. Excluding North America; due to special national legal provisions the indicators are not comparable to those of other business units. // 10) Housing unit for humanitarian projects: Buildings: Construction/renovation of residential and non-residential buildings. One housing unit = one single-family house / one apartment / a predefined surface in a non-residential building // Infrastructure (drinking-water or wastewater connection): Construction/renovation: connection of four housing units to drinking water supply or wastewater disposal / connection per predefined surface in a non-residential building = one housing unit.

Key figures on our products and system solutions		2020	2021	2022	Chg. in %
Percentage of products designed for reuse or recycling in total revenues	**in %**	**–**	**–**	**98**	**0**
Percentage of innovative products in total revenues	in %	33	31	**32**	+2

OUR SUSTAINABILITY PROGRAM 2023 AND PROGRESS 2022

We are clearly committed to achieving climate neutrality and actively support the European Green Deal. The highest possible level of transparency of our progress in the fight against climate change is important to us. Alongside long-term sustainability targets, we therefore also set ourselves ambitious short- and medium-term targets. However, in order to adequately address all ecological, social, and societal challenges, we have defined our Sustainability Program 2023.

	Topics	Targets 2023	Progress 2022
Environment	 **Decarbonization**	**15%** less CO_2e emissions compared with 2020	**13.2%** less CO_2e emissions compared with 2020
	 **Circular Economy**	**100%** of new products designed to be reusable or recyclable	**98%** of new products have been designed to be reusable or recyclable
	 **Biodiversity**	**Biodiversity Action Plans** for all our production sites in place	**67** production sites with implemented Biodiversity Action Plans
Social	 **Diversity**	**>15%** female employees in senior management **>30%** female employees in white-collar positions	**15%** female employees in senior management **34%** female employees in white-collar positions
	 **Training and Development**	**10%** more training hours per employee compared with 2020	**53%** more training hours per employee compared with 2020
	 **CSR Projects**	**200** housing units per year built with our products for people in need in our local markets	**254** housing units built
Governance	 **Governance Standards**	Committed to the highest national and international **governance standards**	**A consistent focus on:** > Business strategy > Board diversity and compensation > Executive compensation > Succession management

WIENERBERGER AT A GLANCE

Wienerberger at a Glance

Company Profile

Wienerberger is a leading international supplier of smart solutions for the entire building envelope in new build and renovation as well as for infrastructure in water and energy management. Currently, we have 216 production sites operating in 28 countries and we export our products to international markets. We are the worldwide market leader in bricks and the number-one producer of clay roof tiles in Europe. Moreover, we are among the leading suppliers of pipe systems in Europe and concrete pavers in Central and Eastern Europe. Through the acquisition of Meridian Brick, Wienerberger became also the leading provider of façade solutions in the USA and Canada.

Wienerberger is a free float company with 100% of its shares being publicly traded. For details on the shareholder structure of Wienerberger, please refer to pages 28 and 246 of this Annual Report.

Our 19,078 employees are the foundation of our organization. Their excellent cooperation is based on a firmly rooted, living corporate culture that is characterized by shared values – trust, respect, passion, and creativity.

Corporate Mission & Value Proposition

We improve people's quality of life and create a better world for generations to come by providing innovative and sustainable solutions for new-build, renovation, and infrastructure projects.

Our vision is to be the most highly regarded provider of sustainable building materials and infrastructure solutions and the preferred employer in our markets.

The primary goal of our entrepreneurial activities is to grow sustainably and continuously and to achieve our financial targets, all in compliance with our strict and ambitious ESG[1] targets.

Further information on our corporate mission and our value proposition is contained in this Annual Report on pages 8-9.

Our Corporate Strategy

Over the past ten years, Wienerberger has gone through a process of complete strategic reorientation: we have evolved from a volume- and production-driven producer of standard products for the building envelope into a full-range provider of innovative, smart system solutions for energy-efficient housing construction, renovation, and infrastructure. To further advance this strategic transformation, Wienerberger is investing continuously in improving its product range and broadening it through the inclusion of digital services.

At present, Wienerberger's durable products and smart system solutions are used for the construction and renovation of buildings and even entire city quarters. The product portfolio now ranges from roof and wall systems to façade solutions and building services and facilities to innovative pipe systems for safe and secure energy and water supply, as well as systems for rainwater management and wastewater disposal.

For Wienerberger, organic growth through innovation and digitalization, continuous operational excellence measures, mergers and acquisitions, together with portfolio optimization, are the most important pillars of sustainable growth, as successfully pursued throughout 2022.

1) ESG: Environmental, Social, Governance

In all these accretive transactions, Wienerberger is focused not only on aligning its entrepreneurial activities with the Group's sustainability targets, but also on responding to the major challenges of our time through e.g. innovation, automation, and prefabrication. These include, for example, the impacts of climate change, the shortage of skilled labor, and the question of how to provide sustainable and affordable housing for all.

All our entrepreneurial activities are subject to clearly defined and ambitious ESG criteria and are aimed at achieving our challenging targets by end of 2023:

- 15% reduction of Wienerberger's CO_2e emissions (Scope 1 and Scope 2), compared to 2020.
- 100% recyclability or reusability of all new Wienerberger products.
- Full implementation of the Wienerberger Biodiversity Program at all of our production sites.

The Wienerberger corporate strategy, our priorities, and the interrelation between our financial and non-financial criteria are described in-depth in this Annual Report on pages 12-14.

Our Business Units and Product Groups

With its innovative solutions, Wienerberger has evolved into a provider of system solutions in building materials and infrastructure. The objective of achieving greater customer proximity is reflected in the adaptation of our product groups to this development.

All our efforts have always been focused on improving our solutions for the benefit of our customers. To this end, we are pursuing our own product developments in group-wide research centers; at the same time, we continuously analyze potential value-creating acquisitions in order to explore new technologies and applications and extend our geographic market coverage.

Wienerberger Building Solutions

In our European markets, the Wienerberger Building Solutions Business Unit (WBS) offers a broad range of innovative products and system solutions for the building envelope and an integrated product mix for outdoor applications. WBS comprises our business in all Wienerberger and Semmelrock brands. The Business Unit also includes our clay block production site in India.

Our roof tiles, clay blocks, and facing bricks are essential innovation drivers for energy-efficient, climate-resilient, and affordable system solutions for the building envelope. Our concrete pavers represent high-quality solutions for outdoor applications.

Wienerberger Piping Solutions

Wienerberger Piping Solutions (WPS) provides our European markets with solutions for all current challenges, such as water management in the context of climate change or increasing urbanization. The WPS portfolio comprises our business in Pipelife plastic pipes and Steinzeug-Keramo ceramic pipes.

The product portfolio of WPS includes system solutions for in-house installation, drinking-water supply, irrigation and drainage, wastewater and rainwater management, energy supply and data transmission, as well as special products for industrial applications. For the purposes of our strategic development, we group these applications in two priority areas: in-house solutions and infrastructure applications (including water management for agriculture).

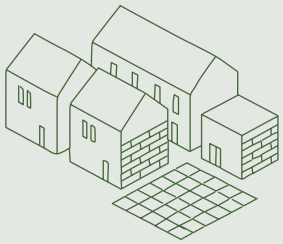
North America

The main focus of our business in the USA and Canada is on innovative products and system solutions with facing bricks, concrete and calcium silicate products, and plastic pipes.

The core properties and applications of these products in North America are comparable to those of façade products of Wienerberger Building Solutions (WBS). This also holds for plastic pipes produced by the North America Business Unit and by Wienerberger Piping Solutions (WPS).

WIENERBERGER
CORE APPLICATIONS OF OUR PRODUCTS AND SYSTEMS

Solutions for the Building Envelope and Concrete Pavers



- Single- and two-family homes
- Multi-family homes
- Non-residential construction
- Public spaces
- Gardens
- Pavements and parking areas

✓ **New build**
✓ **Renovation**
✓ **Repair**
✓ **Modernization**

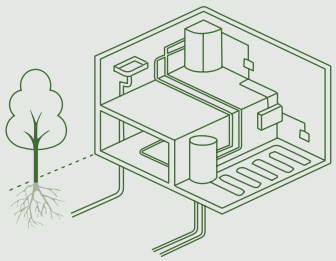
Decision-makers, customer groups

Architect, designer, public-sector client, private investor, building contractor, processor, distribution partner, dealers

Product users

Users of buildings, public at large

In-house-Solutions



- Electrical and heating installations
- Drinking water and wastewater
- Garden irrigation
- Irrigation systems and storage of water

✓ **New build**
✓ **Renovation**
✓ **Repair**
✓ **Modernization**

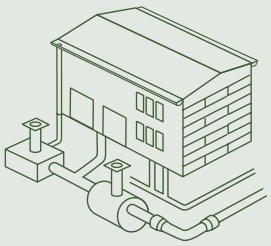
Decision-makers, customer groups

Designers, electricians, plumbers, building contractors, processors, distribution partners, dealers

Product users

End customers, users of buildings

Infrastructure Solutions



- Water management and wastewater disposal
- Energ supply
- Data transfer
- Special products for industry

✓ **New build**
✓ **Renovation**
✓ **Repair**
✓ **Modernization**

Decision-makers, customer groups

Investors, public-sector clients, designers, building contractors, processors, distribution partners, dealers, private clients

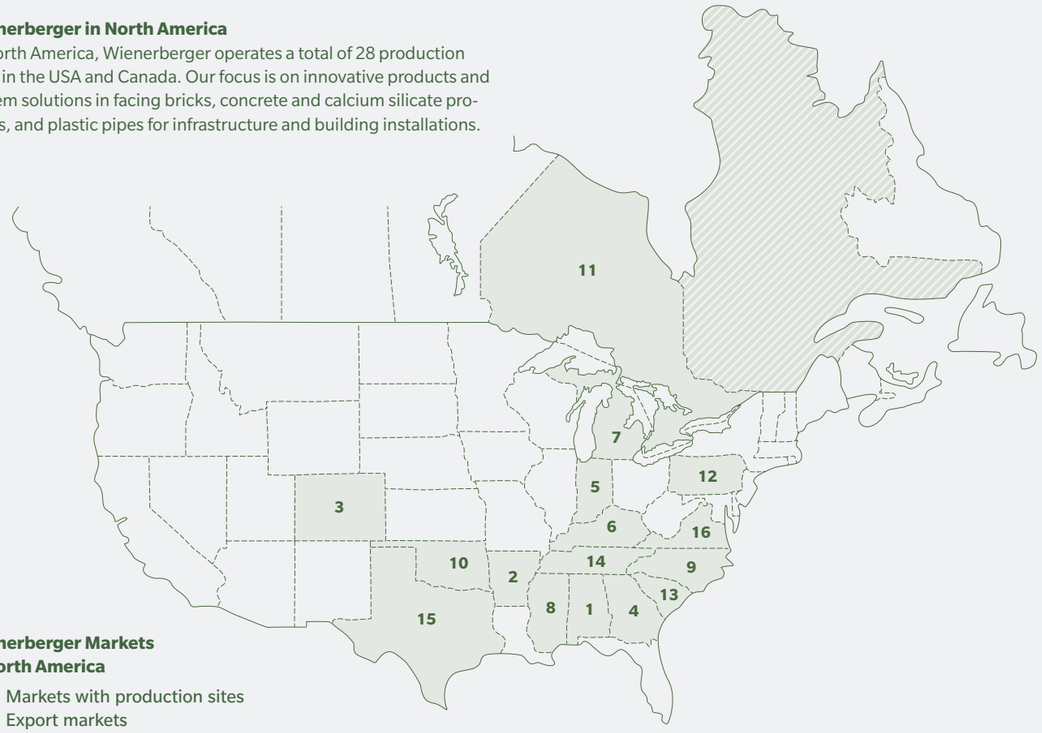
Product users

End customers, users of buildings, public at large, network operators

WIENERBERGER
PRODUCTION SITES

Wienerberger is a leading international provider of smart solutions for the entire building envelope for new residential housing and for renovation as well as infrastructure solutions for water and energy management. Currently, we have 216 production sites in operation in 28 countries and we export our products to markets all over the world. We are the world's leading brick manufacturer and hold top market positions in clay roof tiles, pipe systems, and concrete pavers.

Wienerberger in North America
In North America, Wienerberger operates a total of 28 production sites in the USA and Canada. Our focus is on innovative products and system solutions in facing bricks, concrete and calcium silicate products, and plastic pipes for infrastructure and building installations.



Wienerberger Markets in North America
- Markets with production sites
- Export markets

Number of production sites
- 1 Facing Bricks
- 1 △ Calcium Silicate Products
- 1 Concrete Products
- 1 ○ Plastic Pipes

		▭	△	▬	○
1	Alabama	1			
2	Arkansas				1
3	Colorado	1			
4	Georgia	2	1		
5	Indiana	1			
6	Kentucky	1			
7	Michigan	1			
8	Mississippi	1			

		▭	△	▬	○
9	North Carolina	2			
10	Oklahoma	2			
11	Ontario	2	1		
12	Pennsylvania	1			
13	South Carolina	1			
14	Tennessee	1			1
15	Texas	5			1
16	Virginia	1			

Status 31/12/2022

Wienerberger in Europe
In Europe, we provide innovative system solutions for the entire building envelope based on our broad range of clay blocks, facing bricks, roof tiles, and pavers. Our product mix also includes plastic pipes and ceramic pipes for solutions in water management, energy supply and in-house installations. We are represented in 25 countries with a total of 187 production sites.

Wienerberger in India
In the Indian market, the birthplace of mudbrick architecture, we operate one production site for clay block solutions.

Wienerberger Markets in Europe
- Markets with production sites
- Export markets

Anzahl der Standorte
- 1 Clay Blocks
- 1 Facing Bricks
- 1 Roofing Systems
- 1 Pavers
- 1 Plastic Pipes
- 1 Ceramic Pipes
- 1 Digital Products & Solutions

		▬	▭	◢	▪	○	○	◆
1	Belgium	3	8	2		3	1	
2	Bulgaria	1			1	1		
3	Denmark		5					
4	Germany	13	3	5	1	1	1	
5	Estonia		1			1		
6	Finland		1			4		
7	France	4	1	3		1		
8	United Kingdom		9	7		1		
9	Ireland					2		
10	Italy	4						
11	Croatia	1		1	1	1		
12	Netherlands	1	10	3	5	3		2
13	North Macedonia			1				

		▬	▭	◢	▪	○	○	◆
14	Norway					4		
15	Austria	7		2		1		
16	Poland	7		1	5	2		
17	Romania	4			3			
18	Russia	2						
19	Sweden					2		
20	Serbia			1				
21	Slovakia	2			1			
22	Slovenia	1		1				
23	Czech Republic	7		2	1	2		
24	Turkey					2		
25	Hungary	5		2	2	1		
26	India	1						

Status 31/12/2022

VALUE CREATION CERAMIC PRODUCTS AND SYSTEMS

BUILDING SOLUTIONS AND PIPES

Sourcing and Distribution

Water

Packaging material

Energy

> Extraction from own clay pits, purchase of clay, additives, aggregates and alternative binders
> Transport of raw materials to the plants
> Recultivation of clay pits

Production

Reuse of energy

Use of waste heat

Preparation > Shaping > Drying > Surface - treatment > Firing/ Sintering

Finishing > Packaging

Delivery

Material recovery / Recyling of production scrap

Reusable/recyclable products

Urban Mining

End of Service Life

Internal and external recycling, recovery

Reuse e.g. roof tiles

Use Phase

Building Solutions and Pipes

- ✓ Roof tiles
- ✓ Clay blocks
- ✓ Facing bricks
- ✓ Clay pavers
- ✓ Ceramic accessories
- ✓ Ceramic pipes
- ✓ Accessories

VALUE CREATION PLASTIC PIPES AND SYSTEMS

Sourcing and Distribution

Purchase of refined raw material (based on oil and salt): PE, PP, and PVC

Packaging material

Purchase of secondary raw material

Transport of raw materials to the plants

Energy

Water

Reusable/recyclable products

Urban Mining

Produktion

Silo

Pipes

Extrusion – Heating, molding, cooling

Fittings

Injection molding

3D printing

Recyling of production scrap

Prefabricated products

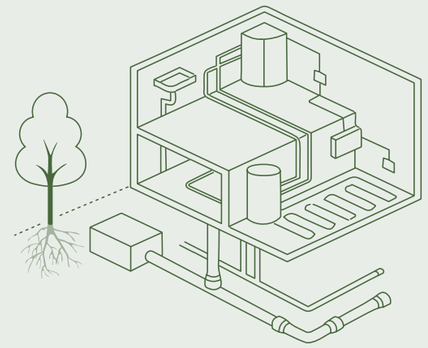
Confectioning, e.g. cutting to size

Packaging

Delivery

End of Service Life

Internal and external recycling, recovery



Use phase

In-house solutions

- ✓ Hot & cold water
- ✓ Heating & cooling
- ✓ Electro installations

Infrastructure solutions

- ✓ Water & gas systems
- ✓ Waste water and rain water systems
- ✓ Cables (outdoor area, e.g. for electricity)

VALUE CREATION CONCRETE PRODUCTS

CONCRETE PAVERS AND SLABS
AND DESIGN ELEMENTS

Sourcing and Distribution

> Purchase of cement, sand, gravel, aggregates (recycled) and alternative binders and fillers
> Transport of raw materials to the plants

Energy

Water

Packaging material

Production

Mixing > Moulding + Pressing > Surface treatment > Curing

Packaging > Delivery

Material recovery / Recycling of production scrap

Reuse

Reusable/recyclable products

Urban Mining

End of Service Life

Internal and external recycling, recovery

Maintenance and cleaning phase for a longer service life

Use Phase

For private, commercial, and public applications:

- ✓ Concrete pavers
- ✓ Concrete slabs
- ✓ Concrete roof tiles
- ✓ Steps
- ✓ Edgings
- ✓ Borders and palisades
- ✓ Fences and walls stones, slope stabilizer blocks

Value Creation of Wienerberger Products and System Solutions

With its innovative and sustainable solutions for new-build, renovation, and infrastructure projects, Wienerberger improves people's quality of life and creates a better world for generations to come. In the primary areas of application of our products and systems we design sustainable solutions for the building envelope and paved surfaces, as well as in-house and infrastructure solutions. Based on the process of value creation, they can be classified as follows:

- Ceramic products and systems
- Plastic pipes and systems
- Concrete products

Detailed information on how Wienerberger product and system solutions contribute to global challenges such as climate protection and adaptation to climate change (page 68-117), circular economy (page 118-126), and biodiversity (page 127-136) is available in the corresponding chapters.

Value creation of ceramic products and systems

Use phase – Building solutions
Wienerberger's building solutions are designed for energy-efficient and future-proof building construction. Our roof tiles, clay blocks, facing bricks, and ceramic pavers are used for single-family homes and multi-story residential buildings as well as non-residential buildings, such as office buildings, hospitals, schools, and kindergartens.

Use phase – Ceramic pipes
Ceramic pipes (clay pipes) and accessories produced by Wienerberger are ideally suited for cost-effective, safe, and sustainable wastewater disposal. Sturdy, environment-friendly, and requiring little maintenance, they prove their merits not only in municipal and industrial applications, but also in residential buildings as well as commercial and public buildings.

End of service life
Brick products have a very long service life of at least 100 years and have a great potential for reuse. Ceramic products can also be recycled internally and externally or reused for other applications. In this context, we are intensively exploring the possibility of recycling and the use of ceramic construction debris, which can either be returned directly into the brick production process or used for the development of new applications. Wienerberger sees great potential in "urban mining", a concept aimed at saving resources through the recovery and reuse of secondary raw materials from the so-called anthropogenic stock (see also chapter "Circular Economy" on page 118).

Sourcing
The most important raw materials for Wienerberger's ceramic products and systems are clay, additives, and aggregates, as well as alternative binders. Clay is either extracted from our own clay pits or procured from external suppliers and transported by them to the respective Wienerberger plants. Other raw materials, as well as packaging material, are also procured externally. Our plants are supplied with energy and water for the production process.

Production
Clay is prepared by crushing and grinding. After interim storage of the prepared clay in the mud house, the material is formed through extrusion in forming dies or pressed into molds. Once cut to size, the products are placed on pallets and transported to the dryer.

The drying process serves to extract moisture from the clay and prepare the products for firing. Certain ceramic products undergo surface treatment before firing. The products are hardened through firing. Although mostly thermal energy is used for drying and firing, the use of electricity for these purposes is gaining in importance. After finishing, the ceramic products are packaged and delivered to the customers.

Value chain of plastic pipes and systems

Use phase
Plastic pipes and systems produced by Wienerberger are the arteries of reliable, resource-efficient water management and energy supply. In-house solutions for residential and non-residential buildings include electrical installations, heating and cooling systems, hot and cold water supply systems, wastewater and rainwater systems, as well as systems for irrigation and water storage. Infrastructure solutions include gas, water, wastewater, and rainwater systems, as well as solutions for energy supply, data transmission, and special industrial applications.

End of service life
Plastic pipes can be recycled internally and externally. Within the framework of the Circular Plastics Alliance, Wienerberger supports all efforts to increase the use of secondary raw materials in Europe to at least 10 million tons per year by 2025.

Sourcing
Raw materials for the production of plastic pipes and systems, such as PE, PP, and PVC, as well as secondary raw materials and packaging material, are procured from our suppliers and transported by them to the respective Wienerberger plants. Our plants are supplied with energy and water for the production process. Water for cooling purposes is drawn from surface waters (rivers, lakes, and the sea in Scandinavia) and subsequently returned to them in accordance with the legal provisions in effect.

Production
Plastic granulates are mixed and heated in an extruder to produce a melt. The heated plastic melt is then pressed through a die for shaping. Subsequently, the pipe is cooled in water for curing of the plastic material. The continuous pipe strand is then cut to size according to requirements.

Another production method is injection molding. Raw materials for pipe accessories are heated and melted before they are formed in molds. Electricity is the main source of energy used in the production of plastic pipes and systems. After cutting to size, the plastic pipes and system components are packaged and delivered to the customers.

Value chain of concrete products

Use phase
Concrete products made by Wienerberger, such as concrete roof tiles, concrete pavers and slabs, steps, edgings, borders and palisades, fences, wall stones and slope stabilizer blocks, are used for private, commercial, and public applications. These include public squares, public gardens, roadways, and parking lots.

End of service life
Wienerberger's concrete products are suited for reuse as well as internal and external recycling.

Sourcing
The most important raw materials for the production of Wienerberger concrete products are cement, sand, gravel, aggregates, and alternative binders and filling agents. These are procured from suppliers as primary or secondary raw materials (externally recycled materials) and transported to the respective Wienerberger plants. Energy, water, and packaging materials are also procured for the production process. For Wienerberger concrete products, so-called "urban mining", i.e. the recovery and use of secondary raw materials from the so-called anthropogenic stock, is gaining in importance as a source of secondary raw materials (see also chapter "Circular Economy", page 118).

Production
Mixing the raw materials is the first step in the production of concrete products, followed by shaping through pressing or casting. For certain products, various surface finishing, such as washing, grinding, blasting, or coating, is applied before or after the drying process. The cured, finished products are then packaged and delivered to our customers.

Stakeholder Management

As a responsible member of society, Wienerberger makes every effort to fully understand the needs of its stakeholders. Wienerberger also takes the concerns of its stakeholders into account in the elaboration of its corporate strategy. Our stakeholders include our employees, customers, and business partners, such as planners and developers, investors, analysts and banks, local residents and local authorities, suppliers, political decision-makers and representatives of the public administration, regulators, organized interest groups, research institutions and universities, media, and civil-society organizations (NGOs).

Expectations

Wienerberger's stakeholder groups are extremely diverse and have different needs, interests, and concerns. Different stakeholder groups are therefore addressed by different departments or organizational units within Wienerberger, and our communication instruments vary accordingly: In addition to personal meetings, we communicate and provide information through regular newsletters and information brochures, Internet-based information platforms, and information events.

Our employees are kept informed of corporate targets and strategies as well as current developments and measures in a timely and comprehensive fashion, the aim being to provide a motivating work environment and stimulate personal initiative. We support our employees' individual career development in numerous ways, for instance through training programs.

Our customers and business partners – end customers as well as municipalities, developers, design engineers, merchants, and contractors – are mainly interested in high-quality, durable, and affordable products for buildings that ensure a safe, healthy, and comfortable environment. To a growing extent, our customers and business partners take an interest in sustainable building construction as well as energy-efficient and energy-neutral solutions, and expect us to supply products that are reusable or recyclable.

Capital market participants – investors, analysts, and banks – are interested, among other factors, in the company's sustainable performance. Timely communication and a regular exchange of information with the Managing Board as well as comprehensive and transparent external reporting are of crucial importance for them.

Suppliers are particularly interested in fair business relations. Wienerberger's interest lies in reliable long-term sourcing of the required resources, raw materials, and products in accordance with the criteria of sustainability. Within the framework of our business relations, we therefore make sure that our suppliers comply as well with our ecological and social standards, which we explicitly communicate to them.

Local residents, local authorities, and civil-society organizations (NGOs) are another important group of stakeholders. Every production site is also a neighbor, a local employer, and a taxpayer. Good and trusting relationships not only with neighbors, but also with local government authorities, associations, and citizen initiatives are essential for a stable production environment.

Policymakers determine the legal framework and thereby exert a major influence on Wienerberger's entrepreneurial environment. For quite some time, we have been publicly advocating the provision of affordable and social housing in Europe. Moreover, we are trying to convince policymakers of the need for state aid for renovation measures and the construction of water supply and wastewater disposal networks. It is an essential component of our success that we address the trends and developments in the individual markets, such as increased urbanization, and offer decision-makers practical, sustainable and, above all, affordable solutions for new construction and renovation of residential buildings as well as essential infrastructure components, such as supply and disposal systems or the paving of outdoor surfaces.

Research institutions and universities are important partners with which Wienerberger maintains close contacts and engages in regular exchange. Wienerberger itself operates several research facilities in Europe specializing in various fields of production.

The media expect targeted and timely information on strategic developments and current issues. Wienerberger, for its part, expects to receive fair media coverage.

Stakeholders & Communication Instruments

Primary Stakeholders

Our employees

- Internal communication channels
- Trainings

Our customers and business partners

- Wienerberger brand
- Environmental product declarations (EPDs)
- Sales team
- Digital platforms
- Online channels e.g., homepage and social media
- Well-trained employees at the service center

Capital market participants

- Annual and quarterly reports
- Presentations
- Mailings on current developments
- Road shows
- Investor conferences
- Personal conversations
- Capital Markets Day

Suppliers

- Monitoring of suppliers with regard to terms and conditions, non-financial and financial performance
- Exchange in the course of our on-site supplier audits
- Cooperation based on suppliers' ESG rating results (plans for optimization)
- Implementation of the Supplier Code of Conduct
- Exchange on and cooperation in the fields of decarbonization, use of secondary raw materials, and the joint development of innovative products and system solutions

Community

Local residents, communities, and public authorities

- On-site dialogue with stakeholder committees
- Informal exchanges

Research institutions and universities

- Research cooperation

Political level

- Membership in European and national representative bodies and platforms
- Participation in technical committees

Media

- Press releases and press conferences
- Media enquiries
- Interviews

Stakeholder dialogues

We attach particular importance to open, continuous, and target-group-oriented dialogue, as it promotes mutual understanding of each other's interests, expectations, and goals. Wienerberger therefore conducts regular stakeholder dialogues. The aim of these dialogues is to take a deep dive into the key issues and aspects from a stakeholder perspective in order to identify risks and opportunities for the company at an early stage. Moreover, we want to better understand what moves social groups and what they expect from us. Acting upon the CEO's request, Wienerberger therefore updated its materiality analysis in 2020, including internal and external stakeholders. A first step of the materiality analysis consisted in identifying and weighting the stakeholder groups that are of material importance for Wienerberger (see page 31). The results of the materiality analysis were presented to the Managing Board and the Supervisory Board of Wienerberger and have been incorporated into the Wienerberger Sustainability Program 2023. They are an integral part of our corporate strategy.

The Chairman of the Wienerberger Managing Board (Chief Executive Officer, CEO) communicates with these stakeholder groups through various channels. These include, for example, communication with our employees and exchanges with capital market participants, e.g. within the framework of roadshows, investor conferences, communication with financial media, or the Capital Markets Day. As part of his podcast, the CEO of Wienerberger conducts interviews with representatives of various stakeholder groups on current topics. He also exchanges views with politicians and the Vienna Stock Exchange at high-level events and appears in the media in the course of interviews. Furthermore, the Chairman of the Wienerberger Managing Board of Wienerberger engages in an exchange with CEOs of other large companies in the course of panel discussions, including on ESG topics.

In the years to come, Wienerberger will continue its direct dialogue, in particular with its core stakeholder groups.

ESG stakeholder dialogues in 2022
In 2022, Wienerberger conducted ESG dialogues with selected groups of stakeholders. The purpose of these dialogues was to follow up on the 2020 materiality analysis and focus on the challenges currently faced by our stakeholders in the field of ESG. Similar ESG dialogues were already conducted in 2021, the results of which were presented in the 2021 Annual Report.

These ESG dialogues were coordinated by the Corporate Sustainability & Innovation Department and the Management Teams of eleven countries: Austria, Belgium, Bulgaria, the Czech Republic, France, Germany, Hungary, Italy, the Netherlands, UK, and the USA. A total of 46 interviews were conducted in the course of the year.

Wienerberger focused on the following stakeholder groups: real estate developers, designers & architects, investors, and municipalities. This choice was based on the need to obtain an in-depth understanding of the legal implications of the European Green Deal for these stakeholders.

The interviews were supported by a structured questionnaire, but encouraged open questions and discussions. The ESG dialogues were particularly well received by Wienerberger's stakeholders, who welcomed the opportunity to engage in personal conversations and an exchange of ideas on new ESG trends and innovations in this area.

The following topics were dealt with in the course of the 46 interviews:

- Energy efficiency
- ESG training
- Waste management (on production and buildings sites)
- Water management (especially rainwater management)
- Circularity with a focus on recyclability of construction waste and recyclability & reuse of products
- Availability of ESG data
- Transparency and availability of information
- Innovative products that enable a reduction of maintenance costs of buildings

In the following, we summarize some of the conclusions drawn from the 2022 stakeholder dialogues:

Real estate developers advocate closer cooperation with building material producers, as they want to obtain a good overview of the products under consideration and understand their sustainable characteristics. The affordability of sustainable products was raised in the course of the discussion and stakeholders emphasized that their prices should at least be the same as that of comparable "standard" products. This would support investment decisions in favour of sustainability. Energy efficiency and circularity in building construction are high priorities among this group of stakeholders, especially given the current situation in the EU and impact of energy prices.

For **designers and architects**, circularity remains a topic of high priority, as it was in 2021. Their interest in the sustainable properties of bricks as a building material was reflected in the request of specific information and training on Wienerberger's sustainable products available on the market. Overall, this group perceives a need for more information, which Wienerberger is making every effort to meet by presenting its products as transparently as possible. In the course of the discussions, it became clear that sustainable products should result in financial savings for the end client, e.g. in the form of a reduced energy bill. Designers and architects also mentioned the regulatory pressure they are exposed to and the importance of working with building material producers capable of integrating the new standards in their product development.

Investors expressed a special interest in sustainable investment policies and key performance indicators (KPIs) used as a basis for ESG ratings. The following KPIs were perceived as key for our investors: GHG emissions (Scopes 1, 2, and 3), circularity (product life cycle assessment and waste management), water stress, biodiversity, health and safety, governance, business ethics, and product design. Conversations on Scope 3 emissions showed that investors expect to obtain such information from producing companies. On the topic of EU Taxonomy, investors looked into the results disclosed by Wienerberger and acknowledged the methods used in 2021 to establish the taxonomy eligibility of Wienerberger's economic activities. These discussions with our investors enable us to better understand and meet their expectations in terms of reporting.

Local authorities emphasized the topic of energy efficiency of (public and private) buildings and the availability of innovative and sustainable products. Municipalities stated that companies like Wienerberger play a key role in enabling the energy transition by providing solutions to improve the energy efficiency of buildings, both for municipalities and for private individuals. Moreover, they expect innovative solutions for the creation of heat supply networks and products designed for the infiltration of road run-off water. They expressed their appreciation of this exchange of information on the options available. The request for more technical training on our sustainable products, reflecting the increasing use of this type of products on the market, was also noted.

Overall, two priorities were identified in the course of the 2022 ESG dialogues. First of all, the urgency of a transition has become evident in the market. All actors are taking specific actions and require support on this journey from building material companies like Wienerberger. The second priority is the explicitly expressed need for external ESG training. Interest in sustainability in general and the use of Wienerberger's sustainable products in particular is high in the building industry. The topics discussed with investors were more specific and granular than in 2021 and conveyed a stronger sense of urgency. However, the topics raised in the 2021 ESG dialogues remain as relevant as before.

Wienerberger will continue this direct and regular exchange with its stakeholders in the year to come. These ESG dialogues play a central role in providing an outside-in perspective of our ESG development.

Corporate Governance at Wienerberger

As a listed company with international operations, Wienerberger is committed to the strict principles of good corporate governance and transparency as well as to the continuous further development of an efficient corporate control system. We are convinced that managing the Wienerberger Group responsibly and with long-term goals in mind is one of the crucial prerequisites for a sustainable increase in enterprise value. In the pursuit of this target, we always act within the framework of Austrian law, the Austrian Corporate Governance Code, our Articles of Association, the rules of procedure of the Boards of the company, and our internal policies.

In 2022 Wienerberger was once again in full compliance with the rules of the Austrian Corporate Governance Code, including its R Rules. The activities of the reporting year relating to corporate governance are described in detail in the 2022 Corporate Governance Report, starting on page 194.

Information on compliance and the fight against corruption is contained in the chapter "ESG: Governance & Management Approach", starting on page 35.

ESG criteria for variable remuneration

Variable remuneration at Wienerberger is composed of a short-term remuneration component for Managing Board members (Short-Term Incentive, STI) and a long-term component (Long-Term Incentive, LTI), which all members of the Managing Board and top-level executives of the Group are entitled to. While the STI is primarily linked to financial indicators, the LTI is intended to enhance the motivation of Managing Board members and top executives to focus more intensively on sustainably increasing the enterprise value and to identify more strongly with the company's long-term planning and goals. As laid down in the remuneration policy, two thirds of the targets for the LTI are financial in nature, while one third of the targets relate to ESG.

Variable Managing Board remuneration
The variable components of remuneration for the members of Wienerberger's Managing Board are designed to create incentives for the achievement of key corporate targets and a sustainable increase in enterprise value.

The remuneration policy devised by the Supervisory Board ensures a high degree of transparency by linking the targets to clearly defined indicators of earnings and profitability as well as precisely measurable ESG criteria. Particular attention is paid to ensuring the greatest possible target congruency between shareholders' interests and Managing Board remuneration. On this basis, the long-term remuneration component is primarily linked to the sustainable increase of the enterprise value, taking into account key financial indicators (relative total shareholder return, return on capital employed after tax), as well as clear environmental, social, and governance (ESG) targets. The latter are measurable criteria applied to assess the performance of the Chairman of the Managing Board of Wienerberger AG. The performance level is assessed on the basis of the non-financial indicators collected for the reporting year and validated by an external auditor.

In accordance with the Sustainability Program 2023, the following environmental, social, and governance (ESG) targets apply to the so-called Special LTI for the Chairman of the Managing Board of Wienerberger AG for the business years 2021 to 2023:

- **Environmental target for climate protection:** 15% less CO_2e emissions as compared to 2020 (Scope 1 and Scope 2)
- **Social target for diversity:** more than 15% women in senior management and more than 30% female staff members
- **Social target for initial and further training:** 10% more training hours per employee as compared to 2020

For our employees in various management positions
The variable remuneration of our employees in various management positions of the Wienerberger Group is designed along the lines of the incentive scheme for Managing Board members. Depending on the functional profile of each executive, the targets for the short-term remuneration component are determined on the basis of the Group budget or the budget of the respective executive's area of activity and supplemented by individually agreed-upon financial or non-financial targets. Local management (see also Organizational Structure of Wienerberger on page 37) has, for example, the components EBITDA, ROCE, reduction of CO_2 emissions, and individual targets in its variable remuneration.

Wienerberger Remuneration Report 2022
Detailed information on Wienerberger's remuneration regime is provided in the 2022 Remuneration Report on our website at https://www.wienerberger.com. The following information can also be found in the 2022 Remuneration Report:

- Ratio of total annual remuneration of the highest paid employee of the organization and the median of the total annual remuneration of all employees, using the example of the Austrian country organization.
- Wienerberger plans to publish the ratio of the percentage increase in annual total compensation for the highest paid person in the organization to the median percentage increase in annual total compensation for all employees, using the example of the Austria country organization, as of the reporting year 2023.

ESG: GOVERNANCE & MANAGEMENT APPROACH

Good corporate governance – Code of Conduct, compliance and prevention of corruption – Supplier management – Non-financial reporting

Target of our Sustainability Program 2023

0

Cases of corruption in the Wienerberger Group

The economy is an integral part of society. At Wienerberger, we take our responsibility as a corporate citizen seriously: We communicate honestly, act ethically, and operate within a transparent economic framework. The responsible management of the Wienerberger Group with long-term goals in mind is firmly rooted in the Group's structures and responsibilities. We observe clear ethical principles, our Code of Conduct, and a firmly established compliance policy.

ESG: Governance & Management Approach

Wienerberger's commitment to sustainability covers all stages of the Group's value chain. The Wienerberger sustainability strategy, also called ESG strategy, and the related Sustainability Program 2023 are integral parts of the Wienerberger corporate strategy and provide a strong basis for sustainable growth (see also "Strategy", pages 12-14). In 2020, in the interest of a clearer definition of our sustainability-related priorities and targets, we performed a materiality analysis with input from relevant internal and external stakeholder groups (see chapter "Materiality Analysis, Sustainability Program 2023 and UN SDGs", pages 56-67). In order to better understand the assessments and priorities mentioned by our stakeholders within the framework of the 2020 materiality analysis, Wienerberger again conducted in-depth stakeholder dialogues in 2022 (see page 32).

Wienerberger established clear structures and responsibilities for sustainability management across the entire Group to ensure a uniform approach and efficient implementation of the measures taken, as well as the achievement of our targets, Moreover, we regard sustainability as a crucial factor of our corporate success and have therefore integrated ESG criteria in areas such as our remuneration policy (page 34) or corporate financing.

In this chapter, the following governance topics and management approaches will be covered in separate sections: :

- Organizational structure
- Wienerberger's risk management and due diligence processes
- Commitment to compliance with the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD)
- Commitment to the disclosure of climate-related information within the framework of the "Carbon Disclosure Project" (CDP)
- Wienerberger Code of Conduct, compliance, and the prevention of corruption
- Supplier management – ESG standards in procurement
- Voluntary commitment to compliance with the ten principles of the UN Global Compact
- Our non-financial reporting

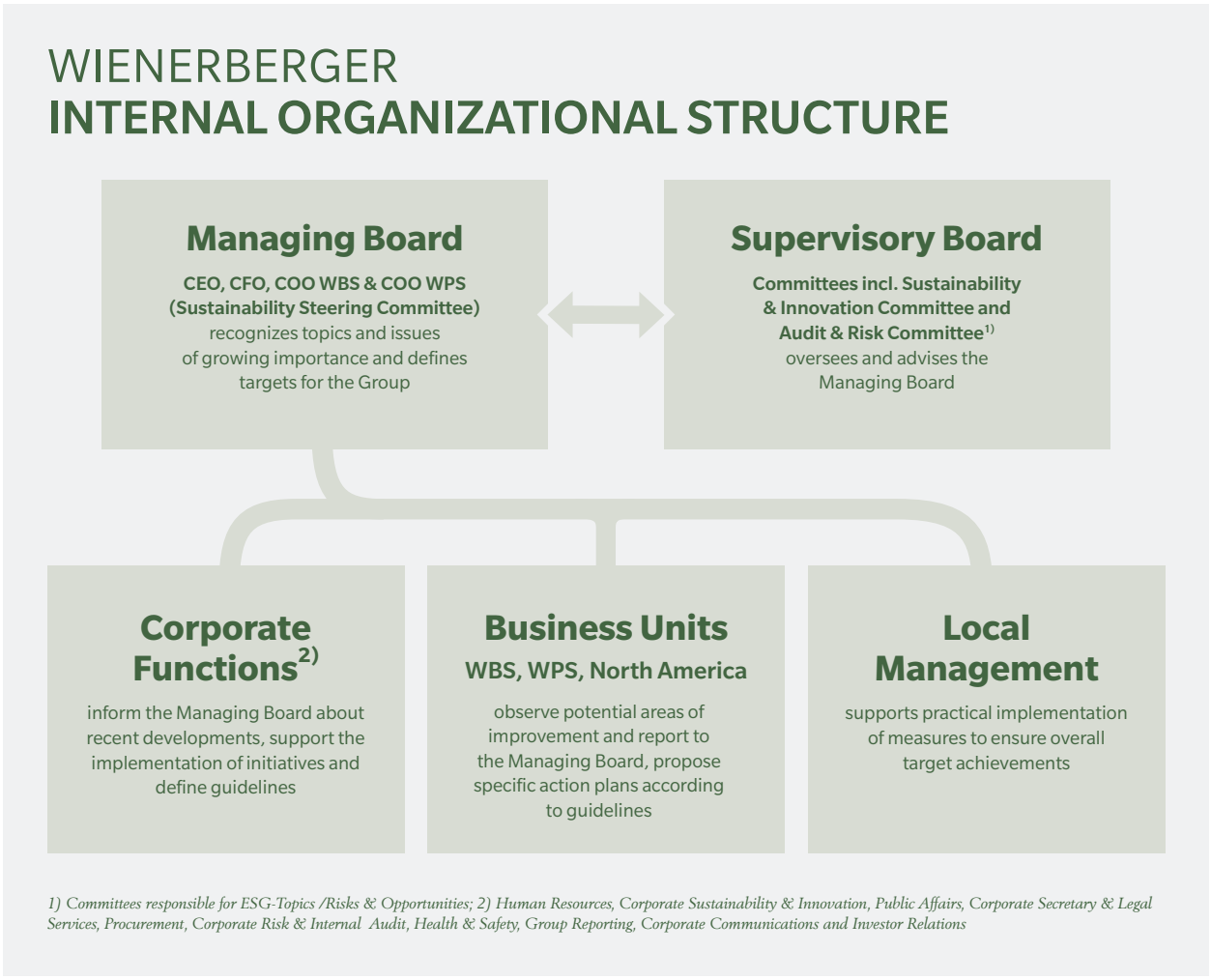
GREEN FINANCING

Wienerberger assumes responsibility for its entire value chain not only in its operational business, but also in corporate financing. Therefore, in 2019, Wienerberger for the first time opted for a sustainability-oriented form of finance. To refinance the 4% corporate bond that matured in April 2020, a € 170 million loan was taken out at a rate of interest that is linked not only to the usual financial indicators, but also to the company's sustainability rating. An improvement in the Wienerberger Group's sustainability performance thus results in lower financing costs.

The Group's ESG rating, which is to be reviewed annually, was updated by EcoVadis in 2022. Given the progress achieved in its sustainability management, Wienerberger won its first gold rating and now counts among the top 4% of its industry in the EcoVadis ranking. In 2021, Wienerberger additionally negotiated a new syndicated loan with a sustainability component, the terms and conditions of which are linked, among other factors, to the ESG rating by EcoVadis.

Organizational Structure

The responsible, long-term approach to the management of the Wienerberger Group is an essential prerequisite for the implementation of the corporate strategy, the achievement of the corporate goals, and the sustainable increase in enterprise value in accordance with ecological, social, and economic criteria. As a listed company with international operations, Wienerberger is committed to strict principles of good corporate governance and transparency as well as the continuous further development of an efficient system of corporate control.



Operational Management

Sustainability Steering Committee
The Sustainability Steering Committee (SSC) is responsible for Wienerberger's sustainability strategy and the definition of the targets, deadlines, and measures of the sustainability program. The committee is comprised of the Managing Board of the Wienerberger Group and other senior managers of the business units. The Managing Board comprises the Chief Executive Officer (CEO), the Chief Financial Officer (CFO) of Wienerberger AG, and the Chief Operating Officers (COOs) of Wienerberger Building Solutions (WBS) and Wienerberger Piping Solutions (WPS). The Managing Board acts as the top-level internal steering body, identifies matters of growing importance related to ESG, and defines sustainability targets for the Group. The Sustainability Steering Committee reports to the Supervisory Board on current ESG matters. The ESG governance structure is shown on this page.

Functions at Group level
The Corporate Sustainability & Innovation Department is headed by a Senior Vice President. The latter reports directly and at regular intervals (at least once per quarter) to the Chairman of the Managing Board and four times per year to the full Managing Board of Wienerberger AG. He ensures group-wide coordination of the sustainability and innovation strategy, the sustainability program (currently the Sustainability Program 2023), and sustainability management, and is responsible for Wienerberger's sustainability reporting. The department is in charge of aligning Wienerberger's sustainability strategy with the Group's innovation agenda. It also supports the implementation of both agendas and ensures continuous dialogue with and involvement of the stakeholder groups, such as customers and users of our products and system solutions. At department level, clearly defined responsibilities and targets

contribute significantly to the implementation of the Wienerberger strategy. For example, "Human Resources" and "Procurement" submit regular progress reports to the Managing Board.

Business Units
At Business Unit level, the COOs of Wienerberger Building Solutions (WBS) and Wienerberger Piping Solutions (WPS) and the CEO of North America (NOAM) are responsible for implementing the sustainability targets. They observe potential areas of improvement, report to the Managing Board, and elaborate a specific plan of action for the integration of the sustainability strategy in all Business Units. They are supported by their respective sustainability officers. Continuous exchange with the Corporate Sustainability & Innovation Department on the progress achieved serves to broaden the scope of responsibility and influence in the pursuit of the Group's sustainability targets.

Local Management
The internal organizational structure is rounded out by our experienced local management teams, who play an important role in all ESG matters. They support the practical implementation of policies and measures at local level and thus ensure that the targets set at Group level are attained.

Managing Board and Supervisory Board

The Managing Board of Wienerberger AG and the Supervisory Board play a central role in the Group's efforts to address the most important aspects relating to sustainability. The Managing Board of Wienerberger AG, which currently has four members, is responsible for the strategic and operational management of the company. The Supervisory Board monitors all essential strategic projects. Alongside its monitoring and steering function, it plays an advisory role and thus assumes part of the company's entrepreneurial responsibility. Upon the Managing Board's proposal, the Supervisory Board analyzes and approves the Wienerberger strategy and the sustainability program. The current Sustainability Program 2023 sets out the targets to be pursued and outlines the strategy to achieve these targets.

This structure is intended to ensure that ESG topics, especially those that are relevant to climate change, are taken into account in the elaboration of the corporate strategy, financial planning, the annual budgeting process, and investment decisions. In the performance of its functions, the Supervisory Board is supported by two committees:

- Sustainability and Innovation Committee
- Audit and Risk Committee

Sustainability and Innovation Committee
The Sustainability and Innovation Committee established by the Supervisory Board deals intensively with current topics of Wienerberger's sustainability and innovation management and reports regularly to the Supervisory Board on the topics discussed and the conclusions reached. Its core tasks are as follows:

- Reviewing the innovation, environmental, and social policy of the Group
- Observing the sustainability and innovation management of the Group as reflected in reports produced by the management (Sustainability Report, Non-Financial Report, current Sustainability Program, etc.) and engaging in an exchange of information with corresponding experts of the Group
- Supporting the Managing Board in the review and further development of the Group's sustainability and innovation strategy
- Exchanging ideas with the Managing Board on new legal provisions and global trends in sustainability and innovation management
- Monitoring the implementation of the Group's sustainability and innovation strategy

As of 31 December 2022, the Sustainability and Innovation Committee consisted of four members of the Supervisory Board. It met four times in 2022. In the course of its meetings, it discussed the progress made in the implementation of the Wienerberger sustainability strategy and/or the sustainability program, Wienerberger's ESG performance relative to the targets set, and the introduction of standards and guidelines on risk mitigation. The Wienerberger Managing Board and the Senior Vice President for Corporate Sustainability & Innovation participated in the meetings. The CEO not only participates in the meetings of the Sustainability and Innovation Committee, but also engages in regular exchanges with the Supervisory Board on ESG topics.

Audit and Risk Committee
This committee is in charge of monitoring all financial and accounting matters of the entire Group, including the audit of its annual financial statements and risk-related topics. After each meeting, the chairman of the committee formally reports to the Supervisory Board on the committee's activities in all matters within its remit. He also reports to the Supervisory Board on how the committee performed its monitoring tasks, which cover the following key areas:

- Financial reporting and the corresponding explanatory notes
- Internal control and risk management systems as well as internal audit
- Audit of the annual financial statements
- Risk management processes, including climate-related risks and opportunities

As of 31 December 2022, the Audit and Risk Committee had five members. The Committee met five times in 2022.

Wienerberger's Risk Management and Due Diligence Processes

The responsible management of the Wienerberger Group with long-term goals in mind is an essential prerequisite for the sustainable success of the company. An overview of the major risks and impacts of the Wienerberger Group in non-financial matters is shown on page 58.

Information on the ESG concepts and due diligence processes applied by Wienerberger in respect of environmental, social, and governance aspects is contained in the following chapters: "Climate Protection & Adaptation to Climate Change" (pages 68-117), "Circular Economy" (pages 118-126), "Biodiversity & Environment" (pages 127-136), and "Employees & Social Impacts" (pages 137-162).

Information on Wienerberger's risk management, the related data collection processes, and the internal control system applicable to financial and non-financial matters is contained in the Risk Report (starting on page 316).

TCFD: Climate-related risks und opportunities
Wienerberger has set itself the target of minimizing its climate-related risks and identifying its opportunities. The company is therefore continuously developing solutions aimed at enhancing its climate resilience. In 2021, Wienerberger aligned its reporting processes with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and began to transparently disclose its climate-related risks and opportunities, as described in the chapter "Climate Protection and Adaptation to Climate Change" (page 68). In 2022, Wienerberger extended its TCFD reporting to include a description of the resilience of its corporate strategy, taking various climate-related scenarios into account. One of the scenarios is based on compliance with the Paris Climate Agreement, assuming an increase in global temperature of less than 2° Centigrade by the end of the century, as compared to the pre-industrial age (pages 85-97).

The analysis and assessment of the opportunities and risks arising from the transition to a low-carbon, climate-resilient economy (see pages 85-97) have been integrated into Wienerberger's risk management processes (see page 248).

TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

The "Task Force on Climate-related Financial Disclosures" (TCFD) was established by the Financial Stability Board of the G20 in 2015. It was mandated to develop recommendations for companies to disclose their resilience to climate change to the capital market. These recommendations cover four thematic areas (governance, strategy, risk management, and indicators & targets) and provide a basis for companies to identify, assess, steer, and report on climate-related risks and opportunities. Since June 2017, date of publication of the recommendations, more than 3,900 organizations all over the world have confirmed their support for the TCFD.

Commitment to Compliance with the TCFD Recommendations

As a leading provider of building material and infrastructure solutions, we demonstrate our good corporate governance culture by complying not only with the information requirements pursuant to the Austrian Sustainability and Diversity Improvement Act, but also with the recommendations of the "Task Force on Climate-related Financial Disclosures" (TCFD recommendations). By following the TCFD recommendations, we voluntarily commit to ensuring a transparent disclosure of climate-related opportunities and risks. Wienerberger understands the importance of such information for the investment community and other stakeholders. We will therefore continuously improve our climate-related disclosures and actively solicit feedback. An overview of climate-related information provided by Wienerberger in accordance with the TCFD recommendations – the TCFD Content Index – with references to the corresponding pages is provided on page 55.

Commitment to Disclosure of Climate-related Information within the Framework of the "Carbon Disclosure Project" (CDP)

The Carbon Disclosure Project (CDP) is a global not-for-profit organization that operates the world's largest platform for the disclosure of environmental and climate-related information. Wienerberger reported to the platform for the first time in 2022 and scored a B (Management band)[1]. This score confirms that Wienerberger has addressed the environmental impacts of its activities and ensures good environmental management. By disclosing information on the topic of climate change within the framework of the CDP questionnaire, Wienerberger again demonstrated its willingness to respond to the growing demand for transparency in environmental matters expressed by financial institution, our customers, and political decision-makers.

Wienerberger Code of Conduct, Compliance and Prevention of Corruption

Since the foundation of Wienerberger over 200 years ago, we, as a company operating successfully on an international scale, have assumed a great responsibility in society. Determined to consistently justify the confidence of our stakeholders, we ensure that our actions are guided by clear ethical principles and a firmly established compliance policy. For us, this encompasses a commitment to business ethics, honest communication, the creation of a transparent economic environment, personal accountability for what we do, and acting as a reliable and valuable member of society.

In 2021, in order to highlight the significance and the binding nature of these principles, Wienerberger elaborated a group-wide Code of Conduct, which was implemented in parallel with a whistleblowing service.

According to our definition, the term "compliance" encompasses all instruments and measures designed to ensure that Wienerberger and its employees act in conformity with the law in respect of all legal provisions that specifically apply to our company. Commitment to compliance with all national and international legal standards in effect is a fundamental principle of the Wienerberger Group.

In many countries, Wienerberger is subject to comprehensive and increasingly stringent environmental regulations as well as health and safety rules. Wienerberger considers itself duty-bound to observe all these rules and regulations, if necessary through investments in optimization measures, at all times. For years, Wienerberger has been committed to implementing the ten principles of the UN Global Compact. In accordance with the Wienerberger Social Charter, the company undertakes to comply with the relevant conventions and recommendations of the International Labor Organization (ILO) (see page 52).

WIENERBERGER SOCIAL CHARTER

https://www.wienerberger.com/content/dam/corp/corporate-website/downloads/other/Wienerberger-Social-Charter_en.pdf

1) CDP homepage: https://www.cdp.net/en/scores/cdp-scores-explained

This section contains our report on Wienerberger's processes and standards relating to compliance and the prevention of corruption, with a special focus on:

- Wienerberger Code of Conduct
- Prevention of corruption
- Compliance
- Internal audit
- Privacy, data protection, and cybersecurity
- Complaints management

Wienerberger Code of Conduct

For Wienerberger it is particularly important to ensure compliance with the highest standards of integrity and business ethics at all times and to protect and safeguard the reputation of the Group, its subsidiaries, and its brands. In 2021, Wienerberger elaborated a group-wide Code of Conduct, which was implemented in parallel with a whistleblowing service. The Wienerberger Code of Conduct represents a binding guideline and sets out how each and every one at Wienerberger should act in the conduct of day-to-day business. The Code of Conduct must also be acknowledged by all our business partners.

Purpose and application
The Code of Conduct applies to the entire Wienerberger Group and thus to all its subsidiaries in which Wienerberger holds a stake of at least 50%. The principles laid down in the Code of Conduct are intended to ensure that we share a common understanding, demonstrate good judgement, and maintain high standards of ethics and integrity in our dealings with all our stakeholders. We expect the same behavior from our business partners, such as suppliers, contractors, and customers.

As spelled out clearly in our Code of Conduct, Wienerberger does not tolerate any misconduct whatsoever, and the necessary steps will be taken or sanctions imposed in the case of violations. If, after verification of the information received, it is ascertained that an employee or business partner has violated the Code of Conduct, this may have serious consequences under labor law or, depending on the severity of misconduct, result in contractual consequences.

Furthermore, Wienerberger does not tolerate any discrimination of or reprisal against persons who raise concerns, ask questions, or report suspected misconduct in good faith. All reports are thoroughly examined and (if permitted by law) treated confidentially. We encourage all our employees and business partners to voice their concerns and speak up when they observe a breach of the Wienerberger Code of Conduct. In the majority of cases, the matter can be discussed and clarified with superiors or colleagues from HR. If this is felt to be inappropriate, employees can contact the Wienerberger Whistleblowing Committee or report their concerns anonymously via the "SeeHearSpeakUp" Whistleblowing Service.

Whistleblowing Service
Wienerberger wants to be absolutely sure that any suspected misconduct in our company can be reported via appropriate and secure channels. Concerns have to be taken seriously and people reporting them must not be subjected to any pressure. This is a key aspect of the whistleblowing service.

When implementing its Code of Conduct, Wienerberger therefore also established a whistleblowing service that is available throughout the Wienerberger Group. This service is provided in cooperation with an external, independent global partner for whistleblowing services.

Through its external partner, Wienerberger offers all its employees and business partners the possibility to report their observations anonymously and confidentially in their native language. Thus, the whistleblowing service is also available to our external stakeholders, e.g. our business partners.

Reports can be submitted in three ways:

- via the online reporting system, which can be easily accessed on the Internet
- by email in one's own language
- via a toll-free whistleblowing phone number of the country concerned in one's own language

The whistleblowing service supports the Wienerberger Whistleblowing Committee in the investigation of illegal, unethical, or inappropriate conduct, suspected violations of the Compliance Policy, and the processing of complaints.

Whistleblowing Committee and Whistleblowing Policy
The Wienerberger Whistleblowing Committee comprises experts from Corporate Legal Services, Internal Audit, Corporate HR, and the Corporate Secretary. For matters that pose a potential risk to the interests of Wienerberger or others, we also refer to the Wienerberger Whistleblowing Policy, which applies across the Group. While individual circumstances may vary, our Whistleblowing Policy ensures that all reported incidents are handled in a fair manner.

Details on reporting, whistleblower protection, and support provided by Wienerberger are also outlined in our Whistleblowing Policy.

Follow-up procedure upon receipt of a report
Each report is verified by the Wienerberger Whistleblowing Committee before an investigation of the incident reported is initiated. The Whistleblowing Committee ensures that all reports of possible violations are investigated. All enquiries and reports are treated confidentially and in line with the legal provisions, the Wienerberger Code of Conduct, and any other policies in place, regardless of whether the report is submitted by telephone, by email, or as an online report to the whistleblowing service. The follow-up procedure is the same for reports submitted by external or internal stakeholders.

Implementation
The Managing Board, the Supervisory Board, and the Wienerberger Works Council fully support the ideas and guidelines of the Code of Conduct. We expect all employees and business partners to familiarize themselves with our binding Code and comply with each of its principles.

The Wienerberger Code of Conduct is available in all 25 languages spoken in the countries in which the Wienerberger Group operates.

We will continue to inform all our employees about the contents of the Code on an ongoing basis and communicate its principles via various channels and through specific training. We encourage all employees and business partners to report potential violations of our Code of Conduct.

Reports received in 2022
In 2022, the whistleblowing service was used to a relevant but manageable extent. In principle, the service has been well received by our employees as well as our external stakeholders.

In the course of 2022, a total of 40 reports were received via the aforementioned channels. The majority of the reports was submitted via the online reporting system (75%). 15% of the reports came in by email and 10% by telephone. Most of the concerns reported were classified as low-risk (95%) by the Whistleblowing Committee, while very few (5%) were perceived as constituting a medium risk. About 63% of the reports received were by accounted for by general misconduct in dealing with employees, colleagues, and working instruments. Some 18% of the reports received concerned matters of occupational health and safety. About 8% related to business terms and conditions and another 8% to wages and salaries. Two reports concerned substance abuse at work. Except for one report received at the end of December, all reports submitted in the course of 2022 were thoroughly investigated, processed and closed in in the same year. The last report received at the end of December 2022 was closed at the beginning of 2023. No cases of severe misconduct, such as embezzlement or fraud, were reported in 2022.

Prevention of corruption

Wienerberger is committed to the principle of free and fair competition, which includes a firm stance against any form of corruption. Within the framework of the Sustainability Program 2023, we have therefore set ourselves the following target:

We are steadily pursuing the strictly defined target of "zero incidents of corruption".

We expect all our employees to act accordingly, which is also spelled out in our group-wide Code of Conduct (see page 41). An important instrument for the prevention of corruption is the four-eye principle applicable to the signing of business transactions with third parties. Whenever rights and obligations are established, modified, or terminated, the signatures of two competent authorized persons from the local entity are required. This principle is laid down in international Group policies and supports the prevention of corruption at international level, as does the group-wide policy on how to deal with business gifts and gratuities, which was updated in 2017 and continues to apply. The Group policies are accessible to all our employees on weComm, the Wienerberger Intranet, and are disseminated by email exclusively by Corporate Communications. Compliance with Group policies is verified regularly by the management (e.g. by Internal Audit). In general, the risk of corruption at Wienerberger is perceived to be low.

In 2022, no criminal proceedings for corruption were initiated against Wienerberger or companies of the Wienerberger Group.

Compliance

As a listed company with international operations, Wienerberger is committed to the strict principles of good corporate governance and transparency, as well as to the continuous further development of an efficient system of corporate control. The framework for the company's actions and obligations is set by Austrian law, the Austrian Corporate Governance Code, the Articles of Association, the rules of procedure of the Boards of the company, and internal policies.

In order to prevent insider trading and the unlawful disclosure of inside information, the company has a capital market compliance policy in place, which implements the provisions of the European Market Abuse Regulation. A capital market compliance officer, supported by a deputy, has been appointed to monitor compliance. Moreover, training sessions, for example on issuer compliance, are held regularly at the Vienna headquarters for both the Wienerberger holding company and the individual business units.

The principles governing lobbying activities have been laid down in a code of conduct based on the provisions of the Austrian Lobbying and Transparency Act, which applies to all board members and employees of Austrian companies in which Wienerberger AG holds a majority interest.

On account of the market position held by the Wienerberger Group in certain markets, the pricing policies of our subsidiaries are followed attentively by the anti-trust authorities. Investigations can be initiated even in the absence of a specific reason. We take such proceedings very seriously and support the investigations to the best of our abilities so that the issues raised can be clarified swiftly and thoroughly.

WIENERBERGER LINKS

Corporate Governance Report as part of the 2022 Annual Report (starting on page 194)
Code of conduct pursuant to the Austrian Lobbying and Transparency Act

Price fixing is not part of Wienerberger's business practices and is therefore explicitly prohibited by our internal policies, which provide for severe sanctions in the event of violations.

To make our employees aware of problems that may arise in the field of anti-trust law, an anti-trust compliance program was introduced within the Wienerberger Group some years ago. The rules of conduct laid down in the policy provide concrete guidance on sensitive issues relating to competition law and are to be strictly observed.

In the context of the anti-trust compliance program, all country organizations of the Wienerberger Group are obliged to hold regular anti-trust training sessions. As a rule, anti-trust training sessions take place annually up to a maximum of once every two years and are conducted by a national anti-trust expert. The local management is responsible for the organization of the training courses and the selection of employees to be trained. Internal Audit verifies that training has taken place and monitors compliance with the anti-trust policy.

In accordance with Wienerberger's decentralized structure, responsibility for the implementation of and compliance with the national rules and regulations lies with the respective local management bodies. For this reason, and pursuant to national legal provisions, compliance officers have been appointed at country level and mandated to evaluate compliance and report thereon to the local authorities and the Wienerberger Managing Board.

Internal Audit

In order to verify compliance and regularly analyze our internal policies and operational processes for their effectiveness, risk potential, and possibilities of efficiency enhancement, an internal audit function has been set up as a staff unit reporting to the Managing Board. These activities are based on an audit plan approved by the Managing Board and the Audit and Risk Committee of the Supervisory Board, as well as a group-wide system of risk assessment covering all the company's operations. Internal Audit reports to the Managing Board and the Audit and Risk Committee on the audit findings. A detailed description of Wienerberger's risk management and its internal control system is contained in the corresponding chapter of the Management Report on page 220.

In 2022, 21 companies (listed in the 2022 Annual Report on page 327, chapter "Group Companies") were audited by Internal Audit with a special focus on organization, procurement, materials management, sales, and human resources, as well as corruption, anti-trust legislation, and the General Data Protection Regulation (GDPR) of the European Union. The audits are performed on the basis of a risk-based audit plan. They cover the country organizations and include on-site inspections at sites selected according to certain pre-defined criteria. The companies are classified according to size (large or small). The audit plan is based on external indicators (e.g. Corruption Perception Index) and internal indicators (e.g. EBITDA, number of employees, etc.). Depending on the size of the company, selected sites are audited every two to four years. Another focus area of the audits was compliance with the group-wide safety and health standards for our employees.

In the course of these audits, it was ascertained that the internal policies had been implemented in the companies audited and that the employees concerned were adequately informed. Deviations from the policies, if any, were reported to the Managing Board and the Audit Committee, and appropriate measures were agreed upon with the respective local management.

Privacy, data protection, and cybersecurity

The protection of data and information systems has always been a matter of high priority for Wienerberger in all the company's business relations. We treat personal data confidentially and in accordance with data protection rules. We continuously invest in data security measures to ensure the best possible protection of our information systems and the data contained therein.

Our central Information and Data Security Department consists of the Head of Information Security, a Privacy and Security Expert, and two Security Analysts. The department is part of the Wienerberger holding company and has a group-wide function. In the performance of its tasks, the team is supported by regional IT security coordinators and the local information security managers of the individual local companies.

Our experts on information and data security within the Wienerberger Group focus on the introduction, operation, and continuous improvement of information security measures designed to prevent security breaches. Their work includes not only IT risk management, but also the coordination of training measures for all employees, the simulation of phishing and cyberattacks, the management and supervision of technical protection measures, as well as the constant monitoring and improvement of the level of maturity of our sites in terms of security. We protect our systems by defining and implementing standards, keeping our infrastructure up to date, employing the most advanced protection measures, and defining appropriate key performance indicators (KPIs) in order to verify the effectiveness of our measures. In order to identify irregularities in our systems and data and to ensure effective and fast processes for the elimination of such irregularities, our Defense Center uses the most advanced technologies, ranging from artificial intelligence to highly specialized external cybersecurity analysts.

A high level of quality is guaranteed through the consistent analysis of security-related indicators. In order to immediately detect potential threats and react accordingly, the Wienerberger Group also cooperates with renowned partners that are available around the clock, if needed.

Protection of personal data
Personal data of any kind – be it data of employees, customers, or business partners – are treated confidentially and in accordance with the data protection rules. Violations of data protection provisions can result in disciplinary measures.

To maintain the high quality of data protection, an international team of data security coordinators has been put in place at Wienerberger and in the country organizations. Together with external specialists, a quality standard for data protection has been elaborated and successfully implemented across the Group.

Regular internal checks serve to review and optimize the standard. These checks encompass all business areas, country organizations, and partner companies processing data on our behalf.

Cybersecurity
Cybersecurity incidents can have a disruptive effect and cause harm to employees, customers, or the company as a whole. In an effort to minimize cyber risks, we regularly back up our data, protect our devices and networks, encrypt important information, and demand that passwords be changed at regular intervals.

Wienerberger's employees are responsible for complying with these measures and have to protect themselves against risks arising from a variety of sources. They do so by using strong passwords, updating programs and systems at regular intervals, and never trying to circumvent access controls.

In order to guarantee data integrity, system availability, confidentiality, and accountability, all employees must be aware of the rules governing the use of IT systems and other physical assets. To this end, information videos are provided and on-site training, e-learning, and simulation exercises are organized.

Complaints management

All stakeholders can get in touch with the local teams at the Wienerberger sites or directly contact the Wienerberger headquarters. As a matter of principle, the Wienerberger whistleblowing service is easily accessible to all our stakeholders for complaints at any time.

Complaints regarding product quality or other issues are handled in various ways by our business units. Wienerberger Building Solutions (WBS), for instance, deals with complaints at regular discussions with the local WBS teams. At Wienerberger Piping Solutions (WPS), complaints management in the field of plastic pipes is dealt with locally by the individual country organizations. In the field of ceramic pipes, WPS has applied a comprehensive complaints management regime since 2016. Each complaint is entered into the system via an app and, at intervals of two weeks, evaluated by a body comprising representatives of all the departments concerned. Corrective measures, if necessary, are implemented without delay.

Supplier Management – ESG Standards in Procurement

Within the framework of our business relations, we ensure that our suppliers also comply with ESG standards. In 2022, Corporate Procurement evaluated all international raw material suppliers with a view to their ESG compliance. Full ESG compliance is based on two conditions: compliance with the Wienerberger Supplier Code of Conduct and the availability of an externally validated sustainability rating of the supplier by EcoVadis. As an alternative, the procurement team can perform the Wienerberger sustainability desktop self-assessment (internal performance rating).

The Wienerberger Supplier Relationship Management (SRM) tool (see page 48) supports the central management of ESG compliance requirements to be met by our suppliers. The tool matches results from on-site audits and internal performance assessments with information on supplier services with regard to ESG compliance requirements.

According on its ESG compliance and audit results, each supplier is assigned a key supplier score and, if necessary, instructed to take corrective action. In 2021, Corporate Procurement set itself an additional target and introduced a corresponding indicator: Throughout the Group, another 500 non-international key suppliers are to be included in the SRM system. This target was achieved in 2022. Suppliers are to be rated for sustainability and service compliance and assigned corrective measures, if necessary.

Moreover, Wienerberger initiated ESG performance incentives for its suppliers, the intention being to recognize outstanding performance in the field of ESG compliance and encourage continuous improvements. Furthermore, a distinction is awarded to country procurement teams in recognition of outstanding performance in the field of sustainable procurement excellence.

The following sections cover aspects and instruments of supplier management contributing to ESG compliance:

- Responsible Sourcing Policy 2020+ – Responsible Procurement Guideline, ESG Steering Committee established within Corporate Procurement
- Wienerberger Supplier Code of Conduct
- Supplier Relationship Management (SRM) Tool for supplier assessment
- On-site audits of selected suppliers
- Rating of suppliers by a rating agency on the basis of ESG criteria
- Encouraging suppliers to improve their ESG performance
- Screening of suppliers against international sanction lists and verification of their financial resilience
- ESG compliance of suppliers and escalation protocol in cases of insufficient ESG conformity
- ESG training and communication tools for employees working in procurement
- Recognition of sustainable sourcing at Corporate Procurement level
- Fostering diversity among our suppliers

Responsible Sourcing Policy 2020+ – Responsible Procurement Guideline, ESG Steering Committee established within Corporate Procurement

Corporate Procurement at Wienerberger has further intensified its focus on ESG criteria in supplier management. The Responsible Sourcing Policy 2020+ released by the Managing Board in 2020, an integral part of the Procurement Strategy 2020+, continued to serve as an essential basis for our supplier management.

The Procurement Strategy 2020+ defines our ambitious ESG criteria applied in supplier management. The strategy comprises three key areas:

- Promoting improvements in ESG (environment, social, governance) in all our sourcing activities, in combination with risk management
- Identifying and mitigating procurement risks alongside efforts to take advantage of opportunities and ensure compliance
- Ensuring that our policies, procedures, measures, and reporting rules are observed both internally and externally

Based on the Procurement Strategy 2020+, the Responsible Sourcing Policy 2020+ defines the framework for responsible sourcing at Wienerberger. Within this framework, requirements for compliance with ESG criteria are set out, specifying targets, areas of application, roles and responsibilities, procedures, governance, and reporting rules. Moreover, in 2022 our performance and our ambitions in the field of ESG were monitored and reviewed as core indicators of sustainable sourcing. These indicators are discussed on a quarterly basis.

In 2021, this Policy, as an integral component of Corporate Procurement, was translated into eight specific guidelines. The internal sustainable procurement stakeholders received comprehensive training in accordance with these guidelines. By following these rules and supporting the clear guidelines (what – who – how – when), we are able to effectively steer the ESG performance of our suppliers along our supply chain.

In 2022, the ESG Steering Committee established within the framework of Corporate Procurement was not involved in any proceedings regarding potential ESG non-compliance risks of SRM suppliers (see end of this page, Supplier Relationship Management tool). Moreover, the ESG Steering Committee acknowledged the current responsible sourcing policy and the related plans for 2022. No major structural changes were made.

RESPONSIBLE PROCUREMENT POLICY 2020+

Based on this Policy, we will align our supplier base with the following ESG priorities of the Wienerberger Group:

- *Climate change and energy*
- *Circular economy and increased use and availability of secondary raw materials*
- *Human health and well-being*

Wienerberger Supplier Code of Conduct

In 2019, a group-wide "Supplier Code of Conduct" (SCOC) was elaborated in cooperation with internal and external experts. The SCOC sets out the minimum requirements which Wienerberger expects its suppliers to meet in terms of responsible action regarding the environment, social aspects, and governance, including respect for human rights and compliance with other requirements of the ten principles of the UN Global Compact. The implementation of the SCOC and its application in the Supplier Relationship Management tool (SRM, see following section) was substantially advanced by the group-wide procurement structure managed by the Head of Corporate Procurement and the Head of ESG in Corporate Procurement.

SUPPLIER CODE OF CONDUCT

Wienerberger expects all its suppliers to meet minimum requirements of responsible action in respect of the environment, social aspects, and governance (ESG). To ensure compliance with these minimum standards, Wienerberger regularly audits its suppliers and rates their sustainability performance.

Supplier Relationship Management (SRM) tool for the evaluation of suppliers

The Wienerberger Supplier Relationship Management tool is an internal data platform containing information on the financial terms and conditions as well as the ESG performance and risks of Wienerberger's own suppliers (tier 1). The (SRM) tool facilitates efficient and coordinated data collection and evaluates suppliers on the basis of their daily performance and their compliance with Wienerberger's Responsible Procurement Policy.

The SRM tool collects general information, such as the results of audits or discussions on products, technology, pricing, and services offered by suppliers. Moreover, ESG-specific data, including information on whether the supplier has its own code of conduct or has signed the Wienerberger Supplier Code of Conduct, as well as the supplier-specific risk analysis (based on the ESG rating awarded by EcoVadis, see page 50) are integrated.

These evaluations are used as a basis for recommendations regarding the further development of our suppliers in terms of ESG criteria, as well as for the benchmarking of suppliers against one another. Moreover, other instruments, such as the screening of suppliers against international sanction lists (see page 50) and the verification of their financial resilience, help us minimize supplier-side risks as much as possible.

The Wienerberger SRM tool supports the central availability and comparability of relevant information on our suppliers, including the following:

- Supplier performance, including ESG performance
- Implementation and progress of corrective measures required to meet specified ESG criteria and compliance requirements
- Documents, such as the signed Supplier Code of Conduct or the supplier's own code of conduct, certificates, including their periods of validity (e.g. ISO BES), current price agreements, minutes of meetings, notifications
- Complaints management by suppliers

The SRM tool comprises two dashboards, one with general information on suppliers and another with a supplier scorecard library. It also contains an internal and an external landing page for target suppliers (selected suppliers).

The Supplier Relationship Management tool is linked to Wienerberger's SAP system and the platform run by EcoVadis, the international partner for sustainability ratings (ESG ratings).

On-site audits of selected suppliers

Our Responsible Sourcing Policy 2020+ provides for target suppliers to undergo an external CSR assessment (e.g. by EcoVadis). The need for on-site audits of suppliers is therefore reduced to a minimum. Nevertheless, on-site audits by independent third parties are performed in particularly relevant cases, such as potential new suppliers in India and China.

In 2018, a formalized training program run by external certification bodies was introduced to qualify employees working in procurement for the performance of supplier audits. By 2021, 12% of all employees working in Procurement were trained as accredited supplier auditors by external certification bodies (technical inspection bodies or equivalent institutions). Ultimately, 20% of all employees in procurement are to be trained to perform professional on-site supplier audits in cooperation with local colleagues who have undergone similar training, in particular if concerns have arisen over a supplier's performance. The 20% target was surpassed in 2022. Corporate Procurement nominates employees on the basis of strategic considerations and is rolling out the certified external training of employees step by step to all country organizations. The objective is to perform standardized supplier audits throughout the Group and to have at least one employee in each country organization who is certified to perform supplier audits.

Within the framework of the Responsible Sourcing Policy 2020+ Corporate Procurement defined uniform follow-up processes to be followed after the audits, depending on the audit results. Based on these process definitions, individual supplier audits are initiated in those areas of procurement and geographic locations where the biggest potential risks are assumed to exist.

The audits cover essential ESG criteria, such as the health and safety of employees, respect for human rights, the prevention of corruption and bribery, and environmental protection. On the basis of the audit results, the suppliers concerned are recommended to adopt appropriate corrective measures and deadlines are set for the implementation of improvements.

ACCREDITED SUPPLIER AUDITORS AT WIENERBERGER

Wienerberger employees are trained as accredited supplier auditors by external certification bodies. They perform professional on-site audits on supplier premises.

Rating of suppliers by a rating agency on the basis of ESG criteria

Since 2019, Wienerberger has had the sustainability performance of suppliers and potential supplier risks in selected areas of procurements rated by EcoVadis, an international partner for sustainability ratings (ESG ratings).

Suppliers are being rated by EcoVadis in terms of their performance and their compliance with local, national, and international standards regarding environmental protection, labor rights, human rights, ethics, and sustainable sourcing. EcoVadis also rates the efforts made by target suppliers to reduce greenhouse gas emissions and performs a 360° Watch (= performance appraisal) of the company.

The ratings of the suppliers' sustainability performance by EcoVadis are stored on our internal data platform (SRM tool). Moreover, employees working in procurement are being trained not only by Wienerberger, but also by EcoVadis to heighten their awareness of the relevance of sustainability ratings and risk analyses.

Encouraging suppliers to improve their ESG performance

Wienerberger's definition of ESG excellence in procurement also helps our target suppliers to improve their own performance. Within the framework of the SRM tool, the member of the Procurement team responsible for the selection of suppliers reviews the target supplier's current performance and proposes improvements in the field of ESG.

Internal and external measures taken by suppliers, which must be in accordance with Wienerberger's Responsible Sourcing Policy 2020+, are measured and evaluated. Through this procedure, ESG risks of third parties, i.e. Wienerberger's suppliers, are being managed and reduced.

In 2022, significant improvements of the suppliers' ESG performance were achieved. We recognize such improvements and reward them accordingly. In particular, we want to encourage continuous improvements in performance and strengthen the business relations between the Wienerberger Group and its target suppliers.

Screening of suppliers and customers against international sanction lists and verification of their financial resilience

Every new supplier has to undergo a stringent acceptance procedure before being registered in Wienerberger's SAP system (Marlin tool). As part of the standard procedure, the supplier's financial resilience is verified by the Finance Department on the basis of the company's VAT number. Any non-conformity or potential financial risk is immediately escalated internally. If necessary, Procurement also performs an ad-hoc review of the supplier's financial resilience.

Since 2019, all of Wienerberger's suppliers and customers registered in the SAP system have been screened on a monthly basis via an interactive data platform for their inclusion in international sanction lists (published by the United Nations (UN), the EU, and the Office of Foreign Assets Control (OFAC) of the US Department of the Treasury). Appropriate steps are being taken, if necessary. The screening is performed centrally by the sanctions management software, which runs monthly checks of all customer and supplier master data in the SAP system. Every match is transmitted to the local management in charge for assessment and follow-up.

The local decision on whether to continue doing business with the suppliers or customers concerned must be communicated to Corporate Legal Services for consultation within two weeks. All decisions taken in this context are documented in the sanctions management software.

ESG compliance of suppliers and escalation protocol in cases of insufficient ESG conformity

As regards the measures and actions taken within the framework of the Wienerberger Responsible Sourcing Policy 2020+, we differentiate between ESG-compliant and ESG-non-compliant suppliers.

The following requirements relating to the Responsible Sourcing Policy 2020+ are defined in a manual:

- Criteria for the differentiation between ESG compliance and non-compliance by suppliers
- Protocol to be followed in the event of supplier non-compliance or non-conformity, up to the exclusion of suppliers

ESG training and communication tools for employees in Procurement

All Wienerberger employees working in Procurement are trained in how to apply the Responsible Sourcing Policy 2020+ and the related guidelines. The corresponding documents are available on the Wienerberger Intranet and can be downloaded by all employees in Procurement at any time. Short-term support in operational and strategic terms is easily accessible via a tool provided by the unit in charge of digitalization in procurement.

New developments in the field of sustainable procurement (ESG) are communicated on the internal Microsoft Teams site of Procurement and discussed at the quarterly Procurement meetings and the annual Procurement conference. Moreover, all so-called Procurement high potentials of the Procurement Academy program (introduced in 2019) receive (strategic and operational) expert training in sustainable procurement.

Recognition of sustainable sourcing in Corporate Procurement

The success of measures taken by our employees in Procurement to implement the Responsible Sourcing Policy 2020+ and achieve the related targets is rewarded as well. In 2020, Wienerberger introduced a Supplier Award Program and a Procurement Excellence Award Program in order to recognize special ESG and operational performance.

In 2022, Wienerberger improved its performance in all areas covered by EcoVadis' sustainability rating, which comprises the aspects of environmental protection, labor rights, human rights, ethics, and sustainable sourcing. In the field of sustainable sourcing, Wienerberger has reached a score of 80 out of 100 points. In the responsible supplier management category, EcoVadis thus ranks Wienerberger among the top 3% of all companies of its sector of industry.

Promoting diversity among our suppliers

In 2022, Wienerberger focused, in particular, on promoting diversity among our suppliers and integrated a clause to that effect into our current Responsible Sourcing Policy 2020+.

We are investing in the diversity of our suppliers not only to strengthen our resilience (diversified supply chain), but also to demonstrate the perception of our corporate responsibility (opportunities for marginalized communities), foster innovation and social responsibility, and support local communities. We intend to increase the annual monetary value of our business with such suppliers.

In doing so, we not only want to make a further contribution to Wienerberger's sustainability strategy, but also ensure that uniform and equal opportunities for new and diverse suppliers exist along our entire supply chain. We are proceeding step by step, as follows:

- Reviewing Wienerberger's current supply chain for diversity criteria among our suppliers
- Measuring the extent to which Wienerberger is working with diverse suppliers and first internal reporting
- Determination of intended change on the involvement of diverse suppliers at Wienerberger
- Inclusion of additional procurement processes at Wienerberger

Hard Facts on supplier management in 2022

- 73% of 3,000 target suppliers predefined in 2022 signed the Wienerberger Supplier Code of Conduct.
- 100% of all predefined target suppliers have ESG clauses in their contracts with Wienerberger.
- 80% of all predefined target suppliers were rated by an ESG rating agency on the basis of ecological and social criteria.
- 100% of suppliers having undergone an external, independent ESG appraisal took the necessary corrective action.
- 100% of the four-hour procurement training sessions scheduled for 2022 were held.
- 100% of tier-2 suppliers (= direct suppliers of our suppliers) were reviewed for supplier diversity.

Voluntary Commitment to Compliance with the Ten Principles of the UN Global Compact

Wienerberger acceded to the UN Global Compact in 2003 and is a founding member of respACT, Austria's leading corporate platform for responsible business practices. Thus, Wienerberger is officially committed to the implementation of the ten principles of the Global Compact regarding human rights, labor standards, environmental protection – including the precautionary principle – and the prevention of corruption.

The Wienerberger Social Charter, which confirms the company's commitment to compliance with the relevant conventions and recommendations of the International Labor Organization (ILO – a specialized agency of the United Nations), was signed by the Managing Board of Wienerberger AG and the chairman of the European Forum, a social partnership body, in Strasbourg in 2001.

Through the Wienerberger Social Charter, which is published on our website, our company demonstrates its global commitment to respect for human rights, fair working conditions, payment of adequate remuneration, the avoidance of excessive working hours, permanent employment relationships, and respect for the freedom of assembly and the right of employees to engage in collective bargaining. Within its sphere of influence, Wienerberger guarantees the protection of human rights. It goes without saying that Wienerberger tolerates neither child labor nor forced labor nor any form of discrimination. A supervisory committee, comprising equal numbers of representatives of Wienerberger and the European Works Council, monitors compliance with the provisions of the Social Charter. It should be noted, however, that Wienerberger has no particular exposure to vulnerable population groups.

Wienerberger also expects its suppliers to explicitly commit to the respect of human rights and compliance with Wienerberger's ecological and social standards (see pages 46-52).

Our Non-Financial Reporting

The non-financial indicators and qualitative disclosures of the Wienerberger Group have been published annually since 2010. In combination with the Wienerberger Sustainability Program 2023 (see page 60), Wienerberger's Sustainability Report is an important steering instrument showing how Wienerberger meets its responsibility as a corporate citizen. The reports focus on ecological, social, and governance aspects of our activities, the corresponding management approaches, and our innovations. Further information on our economic performance, the organizational profile of the Group, and corporate governance at Wienerberger, is contained in this 2022 Annual Report. Up to the 2020 reporting year, Wienerberger published a full sustainability report every two years, alternating with a more concise update containing the essential facts and figures for the years in between.

Since the 2020 reporting year, full sustainability reports have been published annually. The most recent 2021 Sustainability Report was published in March 2022 as the non-financial part of the 2021 Annual Report entitled "Sustainability Report". The 2022 Sustainability Report is again included in the 2022 Annual Report as its non-financial part, to be published in March 2023.

All Wienerberger sustainability reports meet the requirements of the Global Reporting Initiative (GRI). Wienerberger has reported in accordance with the GRI standards, for the period January 1, 2022 to December 31, 2022.

The topics covered in this non-financial report are based on the materiality analysis performed in 2020 (see page 57) and the Sustainability Program 2023 (see page 59). Additionally, information on other topics perceived as relevant by Wienerberger's stakeholders on account of global developments and challenges is being disclosed. Water stress is but one example (see page 103).

The information contained in this report refers to the company's activities in the 2022 business year. The indicators listed also include 2020 and 2021, thus reflecting a three-year trend.

Wienerberger's sustainability or non-financial reports are prepared by the Corporate Sustainability & Innovation Department in consultation with the business units and specialized departments; they are released by the Sustainability Steering Committee (Managing Board of the Wienerberger Group and senior management representatives of the business units).

Data management & consolidation

Non-Financial Group Reporting has been established as a central data management tool for the consolidation of all non-financial indicators. The latter serve as a basis for strategic decisions to be taken at Group and business unit levels.

Sustainability reporting follows the scope of consolidation of the Wienerberger Group, which is described in detail in the Notes to the 2022 Annual Report starting on page 259. In terms of substance, this report covers the fully consolidated subsidiaries operating in Wienerberger's product segments, i.e. products for the wall, roof and façade segments, ceramic pipes, plastic pipes, and concrete and clay pavers.

In line with our corporate structure, we report on our activities relating to our European business in ceramic building materials for the building envelope, together with those of the European concrete paver business, within the framework of the Wienerberger Building Solutions (WBS) Business Unit. Developments in our European plastic pipe business and our ceramic pipe operations are reported by the Wienerberger Piping Solutions (WPS) Business Unit. Developments and activities in facing bricks, concrete and calcium silicate products, as well as plastic pipes in North America and Canada, are reported by the North America Business Unit. Details on our product groups and operating segments are described in the chapter "Wienerberger at a Glance" starting on page 19. The indicators relating to "Holding & Others" are allocated to and reported within the three aforementioned business units on a pro-rata basis. The clay block production site in India is part of the Wienerberger Building Solutions Business Unit.

Five companies newly acquired in 2021 (see page 116 of the 2021 Annual Report), where the structures required for the collection of non-financial indicators had to be implemented or optimized in the 2021 reporting year, are included in the non-financial indicators for 2022 in this report. They are allocated to the following countries and business units: Belgium (WBS), Ireland and the United Kingdom (WPS), USA and Canada (North America).

For four companies newly acquired in 2022, the structures required for the collection of non-financial indicators are yet to be implemented or optimized. They are not yet included in the non-financial indicators for 2022 (except indicators relating to the Taxonomy Regulation). They are allocated to the following countries and business units: Austria and Germany (both WBS), Croatia and Norway (both WPS). Wienerberger is working on the implementation and optimization of the necessary data collection structures, the objective being to include the non-financial indicators of these sites as of the 2023 reporting year.

Further deviations of individual indicators from the reporting scope are indicated wherever they apply.

The indicators on the topics of "Climate Protection & Adaptation to Climate Change" (energy and emission indicators) and "Circular Economy" (share of new products that are reusable or recyclable and the share of secondary raw materials used), as well as the share of innovative products, were collected already at the end of 2022. The actual values from 01/01/2022 up to and including 31/10/2022 were collected and reported together with the best estimates for November and December 2022. The estimated values were aligned with the numbers from 01/11/2022-31/12/2022 at the beginning of 2023. No relevant deviations were found. All other indicators were collected at the beginning of 2023 for the entire reporting period from 01/01/2022 to 31/12/2022.

External audit

Most of the data presented in this report are based on internal analyses. This non-financial report was validated by an independent external auditor. For the reporting year 2022, the reporting and its compliance with the requirements of the Sustainability and Diversity Improvement Act (NaDiVeG), GRI standards, and Taxonomy Regulation[1] were audited.

The selection of the independent external auditor for the validation of the Sustainability Report was discussed and approved by the Supervisory Board with input from the Managing Board. In the course of this process, it was decided to mandate a single independent certified public accountant to audit both the financial report and the non-financial report. The auditor was contracted by the Wienerberger Managing Board.

We support these initiatives

United Nations Global Compact

SUSTAINABLE DEVELOPMENT GOALS

TCFD TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

Habitat for Humanity

Our sustainability ratings

ecovadis 2022

CDP DISCLOSER 2022

MSCI ESG RATINGS AAA

Corporate ESG Performance Prime ISS ESG

VÖNIX INDEX MEMBER 22>23

SUSTAINALYTICS RATED

Further information on our ratings can be found on our website.

1) Taxonomy Regulation (EU) 2020/852 – Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088

WIENERBERGER
TCFD CONTENT INDEX

Alignment with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD)

Recommendation	Recommended Disclosures	Our actions
Governance		
Disclose the organization's governance around climate-related risks and opportunities.	a) Describe the Board's oversight of climate-related risks and opportunities.	ESG: Governance & Management Approach – pages 35-55 Corporate Governance Report – pages 194-219
	b) Describe management's role in assessing and managing climate-related risks and opportunities.	ESG: Governance & Management Approach – pages 35-55 Corporate Governance Report – pages 194-219
Strategy		
Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.	a) Describe the climate-related risks and opportunities the organization has identified over the short-, medium-, and long-term.	Climate Protection & Adaptation to Climate Change – pages 68-117 Management Report – pages 220-252
	b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	Climate Protection & Adaptation to Climate Change – pages 68-117
	c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	Climate Protection & Adaptation to Climate Change – pages 68-117
Risk Management		
Disclose how the organization identifies, assesses, and manages climate-related risks.	a) Describe the organization's processes for identifying and assessing climate-related risks.	Management Report – pages 220-252
	b) Describe the organization's processes for managing climate-related risks.	Management Report – pages 220-252
	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	Management Report – pages 220-252
Metrics and Targets		
Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	a) Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such infromation is material.	Key Indicators of the Wienerberger Group – pages 16-17
	b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	Key Indicators of the Wienerberger Group – pages 16-17, Climate Protection & Adaptation to Climate Change – pages 68-117
	c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	Sustainability Program 2023 – pages 59-60, Key Indicators of the Wienerberger Group – pages 16-17, Climate Protection & Adaptation to Climate Change – pages 68-117

MATERIALITY ANALYSIS, SUSTAINABILITY PROGRAM 2023 & UN SDGS

Materiality Analysis

Materiality Analysis 2020

In 2020, in the course of the reorientation of the Wienerberger strategy and the elaboration of the Sustainability Program 2023 (see pages 59-60), Wienerberger again performed a materiality analysis with the support of an external partner. It was implemented in accordance with the current regulatory requirements and international reporting frameworks (Global Reporting Initiative, GRI).

In a first step, Wienerberger updated the value chains of its three core areas of activity – ceramic products and systems, plastic pipes and systems, and concrete products (see value creation at Wienerberger, pages 25-29) – and identified 52 ecological, social, and governance aspects along them. We classified these aspects according to five core thematic areas:

- Climate & energy
- Circular economy
- Employees
- Biodiversity & environment
- Business ethics & social impacts

In order to arrive at a clear definition of the action areas for the Wienerberger strategy and the related Sustainability Program 2023, aspects relating to legal provisions and the requirements of international reporting frameworks (GRI) were included in the 2020 materiality analysis.

For a targeted survey of the most essential matters, Wienerberger's relevant stakeholder groups were reevaluated and weighted. The stakeholder groups were classified by product segment on the basis of "Wienerberger's impacts on its stakeholders" and the "influence of stakeholders on Wienerberger", ranked by order of priority and weighted accordingly. The average of all weightings per product segment was calculated to obtain the consolidated weighting for within the entire Group.

Wienerberger invited approximately 2,500 stakeholders to participate in the online surveys. Systematic interviews were conducted to analyze the five core topics from the following three perspectives and assess them in terms of their materiality:

- Stakeholder relevance as per online survey among our stakeholder groups that were previously evaluated and weighted by relevance
- Business relevance as per online survey among Wienerberger's senior management
- Impacts and risks as per online survey among nominated internal experts

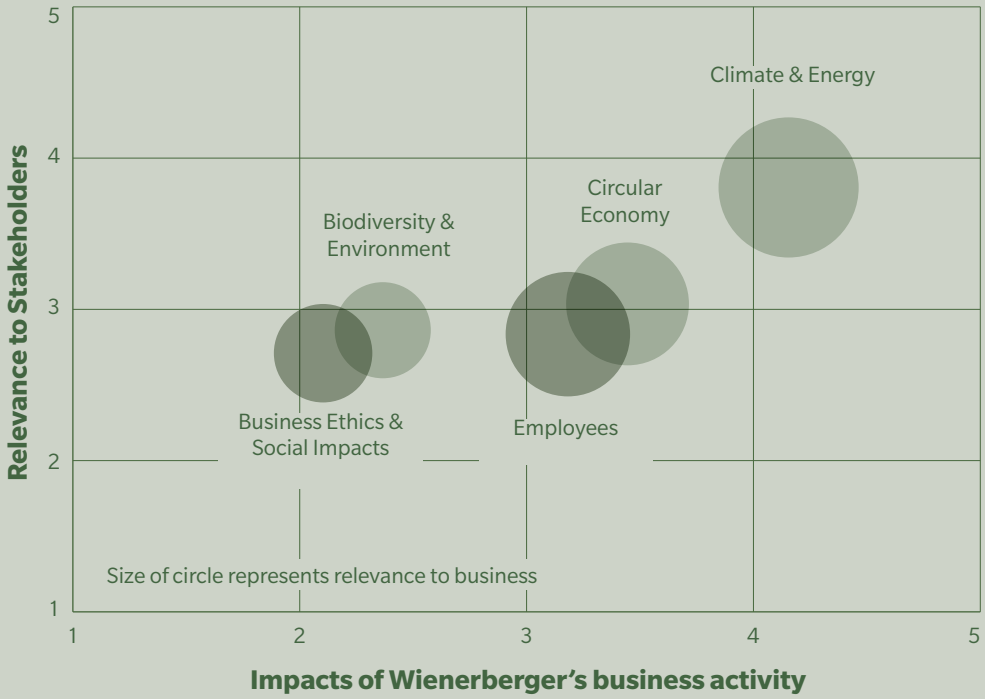
The results of the 2020 materiality analysis provided an important basis for the orientation of the Wienerberger strategy and the determination of targets and measures for the Wienerberger Sustainability Program 2023 (see pages 59-60).

The materiality matrix on the following page shows the result of the analysis performed by Wienerberger in 2020 in the form of a diagram and provides an overview of the topics that were identified as being material for the entire Wienerberger Group along the value chains of all product groups.

In the course of 2022, the relevance of various aspects of the material topics was again thoroughly evaluated in dialogue with our stakeholders (see pages 32-33) and reviewed by the Sustainability & Innovation Committee of the Supervisory Board, the Managing Board, and internal experts.

Based on this current evaluation, information on further topics or aspects that were not yet classified as relevant in 2020 are now included in our sustainability reports. One example is water and the sparing use of this resource, which was not perceived as material in 2020, given the low impact generated by Wienerberger, as compared to the topic of climate & energy. In view of the ongoing exchange with our stakeholders as well as current global developments, the Sustainability and Innovation Committee of the Supervisory Board, the Managing Board, and internal experts decided to include this topic as a focus area and report on it accordingly (see page 103).

WIENERBERGER
MATERIALITY MATRIX 2020



Climate & Energy

- Reduction of carbon emissions in production
- Reduction of energy use and carbon emissions in resource extraction and raw material production (e.g. cement, plastics)
- Energy efficiency through the use of products or solutions
- Energy efficiency (e.g. heat recovery) in production
- Share of renewable energies in energy use in production
- Adaptation to climate change through the effects of products on micro-climate and ground water (paving systems), water storage for dry periods, or discharge of heavy rain (sewage systems)

Circular Economy

- Long product lifetime and long-term value of products
- Share of secondary raw materials in material input in production
- Design of products and systems for improved reusability or recyclability
- Use of renewable raw materials in production
- Separability and recyclability of materials at the products' end-of-life
- Reduction of waste from production

Employees

- Safety and health of Wienerberger's employees
- Job stability and job creation
- Access to skills development, training and apprenticeships, and opportunities for career advancement
- Diversity and equal opportunities, regardless of gender, culture, language, religion, age etc.

Biodiversity & Environment

- Avoidance and control of hazardous substances in raw materials, aggregates, and additives
- Nature conservation at extraction sites
- Contribution of products to biodiversity (e.g. green roofs, walls, and paving solutions)

Business Ethics & Social Impacts

- Compliance and anti-corruption
- Ethical conduct of suppliers
- Human rights and working conditions in the supply chain
- Safety and health in supply chain, in construction & demolition
- Healthy indoor climate due to good air quality in buildings
- Affordability of building materials and solutions
- Product and system design supporting ease of installation

Sustainability Program 2023

The Wienerberger Sustainability Program 2023 is an essential step on the path of our transformation as well as our long-term goals in line with the European Green Deal.

The Wienerberger strategy sets out the Group's vision and its ESG targets[1]. The strategy was elaborated jointly by the Wienerberger Managing Board and the Sustainability and Innovation Committee of the Supervisory Board. It is based on our mission statement and our value proposition: to act responsibly, protect the environment, improve people's quality of life, and, at the same time, create a better world for generations to come.

In 2020, in the process of further developing our strategy, we also elaborated the Sustainability Program 2023 for the Wienerberger Group. It represents a conscious voluntary commitment to continuously improving the ecological, social, societal, and economic performance of the Wienerberger Group.

The Sustainability Program 2023, designed as a three-year program of work, is based on the 2020 materiality analysis and our experience gained so far. It contains group-wide, measurable targets on environmental, social, and governance topics that Wienerberger wants to achieve by 2023.

The targets defined in the Sustainability Program 2023 primarily refer to the topics identified as material in 2020: climate & energy, the circular economy, biodiversity& environment, employees, and business ethics & social impacts. Moreover, we reaffirm our commitment to meeting the highest national and international governance standards (see page 33). In 2020, Wienerberger defined a measurable target for each of the environmental topics identified as material, to be attained by 2023:

- **Climate & energy:** Wienerberger reduces its CO_2e emissions (Scope 1 and 2) by 15% compared to 2020.
- **Circular economy:** Wienerberger designs all new products to be reusable or recyclable.
- **Biodiversity & environment:** Based on the Wienerberger Biodiversity Program, Wienerberger implements a biodiversity action plan at each of its production sites.

As regards the material topic of employees and its sub-aspects, Wienerberger set itself the following measurable targets in 2020, to be attained by 2023:

- **Competence development and career advancement:** Compared to 2020, Wienerberger increases the number of training hours per employee by 10%.
- **Diversity and equal opportunities:** Wienerberger increases the percentage of women to at least 15% in senior management and at least 30% in white-collar positions.

Regarding the material topic of governance & social impacts, Wienerberger has set itself the following targets:

- **Governance standards:** Wienerberger is committed to meeting the highest national and international governance standards, with a special focus on:
  - Corporate strategy
  - Diversity and composition of the Boards
  - Remuneration for executives
  - Succession management
- **Social impacts:** Wienerberger builds 200 dwelling units per year for people in need.

An overview of our ESG targets pursued within the framework of the Wienerberger Sustainability Program 2023, as well as our performance in these areas in 2022, is shown on page 60. For further information on the core topics, targets, and achievements of Wienerberger, please refer to the chapters "Climate Protection & Adaptation to Climate Change" (pages 69-117) "Circular Economy" (pages 118-126) "Biodiversity & Environment" (pages 128-136), and "Employees & Social Impacts" (pages 137-162).

Wienerberger is currently finalizing the ESG targets for 2026 as the next stage of our Sustainability Program. We will present the Sustainability Program 2026, with an even stronger focus on sustainable solutions, in particular for climate-neutral buildings and solutions for sustainable water management, in 2023.

1) ESG: Environmental, Social, Governance

OUR SUSTAINABILITY PROGRAM 2023 AND PROGRESS 2022

We are clearly committed to achieving climate neutrality and actively support the European Green Deal. The highest possible level of transparency of our progress in the fight against climate change is important to us. Alongside long-term sustainability targets, we therefore also set ourselves ambitious short- and medium-term targets. However, in order to adequately address all ecological, social, and societal challenges, we have defined our Sustainability Program 2023.

	Topics	Targets 2023	Progress 2022
Environment	 **Decarbonization**	**15%** less CO_2e emissions compared with 2020	**13.2%** less CO_2e emissions compared with 2020
	 **Circular Economy**	**100%** of new products designed to be reusable or recyclable	**98%** of new products have been designed to be reusable or recyclable
	 **Biodiversity**	**Biodiversity Action Plans** for all our production sites in place	**67** production sites with implemented Biodiversity Action Plans
Social	 **Diversity**	**>15%** female employees in senior management **>30%** female employees in white-collar positions	**15%** female employees in senior management **34%** female employees in white-collar positions
	 **Training and Development**	**10%** more training hours per employee compared with 2020	**53%** more training hours per employee compared with 2020
	 **CSR Projects**	**200** housing units per year built with our products for people in need in our local markets	**254** housing units built
Governance	 **Governance Standards**	Committed to the highest national and international **governance standards**	**A consistent focus on:** > Business strategy > Board diversity and compensation > Executive compensation > Succession management

UN Sustainable Development Goals (UN SDGs)

RELEVANT SDGs
RELATING TO THE ENTIRE WIENERBERGER GROUP

SDGs of Relevance to the Wienerberger Group

The Agenda 2030 for Sustainable Development of the United Nations (UN) comprises 17 Sustainable Development Goals (SDGs). Within the framework of the 2020 materiality analysis, the direct and indirect impacts of Wienerberger on the SDGs along the entire value chain were evaluated. The evaluation focused on the material impacts and risks identified within the framework of an impact analysis performed in 2020 (see page 57). Subsequently, the allocation of relevant SDGs and their targets was made according to the description of impacts and on the basis of external sources (e.g. GRI, UN Global Compact, https://sdgcompass.org/, European Commission, 2018: Mapping the role of raw materials in sustainable development goals). The SDGs were weighted according to these impacts and the relevant targets of each SDG. The relevance of the SDGs was then established on the basis of:

- the number of relevant targets per topic (impact) and SDG, and
- the weighting based on the impact assessment (impact weighting multiplied by the number of relevant targets).

Ten of the 17 SDGs were thus identified as more or less relevant to Wienerberger (see diagram above).

Goal 8 "Decent work and economic growth" was identified as the goal most relevant to the Wienerberger Group. Within the framework of its business activity, Wienerberger aims, on the one hand, to provide high-quality jobs, and, on the other hand, to decouple economic growth from the degradation of the environment.

This includes the enhancement of efficiency and the increased use of clean and sustainable technologies by the company. By increasing its own resource and energy efficiency in production, Wienerberger also contributes significantly to the achievement of Goal 12 "Responsible consumption and production". At the same time, Goal 9 "Industry, innovation and infrastructure", which in particular calls for building resilient and sustainable infrastructure and promotes inclusive and sustainable infrastructure, is being advanced.

An overview of the relevant SDGs and their targets, as they relate to the material topics of the Wienerberger Group (see page 57) along the entire value chain, can be found on pages 62-67.

Climate & Energy

Within the framework of our Sustainability Program 2023, our climate protection target for the entire Wienerberger Group is:

"15% reduction of CO_2e emissions by 2023, compared to 2020[1]"

In our production, we are continuously working on measures to improve energy efficiency and to reduce our CO_2e emissions.

Through our products, such as our clay blocks with their excellent thermal insulation properties, we contribute toward improving the energy efficiency of buildings.

Moreover, our products and system solutions can be used for the construction of tornado-proof buildings and help to make cities more resilient to climate change. With our infrastructure solutions, we help to store water and prevent flash flooding thanks to water-permeable pavers.

For further information on this topic, please refer to the chapter "Climate Protection & Adaptation to Climate Change", starting on page 68.

CLIMATE & ENERGY

7.3
By 2030, double the global rate of improvement in energy efficiency.

13.1
Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.

1) Based on product-group-specific KPIs

Circular economy

Within the framework of our Sustainability Program 2023, our circularity target for the entire Wienerberger Group is:

"100% of our new products designed to be reusable or recyclable."

The reusability or recyclability of our products is an essential aspect of our innovation effort, as it significantly prolongs their useful life. For each product group, we develop criteria to be taken into account in the process of designing new products.

By working with secondary raw materials and using natural resources efficiently in our production, we contribute to the improvement of resource efficiency and the reduction of waste. Moreover, we participate in research projects, for example on recycled concrete and the climate-friendly production of cement.

For additional information, please refer to the chapter "Circular Economy", starting on page 118.

Wienerberger meets all legal requirements at the European, national, and regional levels regarding the avoidance and substitution of hazardous substances, especially in raw materials. Compliance with all legal provisions is being monitored continuously and corrective measures, if necessary, are taken without delay.

Based on an internal guideline, uniform management practices regarding the avoidance of hazardous substances are in place at all production sites of the Wienerberger Building Solutions Business Unit. The guideline provides for the strict classification of inputs and contains mandatory instructions for employees on the use of secondary raw materials and the avoidance of hazardous substances at the production sites. Compliance with these requirements is verified on the basis of the mandatory annual raw material reports.

CIRCULAR ECONOMY

8.4
Improve progressively, through 2030, global resource efficiency in consumption and production and endeavor to decouple economic growth from environmental degradation.

9.4
By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes.

12.2
By 2030, achieve the sustainable management and efficient use of natural resources.

12.5
By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.

Biodiversity & environment

Within the framework of our Sustainability Program 2023, our target for the entire Wienerberger Group regarding biodiversity and the environment is:

"Biodiversity Program fully implemented at all our sites."

By 2023, biodiversity action plans based on the Wienerberger Biodiversity Program will be implemented at all Wienerberger production sites. The Biodiversity Program has been designed as a pragmatic and measurable contribution toward increasing the diversity of plant and animal species at production sites.

The objective of the Wienerberger Biodiversity Program is to convert as much of our land as possible into high-quality habitats for biological diversity. In 2021, Wienerberger, together with external experts, explored over 30 specific measures to foster flora and fauna and documented them in a catalogue of measures for the entire Group, including design, management, and maintenance options as well as measures already implemented at Wienerberger sites. The measures taken into consideration were tried out at various pilot sites in Europe. Based on experience gained there, Wienerberger will roll out individual biodiversity action plans to all sites by 2023. Biodiversity ambassadors appointed for each site will monitor implementation and determine the resultant increase in biodiversity.

Biodiversity, nature conservation, and a meaningful subsequent use are important sustainability criteria for the operation of clay pits. For Wienerberger, it is a matter of course to respect natural habitats and their biological diversity, and to make the company's own depleted clay pits available for their intended subsequent use. Within the framework of our business relations, we also see to it that our suppliers comply with our ecological and social standards, which we communicate clearly in our group-wide Supplier Code of Conduct.

Among other benefits, our products and system solutions also facilitate compliance with the new energy standards for buildings. Our pipe systems are used for the construction of drinking-water supply and wastewater disposal systems, which has a positive impact on hygienic conditions and the health of people.

For additional information, please refer to the chapter "Biodiversity & Environment", starting on page 127.

BIODIVERSITY & ENVIRONMENT

3.9
By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination.

6.3
By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.

6.4
By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.

12.2
By 2030, achieve the sustainable management and efficient use of natural resources.

12.4
Achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.

15.1
Ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands.

15.5
Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species.

Employees

Within the framework of our Sustainability Program 2023, our targets for the entire Wienerberger Group regarding diversity, competence development and career advancement are:

"At least 15 % women in senior management"

"At least 30 % women in white-collar positions"

Wienerberger is aware of the fact that the percentage of women in specific positions is but one of many important aspects of a high level of diversity. We regard these objectives for the percentage of women as a first step: For us, this is not a matter of defining quotas, but of building a positive awareness for gender equality and other aspects of diversity.

"10 % more hours of training per employee by 2023, compared to 2020"

Wienerberger attributes great importance to developing and supporting its employees, enabling them to network with one another, and engage in an international exchange of knowledge.

Wienerberger meets all legal requirements at the EU, national, and regional levels regarding the avoidance and substitution of hazardous substances. The company invests in protective measures, such as protection from exposure to respirable crystalline silica, in order to protect its employees from occupational diseases.

Moreover, Wienerberger confirms its global commitment to respect for human rights, fair working conditions, payment of adequate remuneration, the avoidance of excessive working hours, permanent employment relationships, and respect for the freedom of association and the right of employees to engage in collective bargaining.

For further information, please refer to the chapter "Employees & Social Impacts", starting on page 137.

EMPLOYEES

3.9
By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.

8.5
By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.

8.6
Substantially reduce the proportion of youth not in employment, education or training.

8.8
Protect labor rights and promote safe and secure working environments for all workers.

Business ethics & social impacts

Ensuring compliance with the highest standards of integrity and business ethics is a matter of special importance for Wienerberger. The company reaffirms its global commitment to fair working conditions and respect for human rights. Within its sphere of influence, it guarantees the protection of fundamental human rights. It goes without saying that Wienerberger tolerates neither child labor nor forced labor nor any form of discrimination.

Wienerberger is steadily pursuing the strictly defined target of "zero incidents of corruption" and expects all its employees to act accordingly. In 2021, Wienerberger elaborated a group-wide Code of Conduct, which was implemented in parallel with a whistle-blowing service. The Code of Conduct applies to the entire Wienerberger Group and all its subsidiaries in which Wienerberger holds a stake of at least 50%. The principles laid down in the Code of Conduct are intended to ensure that we share a common understanding, demonstrate good judgement, and maintain high standards of ethics and integrity in our dealings with all our stakeholders. We expect the same behavior from our business partners, such as suppliers, contractors, and customers. We also require our suppliers to meet ecological and social standards, which we communicate clearly in our group-wide Supplier Code of Conduct.

For further information, please refer to the chapters "ESG: Governance & Management Approach", starting on page 35, and "Employees & Social Impacts", starting on page 137.

BUSINESS ETHICS & SOCIAL IMPACTS

8.8
Protect labor rights and promote safe and secure working environments for all workers.

11.1
By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums.

16.5
Substantially reduce corruption and bribery in all their forms.

16.6
Develop effective, accountable and transparent institutions at all levels.

16.7
Ensure responsive, inclusive, participatory and representative decision-making at all levels.

CLIMATE PROTECTION & ADAPTATION TO CLIMATE CHANGE

The building sector accounts for more than one third of worldwide energy consumption and almost 40% of CO_2 emissions. Wienerberger product and system solutions have a long useful life of over 100 years and help to make buildings climate-neutral. With our building and infrastructure systems, we provide long-term solutions for the adaptation to climate change. Moreover, we are consistently pursuing the target of reducing our own greenhouse gas emissions. This is how we support the European Green Deal and set the course for the future.

Target of our Sustainability Program 2023

15 %

less CO_2 emissions (Scope 1 and 2) by 2023 compared to 2020[1]

Apart from the long-term target of becoming climate-neutral by 2050, Wienerberger has also set itself short-term targets as milestones along the way. Our contribution to climate protection comprises a wide range of measures: the enhancement of our production and energy efficiency, the dematerialization of our product and system solutions, the decarbonization of raw materials, and the switch to climate-neutral or low-emission energy sources. At the same time, we are developing new technologies to further reduce CO_2 emissions in our production.

1) Based on product-group-specific KPIs; all CO_2 indicators refer to carbon dioxide equivalents (CO_2e).

Climate Protection & Adaptation to Climate Change

Current global warming, caused by rising concentrations of greenhouse gases in the atmosphere, results in long-term climate change. This change leads to rising sea levels, a higher frequency of extreme climate events, and more extreme heatwaves and droughts. Companies in all sectors and industries are therefore urgently called upon to swiftly reduce the greenhouse gas emissions caused by their processes and products. At the same time, climate-friendly business models open up great economic opportunities and drive innovations.

For Wienerberger, climate change mitigation and adaptation to climate change along the entire value chain are material topics in Wienerberger's mission to improve people's quality of life and create a better world for future generations. Wienerberger has already reduced its CO_2 emissions by more than 7% between 2013 and 2020.

> *"Our long-term goal is to implement the European Green Deal: To reach our target of being climate-neutral not later than 2050, we are pursuing a clear strategy. Wienerberger's medium-term target is to reduce its CO_2 emissions by 40% by 2030, as compared to 2020. Our short-term targets to be attained along the way are transparently disclosed in our Sustainability Program 2023."*
>
> **Heimo Scheuch**, CEO of Wienerberger

Finance flows are to be directed onto a path toward lower greenhouse gas emissions and climate-resilient development. The recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) established by the Financial Stability Board (FSB) serve to advance this target. Meanwhile, sustainability-related financial reporting has become part of the regulatory framework in the European Union. With its Taxonomy Regulation[1], the EU intends to achieve alignment with the objectives of the Green Deal and meet the growing demand of investors for information on ecologically and socially sustainable economic activities. In the near future, we will therefore be seeing a convergence of financial and sustainability reporting in Europe.

In previous years, Wienerberger already used the opportunity to clearly and transparently disclose its contribution to the attainment of climate protection targets. Since 2020, we have voluntarily followed the TCFD recommendations in our reporting. The TCFD recommendations and the Taxonomy Regulation of the EU confirm our strategic orientation and the targets of our Sustainability Program 2023 in respect of climate change mitigation and climate change adaptation.

Our commitment to climate change mitigation and climate change adaptation comprises the following three core areas:

Climate-neutral production by 2050: *We are making a consistent effort to reduce greenhouse gas emission along our entire value chain, the target being to achieve climate neutrality in production by 2050. We have already identified the necessary technologies and measures and defined their use and roll-out in a structured roadmap for their implementation, which we are following step by step.*

Climate-neutral building solutions with our products and systems: *Wienerberger products and systems are designed to make buildings climate-neutral. The classification system of the EU Taxonomy Regulation provides a framework for benchmarking and transparent communication of our commitment.*

Solutions for the adaptation to climate change*: With our building and infrastructure systems, we provide solutions for the adaptation to climate change. These range from roof and wall systems, façade solutions and building technology to innovative piping systems for a secure supply of energy and water, as well as systems for rainwater and wastewater.*

1) The EU Taxonomy Regulation creates a uniform classification system for sustainable economic activities. This legal framework sets out detailed conditions to be met by an economic activity if it is to be classified as economically sustainable.

Climate-related scenario analysis

In 2022, Wienerberger performed a climate-related scenario analysis in accordance with the method recommended by TCFD in order to better assess the opportunities and risks arising from climate change and to plan and act accordingly. Two scenarios dealing with the consequences of future climate change, depending on the mitigation measures taken and the volume of the remaining greenhouse gas emissions, were examined. Additionally, the resilience of the Group under different future climate scenarios was analyzed (see page 85). The analysis of climate-related opportunities confirms the relevance of the Wienerberger Sustainability Program 2023 as part of the corporate strategy, including the target of decarbonization in our production. The range of solutions for climate-neutral buildings as well as solutions for adaptation to climate change, as described on pages 98-102 of this chapter, are in line with these opportunities. Within the framework of the EU Taxonomy Regulation, Wienerberger discloses the percentages of our economic activities that contribute to the target of climate change mitigation. In respect of this climate target, the Taxonomy Regulation provides a platform for Wienerberger to describe its share of solutions for climate-efficient and climate-neutral buildings (details starting on page 104).

Details and definitions of Wienerberger's climate-related reporting

CO_2 and CO_2e: Flue gas analyses performed regularly in our plants have shown that among the greenhouse gases regulated by the Kyoto Protocol[1] CO_2 is the only one of relevance to the Group. In its climate protection efforts, Wienerberger therefore focuses on decarbonization (reduction of CO_2 emissions) along its value chain (see pages 25-29).

Wienerberger therefore reports its direct greenhouse gas emissions (Greenhouse Gas Protocol, Scope 1) in tons of CO_2, which in this case is identical with tons of CO_2 equivalents. Indirect greenhouse gas emissions (Scope 2) from electricity are recorded and reported as CO_2 equivalents or CO_2e (calculation according to market-based method[2]).

The absolute CO_2 emissions or corresponding CO_2 indicators communicated in our reporting on climate protection thus always refer to emissions of carbon dioxide equivalents (CO_2e).

Global Warming Potential (GWP): By definition, CO_2 has a GWP of 1, regardless of the period of time considered, as it is the gas used as a reference.[3] For Wienerberger, with CO_2 being the only relevant greenhouse gas, Therefore, our data on CO_2 equals GWP and CO_2e.

Scope 3 emissions: Relevant Scope 3 emissions, i.e. indirect emissions resulting, for instance, from the purchase, transport, or sale of raw materials and substances, will be disclosed in the Annual Report 2023.

Structure of this chapter

In our activities relating to climate change mitigation and the adaptation to climate change, we differentiate between the fields of action listed below. Our possibilities of addressing these fields of action, challenges, and opportunities, as well as our performance in 2022, are explained in detail in the following sections of this chapter:

- Climate protection in our production (Scope 1 and Scope 2)
- TCFD – Climate-related disclosures focusing on climate change
- Climate protection with our product and system solutions
- Building and infrastructure solutions for adaptation to climate change
- Water management
- Disclosures pursuant to the EU Taxonomy Regulation
- Decarbonization in sourcing and distribution

1) The Kyoto Protocol applies to the following greenhouse gases: carbon dioxide (CO_2, reference value), methane (CH_4), nitrous oxide (laughing gas, N_2O), partially halogenated hydrofluorocarbons (H-FKW/HFC), perfluorocarbons(FKW/PFC), and sulfur hexafluoride (SF_6). Since the beginning of the second commitment period in 2012, it has also applied to nitrogen trifluoride (NF_3) as an additional greenhouse gas.
2) Use of the emission factors of the electricity provider or an individual electricity product.
3) https://www.ghgprotocol.org/sites/default/files/ghgp/Global-Warming-Potential-Values%20%28Feb%2016%202016%29_1.pdf

Climate protection in our production (Scope 1 and Scope 2)

Wienerberger's objective is to be climate-neutral by 2050, which also means becoming climate-neutral in production. The relevance of this target was confirmed by the climate-related scenario analysis performed in 2022 (see page 85). To meet this objective by 2050, we have developed new technologies, identified the necessary measures, and defined a roadmap for their implementation. This includes a continuous increase in production and energy efficiency, the dematerialization of our product and system solutions, a careful selection of raw materials, and the conversion of energy consumption to climate-neutral electricity and low-emission or climate-neutral thermal energy sources, always in combination with the development of new technologies for the reduction of CO_2 emissions[1].

With a view to the efficient orientation and implementation of the Sustainability Program 2023, Wienerberger consistently focuses on those topics and aspects that have been identified as being material for the Group. Climate protection and, in particular, decarbonization in production are environmental topics of top priority for the Wienerberger Group.

Within the framework of our Sustainability Program 2023, our climate protection target for the entire Wienerberger Group is:

"15% less CO_2 emissions (Scope 1 and 2) compared to 2020"[2]

This target comprises the reduction of our

- Scope 1 emissions: direct CO_2 emissions from primary sources of energy and from raw materials (the latter is of particular relevance in ceramic production),
- Scope 2 emissions: indirect CO_2 emissions from the Wienerberger Group's consumption of electricity.

"In 2022, Wienerberger succeeded in reducing its group-wide CO_2 emissions (Scope 1 and Scope 2) by more than 13% compared to 2020."

The reduction achieved by 2022 is attributable to the comprehensive decarbonization programs in our production (details starting on page 115). Our engineers in ceramic production are continuously working on the reduction of our Scope 1 emissions. This includes the development of new technologies for a further enhancement of energy efficiency in drying and firing, for example through electrification and the avoidance or recovery of waste heat, as well as product, process, and portfolio optimization.

Moreover, new production technologies are being developed for the efficient use of low-carbon or carbon-neutral energy sources. We carefully select our raw materials for ceramic production in order to minimize process emissions. To arrive at the best possible solutions, we operate our own internal research facilities and cooperate with external institutions. The dematerialization of our products and system solutions also delivers an important contribution.

Wienerberger is continuously reducing its Scope 2 emissions from group-wide electricity consumption. To this end, Wienerberger concludes power purchase agreements (PPA), buys green electricity certified pursuant to the EU Renewable Energy Directive, uses its own generation facilities, such as solar panels, and offsets the remaining share of electricity from fossil sources.

1) Greenhouse gases such as methane, nitrous oxide, or chlorofluorocarbons (CFCs) are irrelevant in Wienerberger's production. Wienerberger therefore reports its direct greenhouse gas emissions (Greenhouse Gas Protocol, Scope 1) in tons of CO_2, which in this case is identical with tons of CO_2 equivalents. Indirect greenhouse gas emissions (Scope 2) from electricity are recorded as CO_2e (calculation according to market-based method). The absolute CO_2 emissions or the corresponding CO_2 indicators communicated in our climate protection reporting therefore always refer to emissions in carbon dioxide equivalents (CO_2e).
2) Measured on the basis of product-group-specific KPIs

In the following sections, we report in detail on Wienerberger's management and performance as regards the decarbonization of its production. Information is provided on the following aspects:

- Our path to climate neutrality by 2050
- Use of energy sources in our production processes
- Controlling systems and data collection
- Method of index calculation for specific indicators
- Specific direct CO_2 emissions (Scope 1) and indirect CO_2 emissions from electricity (Scope 2)
- Absolute direct CO_2 emissions (Scope 1) and indirect CO_2 emissions from electricity (Scope 2)
- Specific energy consumption
- Absolute energy consumption
- Quality and environmental management systems at Wienerberger

Our path to climate neutrality by 2050

Wienerberger is committed to the European Union's long-term target of climate neutrality by 2050. Wienerberger's medium-term target is to reduce its specific CO_2 emissions by 40% by 2030, as compared to 2020. This is to be achieved through targeted programs and measures.

CLIMATE PROTECTION MEASURES IN OUR PRODUCTION

Our ceramic production accounts for the major part of direct CO_2 emissions (Scope 1). In this area, in particular, Wienerberger will therefore focus intensively on comprehensive measures to reduce specific CO_2 emissions. Some of these measures are listed belows:

Enhancement of production and energy efficiency: *Measures to enhance energy efficiency contribute to the reduction of specific CO_2 emissions in production. In this context, new production technologies (see below) play an important role.*

Dematerialization and raw material efficiency: *Reduction of raw material input, with product quality and product properties remaining the same. CO_2 emissions from raw materials and the consumption of energy sources can thus be avoided.*

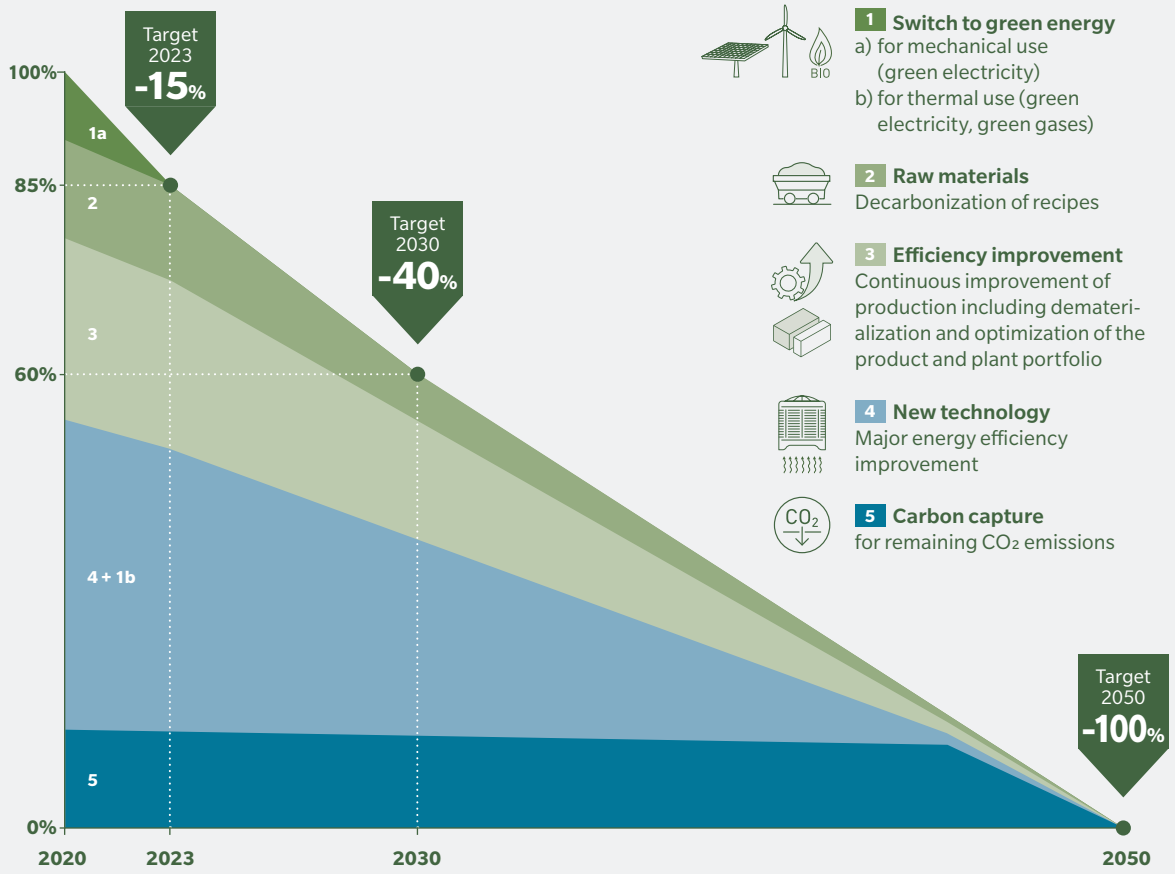
Decarbonization of raw material mixes: *Changes in mix formulas in favor of use low-emission or climate-neutral raw materials, with product quality and product properties remaining the same (wherever possible).*

Conversion to climate-neutral energy sources: *Evaluation of options for the use of alternative energy generation systems and/or sustainable energy sources at various production sites.*

New production technologies: *Implementation of further R&D projects concerning new technologies for kilns, dryers, and heat pumps, as well as raw material preparation.*

WIENERBERGER'S PATH TO CARBON NEUTRALITY BY 2050

FOR SCOPE 1 AND SCOPE 2 EMISSIONS



1 Switch to green energy
a) for mechanical use (green electricity)
b) for thermal use (green electricity, green gases)

2 Raw materials
Decarbonization of recipes

3 Efficiency improvement
Continuous improvement of production including dematerialization and optimization of the product and plant portfolio

4 New technology
Major energy efficiency improvement

5 Carbon capture
for remaining CO_2 emissions

Specific examples of the aforementioned measures to reduce direct CO_2 emissions (Scope 1) include the use of heat pump technology for enhanced energy efficiency of the drying process or highly efficient, novel kiln technology based on green electricity.

Climate-neutral ceramic plant at Kortemark
At the Kortemark production site in Belgium, Wienerberger started up the world's first climate-neutral ceramic plant operating on the highly efficient, novel kiln technology. In this solution developed by Wienerberger, both the dryer and the kiln used for the production of climate-neutral slim bricks are running entirely on electricity, 25% of which is generated by an on-site photovoltaic installation. The remaining demand is met entirely by green electricity. Energy from fossil sources is not used at all.

CO_2 footprint of Uttendorf plant to be reduced by 90%
Another example is the Uttendorf project for the production of clay blocks. Wienerberger intends to reduce the CO_2 footprint of production by 90% through the use of a high-efficiency kiln operating on green electricity.

Projects like these confirm the feasibility of our target to become climate-neutral by 2050.

Wienerberger is reducing its Scope 2 emissions by converting its production to green electricity procured primarily from external generators. To this end, Wienerberger concludes power purchase agreements (PPA) and buys green electricity certified pursuant to the EU Renewable Energy Directive. Moreover, the company uses its own generation facilities, such as solar panels, and offsets the remaining share of electricity from fossil sources.

In 2022, Wienerberger invested more than € 60 million in ESG projects, including over € 39 million for decarbonization projects (compared to approximately € 32 million capex in 2021). This corresponds to a share of over 65 %.

Use of energy sources in our production processes

Use and application of the different energy sources in our production processes vary greatly, depending on the product group. We distinguish between the following fields of production:

- **Ceramic production (clay blocks, roof tiles, facing bricks and pavers, as well as ceramic pipes)**: Mainly thermal energy for the drying process and to heat the kilns for firing. Electrical energy is used for raw material mixing and preparation, extrusion, grinding, and transport.
- **Production of plastic pipes**: Mainly for the operation of plant and equipment to heat plastic granulates in the extruder and shape the material mix by means of a die.
- **Production of concrete and calcium silicate products of the North America Business Unit**: Mainly for heat treatment of products under high pressure for autoclaving.
- **Production of concrete pavers**: Mainly for the operation of plant and equipment for mixing, shaping, drying, and surface treatment (washing, grinding, blasting, or coating).

The disclosures on the use of energy sources are based on actual group-wide consumption values (see also page 84). Data relating to absolute and specific energy consumption, relative to the quantities of products ready for sale, are converted into a unit harmonized across the Group on the basis of consumption values.

Controlling systems and data collection

Effective controlling systems have been installed in all fields of production of the Wienerberger Group. The primary task of these systems is to record all production-related data that are required for the management of the company and enable the internal benchmarking of individual plants against one another. For the 2022 report, the actual energy and emission data from 01/01/2022 up to and including 31/10/2022 were recorded and reported together with estimates for November and December 2022 (see also section "Our non-financial reporting", page 52). After the end of the year, the emission indicators were revised on the basis of the data recorded up to December 31 and corrected if predefined benchmarks were exceeded.

Method of index calculation for specific indicators

The production volume is a measured value that exclusively comprises products ready for sale. It is recorded for the calculation of the specific indicators (energy input, CO_2 emissions).

For the purpose of index calculation, Wienerberger uses not only production volumes in tons, but also other relevant quantity-related units. These are also of relevance for the eco-balances of buildings and are applied as follows:

- **Square meters** for roof tiles, facing bricks, and pavers as well as calcium silicate products
- **Thousand normal formats (TNF)** for clay blocks
- **Tons** for plastic pipes, ceramic pipes, and other concrete products

These indicators reflect our efforts to improve resource efficiency through the dematerialization of products and system solutions without any trade-off in product quality and product properties.

We report the specific values as an index in % relative to the defined baseline year, the values of which are set at 100%.

The index-linked specific indicators, such as energy input or CO_2 emissions relative to the amount of products ready for sale, reflect the development of the individual product groups over time. The index-linked specific energy input is indicated in % based on kWh/quantity of products ready for sale (2020 = 100%). Index-linked specific CO_2 emissions are indicated in % based on kg CO_2/quantity of products ready for sale (2020 = 100%).

Specific direct (Scope 1) and indirect (Scope 2) CO_2 emissions

Index of specific direct (Scope 1) and indirect (Scope 2) CO_2 emissions [1)2)] in %, based on kg CO_2/quantity of products ready for sale (2020 = 100%)	**2020**	**2021**	**2022**	**Chg. vs. Baseline year 2020 in %**
Clay blocks	100.0	92.7	**85.1**	–14.9
Roof tiles (clay and concrete)	100.0	94.2	**90.0**	–10.0
Facing bricks and clay pavers	100.0	95.1	**90.9**	–9.1
Concrete pavers	100.0	89.5	**0.0**	–100.0
Wienerberger Building Solutions	**100.0**	**93.6**	**87.0**	**–13.0**
Plastic pipes	100.0	5.6	**6.5**	–93.5
Ceramic pipes	100.0	97.7	**95.3**	–4.7
Wienerberger Piping Solutions	**100.0**	**31.2**	**34.1**	**–65.9**
Facing bricks and concrete pavers	100.0	99.4	**94.1**	–5.9
Façade (calcium silicate products)	100.0	97.5	**95.5**	–4.5
Concrete products	100.0	94.2	**95.8**	–4.2
Plastic pipes	100.0	95.0	**98.4**	–1.6
North America	**100.0**	**99.0**	**94.2**	**–5.8**
Wienerberger Group	**100.0**	**91.9**	**86.8**	**–13.2**

1) The calculation excluded CO_2 emissions from biogenic input materials. // 2) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included for the 2022 reporting year (for details, see page 53). // The calculation of indirect CO_2 emissions from purchased electricity is based on the current CO_2 emission factors of Corporate Procurement. // For all non-financial indicators, the rates of change compared to previous reporting periods are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

In 2022, Wienerberger significantly reduced the total of specific direct (Scope 1) and indirect CO_2 emissions (Scope 2) by 13.2% compared to the 2020 baseline year. This success was due to Wienerberger's comprehensive programs and activities aimed at the decarbonization of the production process (see page 115). Moreover, Wienerberger reported a substantial increase in its 2022 production volumes, which in turn resulted in higher specific energy efficiency and lower emissions compared to the 2020 baseline year. This shows that we are well on our way toward achieving the target set in the Wienerberger Sustainability Program 2023, which is to reduce our specific CO_2 emissions (Scope 1 and 2) by 15% by 2023 compared to 2020.

Specific CO_2 emissions are calculated on the basis of absolute CO_2 emissions (excluding CO_2 from biogenic input material) in kilograms relative to the quantity of products ready for sale (kg CO_2/quantity of products ready for sale in tons, m^2, or TNF). See also information on the method of index calculation for specific indicators on page 75.

In the following, we report in detail on the development of Wienerberger's specific direct (Scope 1) and indirect CO_2 emissions (Scope 2).

Specific direct CO_2 emissions from primary energy sources and raw materials (Scope 1)

Index of specific direct CO_2 emissions (Scope 1) [1)2)] in %, based on kg CO_2/quantity of products ready for sale (2020 = 100%)	**2020**	**2021**	**2022**	**Chg. vs. Baseline year 2020 in %**
Clay blocks	100	96	**92**	–8
Roof tiles (clay and concrete)	100	98	**96**	–4
Facing bricks and clay pavers	100	99	**95**	–5
Concrete pavers [3)]	100	100	**100**	0
Wienerberger Building Solutions	**100**	**97**	**93**	**–7**
Plastic pipes	100	99	**100**	0
Ceramic pipes	100	98	**95**	–5
Wienerberger Piping Solutions	**100**	**99**	**99**	**–1**
Facing bricks and concrete pavers	100	100	**95**	–5
Façade (calcium silicate products)	100	100	**96**	–4
Concrete products	100	98	**99**	–1
Plastic pipes [3)]	100	100	**100**	0
North America	**100**	**100**	**96**	**–4**
Wienerberger Group	**100**	**97**	**94**	**–6**

1) Direct specific CO_2 emissions (Scope 1) refer to CO_2 emissions from raw materials (in ceramic production) as well as the fuel emissions of the entire Wienerberger Group. The calculation did not include CO_2 emissions from biogenic input materials. // 2) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included for the 2022 reporting year (for details, see page 53). // 3) As certain product groups do not generate Scope 1 emissions, the value remains unchanged compared to the previous year. // For all non-financial indicators, the rates of change compared to previous reporting periods are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

In 2022, Wienerberger succeeded in reducing its specific CO_2 emissions from primary energy sources and raw materials (excluding biogenic input material) by 6% compared to the 2020 baseline year. Ceramic production accounts for the highest share in direct CO_2 emissions (Scope 1). The reduction was largely driven by the Wienerberger Building Solutions (WBS) Business Unit. WBS was able to reduce its CO_2 emissions by 7% compared to baseline through a variety of comprehensive measures taken in 2022, including (see also page 72):

- Increase in production and energy efficiency
- Dematerialization and efficient use of raw materials
- Decarbonization of raw material mixes
- Conversion to climate-neutral energy sources
- New production technologies

Specific indirect CO_2 emissions from electricity (Scope 2)

Index of specific indirect CO_2 emissions (Scope 2) [1)2)] in %, based on kg CO_2/quantity of products ready for sale (2020 = 100%)	**2020**	**2021**	**2022**	**Chg. vs. Baseline year 2020 in %**
Clay blocks	100	97	**93**	–7
Roof tiles (clay and concrete)	100	96	**94**	–6
Facing bricks and clay pavers	100	96	**96**	–4
Concrete pavers	100	89	**0**	–100
Wienerberger Building Solutions	**100**	**97**	**94**	**–6**
Plastic pipes	100	6	**6**	–94
Ceramic pipes [3)]	100	100	**100**	0
Wienerberger Piping Solutions	**100**	**32**	**35**	**–65**
Facing bricks and concrete pavers	100	99	**99**	–1
Façade (calcium silicate products)	100	98	**99**	–1
Concrete products	100	97	**97**	–3
Plastic pipes	100	95	**98**	–2
North America	**100**	**99**	**99**	**–1**
Wienerberger Group	**100**	**95**	**93**	**–7**

1) The calculation of specific indirect CO_2 emissions from purchased electricity is based on the current CO_2 emission factors of Corporate Procurement. // 2) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included in the 2022 reporting year (for details see page 53). // 3) As no Scope 2 emissions were generated through the production of ceramic pipes by Wienerberger Piping Solutions from 2020 to 2022, the values remain unchanged compared to the previous year. // For all non-financial indicators, the rates of change vs. previous periods are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

In 2022, Wienerberger succeeded in reducing its specific indirect CO_2 emission from purchased electricity by 7% compared to the 2020 baseline year. The reduction was primarily driven by the conversion to climate-neutral electricity. This was achieved through Power Purchase Agreement (PPA) projects, the purchase of green electricity certified pursuant to the EU Renewable Energy Directive, and the generation of green electricity from group-owned facilities (e.g. solar panels). As a result of these steps and initiatives, specific indirect CO_2 emissions were reduced in all business units and their product groups.

Absolute direct CO_2 emissions (Scope 1) and indirect (Scope 2) CO_2 emissions

Absolute direct (Scope 1) and indirect (Scope 2) CO_2 emissions [1) 2)] in kilotons	**2020**	**2021**	**2022**	**Chg. vs. Baseline year 2020 in %**
Clay blocks	1,468.4	1,477.1	**1,473.3**	+0
Roof tiles (clay and concrete)	376.4	398.5	**403.9**	+7
Facing bricks and clay pavers	537.3	559.4	**554.7**	+3
Concrete pavers	0.0	9.5	**0.0**	–
Wienerberger Building Solutions	**2,392.8**	**2,444.5**	**2,431.9**	**+2**
Plastic pipes	61.8	3.5	**3.6**	–94
Ceramic pipes	20.9	23.5	**23.7**	+13
Wienerberger Piping Solutions	**82.8**	**27.0**	**27.3**	**–67**
Facing bricks and concrete pavers	154.1	165.3	**440.0**	+186
Façade (calcium silicate products)	6.9	7.7	**8.0**	+17
Concrete products	0.9	1.0	**2.4**	+160
Plastic pipes	0.0	13.7	**13.3**	–
North America	**174.5**	**187.7**	**463.7**	**+167**
Wienerberger Group	**2,650.1**	**2,659.2**	**2,922.9**	**+10**

1) Direct CO_2 emissions (Scope 1): ETS and non-ETS. ETS source: EU Transaction Log (EUTL). Non-ETS: Calculation in accordance with national rules (Switzerland) or on the basis of EU standard emission factors. For plants in the USA CO_2 emissions from the production process are also reported. Including CO_2 emissions from biogenic input material. Quantities from Wienerberger's CO_2 monitoring corresponding to national rules. The calculation of indirect CO_2 emissions from purchased electricity is based on the current CO_2 emission factors of Corporate Procurement. // 2) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included in the 2022 reporting year (for details see page 53). // For all non-financial indicators, the rates of change vs. previous periods are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

In 2022, absolute CO_2 emissions (Scope 1 and Scope 2, including CO_2 emissions from biogenic input material) amounted to 2,923 kilotons, up by 10% from the 2020 baseline year (2,650 kilotons).

On the one hand, the development of absolute CO_2 emissions in 2022 was influenced by the significantly higher production output compared to the 2020 baseline year and by acquisitions. On the other hand, thanks to our initiatives and projects aimed at reducing CO_2 emissions, absolute CO_2 emissions increased less strongly (+10%) than the Wienerberger Group's absolute energy consumption (+28%) compared to the 2020 baseline year.

Further details on the development of absolute CO_2 emissions are contained in the following sections.

Absolute direct CO_2 emissions from primary energy sources and raw materials (Scope 1)

Absolute direct CO_2 emissions from primary energy sources and raw materials (Scope 1) [1) 2)] in kilotons	**2020**	**2021**	**2022**	**Chg. vs. Baseline year 2020 in %**
Clay blocks	1,355.3	1,396.7	**1,436.3**	+6
Roof tiles (clay and concrete)	328.8	360.8	**376.0**	+14
Facing bricks and clay pavers	513.8	557.0	**551.7**	+7
Concrete pavers	–	0.0	**0.0**	–
Wienerberger Building Solutions	**2,197.8**	**2,314.4**	**2,364.0**	**+8**
Plastic pipes	3.8	3.5	**3.6**	–5
Ceramic pipes	20.9	23.5	**23.7**	+13
Wienerberger Piping Solutions	**24.7**	**27.0**	**27.3**	**+11**
Facing bricks and concrete pavers	125.4	135.9	**370.1**	+195
Façade (calcium silicate products)	5.3	6.1	**6.2**	+17
Concrete products	0.1	0.1	**0.0**	–34
Plastic pipes	–	0.0	**0.0**	–
North America	**131.4**	**142.1**	**376.4**	**+188**
Wienerberger Group	**2,355.0**	**2,483.5**	**2,767.7**	**+18**

1) ETS and non-ETS. ETS source: EU Transaction Log (EUTL). Non-ETS: Calculation in accordance with national rules (Switzerland) or on the basis of EU standard emission factors. For plants in the USA CO_2 emissions from the production process are also reported. Including CO_2 emissions from biogenic input material. Quantities from Wienerberger's CO_2 monitoring corresponding to national rules. // 2) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included in the 2022 reporting year (for details see page 53). // For all non-financial indicators, the rates of change vs. previous periods are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

Direct CO_2 emissions (Scope 1) result from the combustion of fossil fuels, the release of CO_2 from carbonates in the raw material, and the combustion of organic components in the raw materials used in ceramic production (process emissions). The absolute volume of CO_2 emissions in kilotons (= 1,000 t) is recorded and calculated throughout the Group in accordance with the calculation method of the European Union Emissions Trading System (EU ETS). The EU Transaction Log (EUTL) is used as a data source. We record and report the direct CO_2 emissions of the entire Wienerberger Group, including emissions of plants not covered and regulated by the EU ETS. The direct CO_2 emissions of all product groups of the Wienerberger Group are reported.

The development of absolute direct CO_2 emissions of the Wienerberger Group was strongly influenced by notably higher production volumes in 2022 compared to 2020 and by acquisitions. Especially for the North America Business Unit, the first-time inclusion of the non-financial indicators of Meridian, a company acquired at the end of 2021, resulted in a significant increase of its 2022 production volume and higher absolute direct CO_2 emissions.

Absolute indirect CO_2 emissions from electricity (Scope 2)

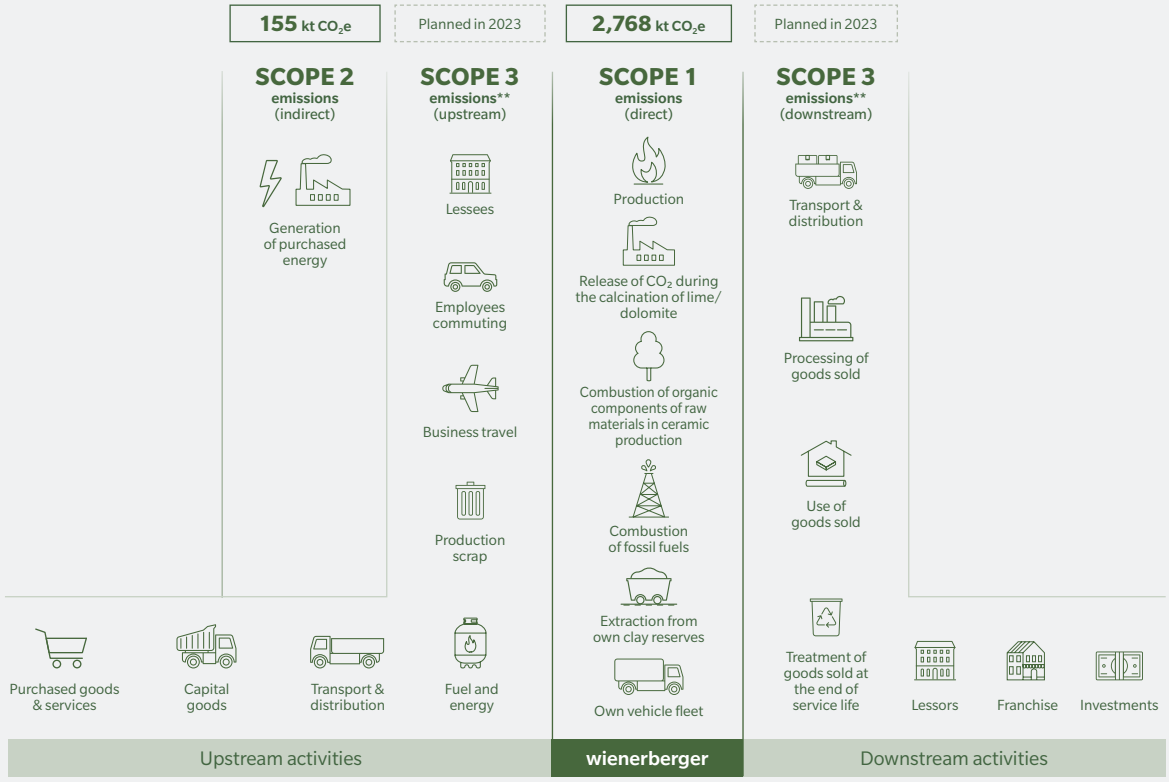
Absolute indirect CO_2 emissions from electricity (Scope 2) [1)] in kilotons	**2020**	**2021**	**2022**	**Chg. vs. base year 2020 in %**
Clay blocks	113.2	80.4	**37.0**	–67
Roof tiles (clay and concrete)	47.7	37.7	**27.9**	–41
Facing bricks and clay pavers	23.6	2.5	**3.0**	–87
Concrete pavers	10.6	9.5	**0.0**	–100
Wienerberger Building Solutions	**195.0**	**130.1**	**67.9**	**–65**
Plastic pipes	58.1	0.0	**0.0**	–100
Ceramic pipes	0.0	0.0	**0.0**	–
Wienerberger Piping Solutions	**58.1**	**0.0**	**0.0**	**–100**
Facing bricks and concrete pavers	28.7	29.3	**69.9**	144
Façade (calcium silicate products)	1.5	1.6	**1.8**	19
Concrete products	0.9	1.0	**2.3**	174
Plastic pipes	12.1	13.7	**13.3**	10
North America	**43.1**	**45.6**	**87.3**	**102**
Wienerberger Group	**296.2**	**175.6**	**155.2**	**–48**

1) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included in the 2022 reporting year (for details see page 53). // For all non-financial indicators, the rates of change vs. previous periods are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

Wienerberger succeeded in reducing its absolute indirect CO_2 emissions (Scope 2) by an impressive 47.6% compared to the 2020 baseline year. This achievement was attributable to Power Purchase Agreement (PPA) projects, the purchase of green electricity certified pursuant to the EU Renewable Energy Directive, and the generation of green electricity from group-owned facilities (e.g. solar panels).

Compared to the 2020 baseline year, the Wienerberger Building Solutions Business Unit recorded a steep 65% reduction of its absolute direct CO_2 emissions from electricity. In 2022, the Wienerberger Piping Solutions Business Unit again reported net-zero indirect CO_2 emissions from electricity, as already in the previous year. For the North America Business Unit, the first-time inclusion of the non-financial indicators of Meridian, a company acquired at the end of 2021, resulted in a significant increase of its 2022 production volume and consequently higher absolute direct CO_2 emissions. By the end of 2023, Wienerberger will further reduce the Group's Scope 2 emissions versus the 2020 baseline year.

ABSOLUTE CO_2e EMISSIONS* SCOPE 1 AND 2 IN 2022



** Greenhouse gases such as methane, nitrous oxide, or CFCs (chlorofluorocarbons) do not matter in Wienerberger's production. Absolute direct CO_2 emissions (Scope 1) from our production processes are therefore identical with carbon dioxide equivalents: Indirect CO_2 emissions (Scope 2) from electricity are recorded as CO_2e (calculation according to market-based method). The absolute CO_2 emissions or the corresponding CO_2 indicators communicated in our reporting on climate protection always refer to emissions of carbon dioxide equivalents (CO_2e).*

*** Scope 3 emissions, i.e. indirect emissions caused, for instance, through the purchase, transport, or sale of raw materials, other materials, and franchise products are are disclosed as of the 2023 reporting year. The data collection structures and processes were optimized accordingly in 2022.*

Quality and environmental management systems

Quality management systems (QMS) have been installed at all our plants, many of them certified according to ISO 9001. Environmentally relevant aspects are also integrated in our existing quality management systems. Meanwhile, more than 50% of all production sites have been certified according to ISO 14001 Environmental Management Systems or are in the process of certification. All ceramic pipe production sites and four plastic pipe production sites of Wienerberger Piping Solutions, as well as all sites of Wienerberger Ltd in Great Britain, have been certified according to (DIN EN) ISO 50001:2011 Energy Management.

Ongoing optimization programs, such as the Plant Improvement Program (PIP+) in the brick segment and the Production Excellence Program (PEP) in the concrete paver segment, are aimed at sustainably reducing resource consumption and costs through improvements of production processes. In the plastic pipe segment, we promote the Design for Lean Six Sigma (DFSS) management approach in order to implement quality improvements and process optimizations.

Specific energy consumption

Index of specific energy consumption [1)2)] in %, based on kWh/quantity of products ready for sale (2020 = 100 %)	**2020**	**2021**	**2022**	**Chg. vs. Baseline year 2020 in %**
Clay blocks	100	101	**101**	+1
Roof tiles (clay and concrete)	100	98	**98**	–2
Facing bricks and clay pavers	100	99	**97**	–3
Concrete pavers	100	101	**91**	–9
Wienerberger Building Solutions	**100**	**100**	**99**	**–1**
Plastic pipes	100	99	**105**	+4
Ceramic pipes	100	93	**90**	–10
Wienerberger Piping Solutions	**100**	**97**	**98**	**–2**
Facing bricks and concrete pavers	100	100	**93**	–7
Façade (calcium silicate products)	100	99	**94**	–6
Concrete products	100	92	**98**	–2
Plastic pipes	100	95	**98**	–2
North America	**100**	**100**	**93**	**–7**
Wienerberger Group	**100**	**99**	**97**	**–3**

1) Total energy consumption includes energy consumed in production, but excludes administration (except in a few individual cases where separate invoicing is not possible). // 2) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included in the 2022 reporting year (for details see page 53). // For all non-financial indicators, the rates of change vs. previous periods are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

For specific energy consumption, as shown in the above table, absolute energy consumption in kWh, relative to the quantity of products ready for sale (in tons, m^2, or TNF), is calculated versus the 2020 baseline year (as an index in %, based on kWh/quantity of products ready for sale; 2020 = 100%). See also methods of index calculation for the specific indicators on page 75.

In 2022, the index of specific energy consumption by the Wienerberger Group was 3% below that of the 2020 baseline year. This is attributable to the energy efficiency projects implemented by Wienerberger in 2022. Moreover, in 2022 Wienerberger succeeded in substantially increasing its production volumes, and consequently its specific energy efficiency, compared to baseline. Owing to the aforementioned impacts, continuously implemented measures aimed at reducing specific energy consumption were successful in almost all product groups.

While the Wienerberger Group's specific energy consumption in 2022 declined by 3% compared to the 2020 baseline year, specific CO_2 emissions were decreased even more sharply by 13.2% (see table on page 76). This difference is due to the fact that the enhancement of energy efficiency is only one of numerous measures taken by Wienerberger with a view to decarbonization. However, individual decarbonization measures sometimes also result in higher natural gas consumption, especially in clay block production. For details, please refer to the section starting on page 72.

Absolute energy consumption

Consumption of energy sources [1) 2)] in gigawatt-hours	2020	2021	2022	Chg. vs. Baseline year 2020 in %
Natural gas	6,319.0	6,837.0	**8,205.7**	+30
Total of other fossil energy sources [3)]	72.0	66.0	**67.0**	–6
Electricity	1,040.3	1,090.0	**1,210.2**	+16
Wienerberger Group	**7,431.0**	**7,993.0**	**9,482.9**	**+28**
Percentage of renewable energy in total electricity consumption in %	42 %	56 %	**54%**	+30

1) Total energy consumption includes energy consumed in production, but excludes administration (except in a few individual cases where separate invoicing is not possible). // 2) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included in the 2022 reporting year (for details see page 53). // 3) Coal, fuel oil, and LNG // For all non-financial indicators, the rates of change vs. previous periods are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

Wienerberger regards the enhancement of production and energy efficiency as a crucial climate protection measure. Our short-term climate protection target (minus 15% by the end of 2023) refers to 2020 as the baseline year. We therefore also report the changes in our absolute energy consumption relative to the 2020 baseline year.

In 2022, the Wienerberger Group's total energy consumption increased by 28% compared to baseline. This is primarily due to acquisitions and the fact that production volumes were substantially higher in 2022 than in 2020. The major part of the Group's absolute energy consumption is accounted for by natural gas, up by 30% in 2022 compared to 2020. Electricity consumption increased by 16% over the value reported in 2020. It is important to note that in 2022 Wienerberger succeeded in significantly increasing its production volume, while production volumes were lower in 2020 primarily on account of the COVID pandemic. Major acquisitions closed in 2021 and included in non-financial reporting for the first time in 2022, such as Meridian in North America, also resulted in higher production volumes than in 2020. These developments had a direct influence on the Wienerberger Group's absolute energy consumption.

Wienerberger is making continuous efforts to convert production processes to low-emission energy sources. The substitution of high-emission energy sources is a matter of high priority for us. In 2022, despite a notable increase in production volumes, the consumption of coal, fuel oil, and liquefied natural gas (LNG) dropped by a total of 6% compared to 2020. As these sources of energy only meet a very small part of the Group's total energy demand, their consumption is reported as an aggregate figure.

In 2022, the share of renewable energy sources in the Group's electricity consumption (in kWh) rose to 54% (2020: 42%), corresponding to an increase by one third (+30% in relative terms). We do not record the consumption of renewable thermal energy sources, as the amounts used in our production processes have been negligible so far. Data on energy sold is equally irrelevant and therefore not reported.

TCFD – Climate-related disclosure with focus on climate change

Since 2020, Wienerberger has supported the voluntary recommendations of the Financial Stability Board (FSB) Task Force on Climate-related Financial Disclosures (TCFD) (see page 39). This way we ensure transparency and the implementation of measures around climate-related opportunities and risks on the path towards a low-carbon economy by 2050. Identified climate opportunities are part of our business strategy and are integrated in our Sustainability Program 2023. The identification, assessment, and effective management of climate risks is an integral part of our current risk management process. For a detailed description, please refer to the Management Report starting on page 248.

Phased approach to integration of the TCFD recommendations

This is Wienerberger's second year of TCFD disclosure, reflecting our actions and processes as of December 31, 2022. The Group is applying a phased approach to integrating the TCFD recommendations over time, recognizing that disclosing the recommended information is not defined as a "one-off" analysis, but as a continuous process. We will therefore continue to enhance our TCFD disclosures as both our business and climate science evolve. Under the TCFD core element "Strategy"[1](one of the four TCFD core elements: Governance, Strategy, Risk Management, and Metrics and Targets) we implemented the following phases (see table on TCFD core elements on page 55):

(1) Phase 1 – implemented in 2021: identification of climate-related risks and opportunities and definition of potential impact on our business, using the following categories:

- **Transition opportunities and risks:** These are linked to the impact of transition to a low-carbon economy (e.g., carbon pricing schemes, future policy requirements on the energy efficiency of buildings).
- **Physical opportunities and risks:** These are linked to the impact of acute risks (e.g., the increased severity of hurricanes/droughts) and chronic risks (longer-term shifts in climate patterns such as a sustained increase in temperatures).

All risks were assessed over the short term (up to one year), medium term (one to five years) and long term (five to 25 years) in line with the observation horizons described in the chapter "Risk Management and the Internal Control System" on page 248.

All opportunities were assessed over the short term (up to five year), medium term (up to ten years) and long term (up to 25 years) in accordance with management expectations and corresponding to the annual planning process.

(2) Phase 2 – implemented in 2022: Implementation of climate-related scenario analysis.

(3) Phase 3 – planned for 2023: Focus on the fourth TCFD core element, "Metrics and Targets".

In 2021, Wienerberger conducted an internal review of its risk identification processes, including interviews and workshops, to identify material climate-related opportunities and risks. The aim was to give the Group an understanding of how the latter currently impact on its business in order to capitalize on strategic business opportunities, enhance resilience to any identified risks, and inform stakeholders about its business strategy going forward. Upon conclusion of this exercise, Wienerberger was able to identify a number of key opportunities which build on our Sustainability Program 2023 in line with EU Taxonomy requirements. The Group was also able to identify climate-related risks and incorporate them in the existing risk register. The Managing Board and the Supervisory Board were jointly responsible for the oversight of this process.

Building on the baseline assessment exercise carried out in 2021, Wienerberger, in collaboration with a leading external climate consultancy firm, conducted a scenario analysis of previously identified material opportunities and risks to understand how they would develop under different future scenarios. The exercise validates our previous work and represents the next step in our phased approach to integrating the recommendations of the TCFD over time. This analysis allowed Wienerberger to further integrate the topic of climate change into our business strategy and risk management procedures, further enhancing resilience and allowing us to better assess future business opportunities.

1) TCFD Good Practice Handbook, 2nd Edition: www.cdsb.net

TCFD – Climate-related opportunities from products

In 2022, Wienerberger reaffirmed its strategic priority of analysis and assessment of the climate-related opportunities from products in the context of TCFD arising on the path towards a low-carbon economy by 2050.

The table on pages 86-88 provides an overview of the climate-related opportunities broken down by product groups and their effects on the business, strategy, and financial planning of the Group. The magnitude of the positive financial impact is classified as high (above EUR 50 million), medium (between EUR 20 and 50 million), and low (below EUR 20 million). The opportunities are continuously evaluated, and appropriate measures and initiatives are taken to fully exploit the identified potential. In 2022, all categories were re-evaluated.

Wienerberger's climate-related opportunities and impact on the organization's businesses, strategy, and financial planning

Product Category	Time Horizon[1]	Contribution to Climate Strategy	Opportunity	Magnitude of Financial Impacts[2]	Financial Impacts
Walls	Long-term	Solutions that contribute to climate adaptation	Development of monolithic exterior wall solutions which make homes naturally climate resilient. The innovative clay blocks with integrated insulation (separate product group) and mortar combines high thermal insulation and maintain the level of functioning and structure during the long lifetime (> 100 years).	High	Increased revenue through solutions contributing to climate change adaptation needs
Walls	Medium-term	Products that contribute to building energy efficiency and decarbonization	Development of building products with high thermal insulation properties and thermal storage capacity. Supporting energy efficiency in winter and summer.	High	Increased revenue through demand for products from low-emission production; reduced direct costs through efficiency gains
Walls	Medium-term	Resource efficiency	Development of resilient building products (building lifetime >100 years vs. insulation lifetime of 35 years).	High	Increased revenue from products contributing to circular economy; reduced direct costs through efficiency gains
Walls	Medium-term	Resource efficiency	Products which contain increased secondary materials as well as products which are reusable and recyclable.	High	Increased revenue from products contributing to circular economy; reduced cost of abatement/carbon tax
Roof	Medium-term	Solutions that contribute to climate adaptation	Renovation of roofs with roof solutions with high thermal insulation properties.	High	Increased revenue through solutions contributing to climate change adaptation needs and circular economy

Product Category	Time Horizon[1]	Contribution to Climate Strategy	Opportunity	Magnitude of Financial Impacts[2]	Financial Impacts
Roof	Medium-term	Resource efficiency	Collection of circular roof products which are reusable and recyclable.	Medium	Increased revenue from products contributing to circular economy; reduced cost of abatement/carbon tax
Roof	Medium-term	Solutions that contribute to building energy efficiency and decarbonization	Solar-panel integrated roof solutions (e.g., Wevolt X-tile and X-Roof, Alegra 10 Wevolt solar roof tiles).	Medium	Increased revenue due to shifting consumer demand for energy efficient production
Façade	Medium-term	Resource efficiency	Use of secondary raw materials (fired clay) in the production of facing bricks.	Medium	Increased revenue through new solutions to climate adaptation needs; lower operating costs through efficiency improvements
Façade	Short-term	Solutions that contribute to building energy efficiency and decarbonization	Development of thinner/dematerialized façade solutions with high thermal insulation properties (e.g., Eco-brick and brick slips) made of natural clay building materials.	Medium	Increased revenue through demand for solutions from low-emission production; reduced direct costs through efficiency gains
Façade and clay pavers	Short-term	Resource efficiency	Reduction of raw material input in production.	High	Increased revenue due to shifting consumer demand for products from energy-efficient production
Plastic and ceramic pipes	Long-term	Resource efficiency	Use of secondary materials in production.	High	Increased revenue through demand for products from low-emission production; reduced direct costs through efficiency gains
Plastic pipes	Long-term	Products that contribute to energy transition	Development of safe and cost-efficient non-fossil gas transportation systems (e.g., SoluForce pipeline systems for hydrogen and biogas).	Medium	Increased revenue through new solutions to adaptation needs; reduced direct costs through efficiency gains
Plastic pipes	Medium-term	Solutions that contribute to building energy efficiency and decarbonization	Development of inhouse floor heating, heat pumps, hot/cold systems, and geothermal solutions.	High	Increased revenue through demand for solutions from low-emission production; reduced direct costs through efficiency gains
Plastic pipes	Medium-term	Products that contribute to climate adaptation	Development of water storage, stormwater management, and water reuse systems for flood/drought mitigation (e.g., Raineo system and roto moulded tanks).	High	Increased revenue through new solutions to climate change adaptation needs
Plastic pipes	Medium-term	Products that contribute to climate adaptation	Development of agricultural irrigation systems (e.g., irrigation pipes with precision drippers) for markets where drought management is important due to limited water resources.	Medium	Increased revenue through new solutions to climate change adaptation needs

Product Category	Time Horizon[1]	Contribution to Climate Strategy	Opportunity	Magnitude of Financial Impacts[2]	Financial Impacts
Plastic pipes	Medium-term	Products that contribute to energy transition	Development of safe underground electricity transport and cable protection solutions (e.g., pipes and fittings for horizontal drilling).	High	Increased revenue through demand for products from low-emission production; reduced direct costs through efficiency gains
Plastic pipes	Medium-term	Products that contribute to climate adaptation	Development of smart water sensors and leak detectors to enhance the efficiency of water distribution.	Medium	Increased revenue through new solutions to climate change adaptation needs
Concrete pavers	Long-term	Resource efficiency	Substitution of gravel and sand with secondary aggregates.	Medium	Reduced direct costs through efficiency gains
Concrete pavers	Medium-term	Resource efficiency	Development of products that enable the substitution of cement with alternative binder materials and ensure improved product design.	Medium	Reduced direct costs through efficiency gains
Concrete and clay pavers	Short-term	Products that contribute to climate adaptation	Development of permeable concrete and clay surfaces (e.g., concrete pavers Eco-line).	Medium	Increased revenue through new solutions to climate change adaptation needs and increased revenue due to shifting consumer demand for energy efficient products

Notes on the table:
1) Time Horizon
› Short-term – up to five years
› Medium-term – up to ten years
› Long-term – up to 25 years

2) Magnitude of positive Financial Impacts
› High – above EUR 50 million
› Medium – between EUR 20 and 50 million
› Low – below EUR 20 million

TCFD – Climate-related scenario analysis

As part of its sustainability agenda, Wienerberger is looking to increasingly align with the recommendations of the TCFD, including the use of climate-related scenario analyses, to better understand, manage, and communicate its climate change opportunities and risks.

In 2022, Wienerberger conducted a scenario analysis considering two scenarios addressing the uncertainty of future climate change and exploring the Group's resilience in different climate change futures. The "high-mitigation" scenario adheres to the Paris Agreement, while the other one reflects a "no-mitigation" scenario. These scenarios are recognised as best practice in industry and across the scientific community to understand climate-related impacts on a business. A short explanation and the reason for their inclusion are provided in the table on page 90. Scientific data and literature were used to review the outcome of the analysis and to validate the results.

This chapter provides a concise summary of the outcome of a qualitative assessment of climate-related opportunities and risks under a scenario analysis. The outcome does not reflect any financial implications for Wienerberger, as they have not yet materialised with a sufficient probability. It relies on assumptions that may or may not eventuate, and scenarios may be impacted by factors in addition to the assumptions disclosed. The structure covers the following topics:

- Goal of the scenario analysis
- Processes for identifying and assessing climate-related opportunities and risks
- Key concepts in line with best practice
- Selection of climate scenarios
- Results from selected scenarios
- Case studies on physical opportunities and risks
- Summary and next steps

Goal of the scenario analysis

- To understand Wienerberger's most material transition and physical opportunities and risks (see Risk Report in the chapter "Consolidated Financial Statements" on page 316 for the full list of risks).
- To evaluate the business under different versions of the future (scenarios) based on different levels of global warming.

Processes for identifying and assessing climate-related opportunities and risks

- **Governance in place –** In the first phase of the scenario analysis, the Corporate Sustainability & Innovation Department informed and involved the Managing Board and the Sustainability and Innovation Committee members as well as the senior management. The project was fully supported and encouraged.
- **Baseline assessment –** In the second phase, Wienerberger held workshops with key internal stakeholders along the value chain to develop a long list of climate-related opportunities and risks. A short list with 19 topics was prioritized for further assessment.
- **Scenario analysis –** In the third and last phase, a scenario analysis was performed, focusing on the shortlisted items in line with best practice in climate science.

Key concepts in line with best practice

- Two relevant time horizons to analyse the climate future – medium-term up to the year 2030 and long-term up to the year 2050.
- Two climate scenarios and the reason for their inclusion are described in the table on page 90.

Selection of climate scenarios

Transition risks

High-mitigation scenario: Sustainable Development Scenario (SDS), a Paris Agreement-aligned scenario, provided by the International Energy Agency (IEA), which analyses a world with a global temperature increase well below 2°C

Description of scenario: This scenario illustrates the connections and dependencies across technologies, policies, geographies, and economic outcomes as the world strives toward a global warming goal of well below 2°C. It considers any existing or announced policies that are instrumental in the achievement of the Paris Agreement's ambitions (considering socio-economic aspects). By 2100, this 'well below 2°C scenario' results in an increase in global temperatures limited to 1.6°C above pre-industrial levels.

Reason for inclusion: One of the most well-known and widely used transition scenarios for conducting TCFD-aligned risk assessments. This scenario maps out a pathway to effective climate mitigation in line with the Paris Agreement's goal of limiting global warming to well below 2°C, while also taking into consideration other Sustainable Development Goals (SDGs) such as global health or easy access to energy.[1]

1) The IEA SDS assumes full implementation of SDG 7 – Universal access to affordable and modern energy, SDG 13 – Tackling climate change, and partial implementation of SDGs 3 and 11 – Reducing impacts of air pollution.

Physical risks

No mitigation scenario: Representative Concentration Pathway (RCP) 8.5 provided by the Intergovernmental Panel on Climate Change (IPCC)[2] for their "Fifth Assessment Report", which analyses the 4°C world

Description of scenario: This scenario represents the most 'extreme' scenario from a physical climate change perspective, assuming a future where almost no mitigation action is taken and emissions continue to rise at the current rate, and where global mean temperature increases by 4°C by the end of the century relative to the pre-industrial period.

Reason for inclusion: Depicts a state-of-the-art scenario that is used by the IPCC. It aligns with TCFD recommendations by representing one extreme future pathway of the full spectrum of potential pathways.

2) The Intergovernmental Panel on Climate Change (IPCC) is the United Nations' body for assessing the science related to climate change.

WIENERBERGER'S COMMITMENT TO THE UN SDGS

The United Nations Agenda 2030 for Sustainable Development comprises 17 Sustainable Development Goals (SDGs). Within the framework of the 2020 materiality analysis, the direct and indirect impacts of Wienerberger on the SDGs were evaluated along the entire value chain. A detailed analysis can be found on page 61 in the chapter Materiality Analysis, Sustainability Program 2023 & the UN SDGs.

REPRESENTATIVE CONCENTRATION PATHWAYS

IPCC outlines four Representative Concentration Pathways (RCPs) which describe different climate futures considered possible depending on the volume of GHG emitted to 2100. The four pathways are RCP 8.5, RCP 6.0, RCP 4.5 and RCP 2.6, which are consistent with certain socio-economic assumptions. Wienerberger analysed RCP 8.5, also known as the "no mitigation" scenario.

Results from "high - mitigation" scenario – Paris Agreement-aligned "Sustainable Development Scenario" for the assessment of transition opportunities and risks

Multiple key opportunities for Wienerberger, its shareholders, and its stakeholders can be identified in the Paris Agreement-aligned "Sustainable Development Scenario". Key examples from the analysis are opportunities associated with climate regulation of the building sector as listed in the table on page 92. The new market conditions arising from this regulation will lead to an increase in demand for low-carbon products and solutions. Wienerberger, as a provider of smart solutions for the entire building envelope and innovative infrastructure solutions, is best positioned to meet this demand. The building sector in the EU accounts for 40% of all final energy consumption and for 36% of end-use energy emissions. Reducing energy consumption in buildings constitutes a key step in reducing GHG emissions. Wienerberger's sustainable housing solutions with green energy and innovative brick solutions are well-suited for the construction of energy-efficient buildings (see page 115). Policies that incentivize, mandate, and/or support energy efficiency in buildings provide an opportunity for Wienerberger to increase revenues and market access through increased product demand. This opportunity is of high strategic importance for Wienerberger and has already been integrated in our pathway towards carbon neutrality by 2050.

TCFD transition categories:	Geography:[1]	Assessed time horizons:
› Policy and legal › Technology › Market › Reputation	› European Union[2] › North America	› Medium-term (2030) › Long-term (2050)

1) The scope covers the whole value chain in the geographical locations.
2) The assessment largely focussed on the European Union excl. UK. However, the assessment for 'talent attraction' was based on the whole of Europe.

10 KEY TRANSITION OPPORTUNITIES AND RISKS UNDER THE SUSTAINABLE DEVELOPMENT "HIGH MITIGATION" SCENARIO (WELL-BELOW 2°C WORLD[1])

TCFD Category	Topic	Geography	Potential impact	2030	2050
Reputation	**Opportunities for talent attraction (O)**	EU	Improved image due to sustainable products		
Policy	**Climate regulation on the building sector (O)**	EU/NA	Increase in demand for products		
	EU regulations on materials and circularity (R)	EU	Increase in operating costs due to regulation		
	Climate regulation on energy production (R)	EU	Increase in operating costs due to regulation		
	Carbon pricing regulation in the EU (R)	EU	Increase in operating costs due to regulation		
Market	**Solar energy systems (O)**	EU/NA	Increase in demand for products		
	Prices for green energy (R)	EU/NA	Increase in operating costs due to input prices		
	Supply of recycled plastics (R)	EU/NA	Increased costs due to limited supply		
Technology	**Supply of low-carbon energy sources (R)**	EU/NA	Inability to meet customer/investor demands		
	Supply of low-carbon logistics providers (R)	EU/NA	Inability to meet customer/investor demands		

uncertain
(R) Risk
(O) Opportunity

low risk
moderate risk
high risk
very high risk

low opportunity
moderate opportunity
high opportunity
very high opportunity

N. / S. / E. / W. / C. EU = Northern / Southern / Eastern / Western / Central Europe; NA = North America
Note: The assessment largely focussed on the European Union. The assessment on the opportunities for talent attraction is at Europe-level.
1) Global temperature increase well-bellow 2°C

Risk rating: The risk ratings are based on the rate of change in the metric relevant to the hazard. The definition of what constitutes a "low" or a "high" rate of change is based on risk scoring used in the academic literature. The risk rating does not describe the magnitude of the financial impact on Wienerberger from each climate opportunity and risk, but whether this opportunity or risk will become larger or smaller[1] in the years 2030 and 2050 compared with a 2022 baseline.

Example: The risk from carbon pricing will increase in the future based on the SDS scenario and is therefore shown as a high risk. However, Wienerberger is already managing this risk via its ambitious decarbonization targets until 2023 as well as its commitment to carbon neutrality by 2050.

1) Defined as the strength of the climate signal (e.g., the opportunity from climate regulation of the building sector)

Note: Ratings for the physical risk assessment are not reflective of the financial impact on Wienerberger. The scores serve as a reference point for managing these future risks. In this sense, any given opportunity and risk rating allows Wienerberger to understand any upcoming changes in risk profile and respond accordingly. The analysed risks are an integral part of our current risk management processes.

Used data: More than 60 scientific publications and over 70 other non-academic publications, including publications from intergovernmental organisations and governments such as the International Energy Agency, the European Commission, the World Energy model 2021, and the U.S. Department of Energy, were reviewed to estimate the expected changes in climate hazards across Wienerberger's locations.

Results from "no mitigation" scenario – Representative Concentration Pathway (RCP) 8.5 for physical opportunities and risks

The Representative Concentration Pathway (RCP) 8.5 scenario for physical opportunities and risks, also called the "no mitigation" scenario, analyses a 4°C world where physical impacts are likely to be most severe as climate policy is less ambitious. According to the current Assessment Report of the IPCC[1], extreme weather conditions such as heatwaves or flooding will become more frequent and more intense as a result of climate change. Given its negative impact on people and the environment, it is therefore essential that we adapt to long-term climate change. One solution is the use of brick as a building material. From keeping rooms cool in summer and warm in winter to protecting them from damp, this versatile material combines a wide range of advantages to adapt and increase resilience to climate change. Climate-resilient insulated bricks for wall and roof solutions from Wienerberger offer protection against extreme weather conditions – from heat stress and storms to flooding. The natural construction material has a high heat-storage capacity and helps keep temperature and humidity within an acceptable range (see page xx in this chapter). Wienerberger is well positioned in this scenario, as our sustainable products and solutions help people to build safer homes with a view to natural hazards.

The following graphic shows a compact summary of the results under RCP 8.5:

TCFD physical categories:	Geography:[2]	Assessed time horizons:
› Acute › Chronic	› Central Europe › Southern Europe › Northern Europe › Western Europe › Eastern Europe › North America	› Medium-term (2030) › Long-term (2050)

1) Weather and Climate Extreme Events in a Changing Climate: https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Chapter11.pdf
2) Where applicable, physical risks are assessed on location level based on GPS coordinates.

9 KEY PHYSICAL OPPORTUNITIES AND RISKS UNDER THE RCP 8.5[1)] "NO MITIGATION" SCENARIO (4°C WORLD[2)])

TCFD Category	Topic	Geography	Potential impact	2030	2050
Acute	Heavy precipitation (O)	C./N./W./E. EU	Increased demand for products		
		S. EU			
	Tropical cyclones (O/R)	NA	Increased demand for products		
			Damage to assets and products		
	Heatwaves (R)	NA, S./E. EU	Decrease in productivity and talent attraction		
		C. EU			
		N. EU			
		W. EU			
	Riverine flooding (R)	EU/NA	Damage to assets and supply chain disruption		
	Wildfire (R)	NA	Supply chain disruptions		
		S./E. EU			
	Wind gust (R)	C. EU	Damage of equipment and stocks		
Chronic	Water scarcity (O)	C.EU	Increased demand for products		
		S.EU			
		N./W. EU			
		E. EU			
	Seasonality changes in temperature (O/R)	S./E. EU	Increased demand for products; shorter winter seasons Supply chain disruptions		
		W. EU			
		C. EU			
		N. EU			
	River streamflow (Rhine) (R)	C. EU	Supply chain disruptions		

uncertain
(R) Risk
(O) Opportunity

low risk
moderate risk
high risk
very high risk

low opportunity
moderate opportunity
high opportunity
very high opportunity

N. / S. / E. / W. / C. EU = Northern / Southern / Eastern / Western / Central Europe; NA = North America

1) RCP = Representative Concentration Pathway 8.5 // 2) Global temperature increase 4°C

Risk rating: The risk ratings are based on the rate of change in the metric relevant to the hazard. The definition of what constitutes a "low" or a "high" rate of change is based on risk scoring used in the academic literature. The risk rating does not describe the magnitude of the financial impact on Wienerberger from each climate opportunity and risk, but whether this opportunity or risk will become larger or smaller in the years 2030 and 2050 compared with a 2022 baseline.[1]

Example: Heatwaves will become more frequent and intense in the future based on the RCP 8.5 scenario and are therefore shown as a very high risk; however, Wienerberger is already managing this risk through the respective mitigation measures.

Used data: The science-based assessment identified key physical opportunities and risks based on the judgement of climate experts, existing records of physical environmental hazards, and feedback from key internal stakeholders. The assessment is based on climate model CMIP 5[2] and data sets such as NASA-NEX GDDP[3], WRI Aqueduct Floods Hazard Maps[4], and WRI Aqueduct Global Maps 3.0.[5]

1) Where 2022 data was not available, a different base year was used. Where there was insufficient data for a particular climate hazard, no risk rating was provided (e.g., tropical cyclones). Note: Ratings for the transition risk assessment are not reflective of the financial impact on Wienerberger. The scores serve as a reference point for managing these future risks. In this sense, any given risk rating allows Wienerberger to understand any upcoming changes in risk profile and respond accordingly. The analysed risks are an integral part of our current risk management processes.
2) Coupled Model Intercomparison Project 5 – promotes a standard set of model simulations of future climate change: pcmdi.llnl.gov
3) NASA Earth Exchange Global Daily Downscaled Climate Projections (NASA-NEX GDDP) – data set for temperature and precipitation-based climate indicators such as annual maximum temperatures, number of hot days, consecutive dry days (CDDs), annual precipitation, etc.: www.nccs.nasa.gov
4) World Resources Institute's Aqueduct Floods Hazard Maps – data set for global inundation heights in meters for riverine and coastal flooding and for several return periods: www.wri.org
5) World Resources Institute's Aqueduct Global Maps 3.0 for water stress, seasonal variability, water supply, water demand: www.wri.org

Case studies on physical opportunities and risks

This section introduces two relevant examples for Wienerberger: (1) one opportunity – increased demand for drought management products resulting from water scarcity, and (2) one risk – heatwaves. Both examples are assessed with regard to location in terms of scope, expected impacts, mitigation measures, climate indicators, and management response. To reflect how Wienerberger's internal controls and risk management procedures mitigate the opportunity/risk in question, a residual risk score is also included.

CASE STUDY ON SELECTED PHYSICAL OPPORTUNITIES AND RISKS UNDER THE RCP 8.5[1)] "NO MITIGATION" SCENARIO (4°C WORLD[2)])

Event / Key data	Opportunity from water scarcity	Risk from heatwaves
Opportunity / risk rating (2030)	**High**	**Very high**
Timeframe	Medium (2030) and long-term (2050)	Medium (2030) and long-term (2050)
Locations in scope	Southern Europe	North America, Southern and Eastern Europe
Impacts	• Products related to water storage management and reuse systems • Increased revenue from new solutions to adaptation needs	• Supply chains and sites, by impacting production and working conditions • An occupational risk for employees working in production sites
Response / mitigation actions	• Innovative water storage • Stormwater management • Water reuse systems for flood and drought mitigation (e.g. Raineo system and roto moulded tanks)	• Extra breaks • Installation of climate cabins • Refrigerated areas / water • Rotation of shift patterns • Wearing of cooling jackets • Seasonal workwear and personal protective equipment • Automation
Climate indicators	• Change in consecutive dry days • Seasonal variability • Annual precipitation	• Change in annual tropical nights • Change in annual hot days
Management response	Wienerberger recorded a significant increase in the demand for rainwater management systems. The Group enlarged its production capacity and upgraded its system to a more sustainable version by using recycled materials. In addition, Wienerberger developed SmartHub, a smart sensoring systems with advanced calculation tools enabling efficient monitoring and control of these rainwater management systems. This combination enables further improvements of the total cost of ownership of our systems to our users.	Wienerberger has introduced a structured Health and Safety Working Temperature Guidance throughout all countries to effectively support and manage extreme or excessive temperatures. The Group already has a number of short-term mitigation actions in place to reduce heat stress at the workplace. In addition, Wienerberger will increase its investments in sustainable cooling solutions, such as on-site cooling systems, to reduce the effect of heat stress on the employees. The implementation of the biodiversity action plans shall also increase the cooling capacity on sites.
Perceived residual opportunity / risk	**High**	**Moderate**

low opportunity	low risk
moderate opportunity	moderate risk
high opportunity	high risk
very high opportunity	very high risk

Summary and next steps along the TCFD recommendations

In 2022 a climate-related scenario analysis was performed. This allowed Wienerberger to explore the business under different versions of the future (scenarios) based on different levels of global warming as core drivers of climate-related opportunities and risks. The analysis, related to climate opportunities, confirmed the relevance of the Wienerberger Sustainability Program 2023, including the target for decarbonization of production. Furthermore, the development of solutions for climate-efficient or climate-neutral buildings and solutions for adaptation to climate change, as described in this chapter on page 98, is also in line with these opportunities. The analysis related to climate risks is based on our current risk register. As already disclosed in 2021, climate-related risks are embedded in our current risk management process. The newly identified topics will be a topic for Wienerberger to work on.

We are committed to continuously strengthening our understanding of how climate-related opportunities and risks affect our business. We will continue to assess and identify them to increase transparency and fully align our actions with the TCFD recommendations.

Wienerberger notes that the current climate risk analysis does not show the impact on cash flow projections for the near-term business strategy. Work done to date has focused on understanding material opportunities and risks for the business and how these develop over time under different climate scenarios. Future work will thereby increasingly focus on quantifying these risks and understanding the associated financial impact on the business under different scenarios.

Climate protection with Wienerberger product and system solutions

Our innovation strategy is marked by the global challenges or our time, such as climate change. Buildings account for more than one third of worldwide energy consumption and almost 40% of total direct and indirect CO_2 emissions. The EU Taxonomy Regulation, as part of the European Green Deal, introduces a uniform classification system for sustainable economic activities. One of the six environmental objectives of the EU taxonomy is climate change mitigation (see also page 104).

In the building sector different criteria apply to new build, renovation, and the purchase of buildings. The recast of the Energy Performance of Buildings Directive (EPBD) of the European Union contains clear provisions on climate change mitigation in the use of buildings, alongside other criteria on their environmental impacts referring, for instance, to the circular economy. The EU Taxonomy Regulation and the EPBD both support and confirm Wienerberger's strategic orientation.

Wienerberger provides system solutions for new build and renovation that a geared toward the target of net-zero-emission buildings. The various measures range from products and systems for the building envelope, in-house energy generation facilities, and low-energy heating and cooling systems to solar panels and heat pumps. Smart in-house solutions enable users to enjoy a high quality of life while saving resources and helping to limit climate change. The ecological footprint of our products and system solutions, resulting from sourcing and production, is positively influenced by their very long useful life of partly more than 100 years. Our product and system solutions thus offer enormous opportunities of advancing climate change mitigation in the building sector.

Wienerberger's product and system solutions for walls, façades, and roofs are an integral part of climate-friendly building design. On account of their thermal insulation properties and their thermal storage capacity they contribute significantly to the energy efficiency and even the climate neutrality of buildings, thus supporting climate change mitigation in both new build and renovation. In recent years, clay blocks filled with insulating material, clay blocks without infill material but with a high thermal insulation value due to their special hole geometry, novel facing brick formats for double-shell exterior walls, energy-efficient upon-rafter insulation for pitched roofs, roof-integrated solar panels, etc. were developed.

The high mechanical strength and the long service life of these products and system solutions keep their ecological footprint small throughout their entire life cycle.

A few examples of Wienerberger product and system solutions that contribute significantly to the energy efficiency of buildings and to climate change mitigation are presented in the following:

Climate-neutral brick with high thermal insulation properties

Brick buildings contribute significantly to climate protection. Wienerberger clay blocks filled with perlite or mineral wool, as well as clay blocks without infill material but a special hole geometry, create a healthy indoor climate and ensure excellent thermal insulation. They reduce energy demand and thus notably diminish the volume of CO_2 emitted by the building during its useful life. By reducing CO_2 emissions from the production process, Wienerberger contributes to climate change mitigation along the entire value chain of bricks.

Porotherm NATURbric® - an example of dematerialization
Designed in France, the Porotherm NATURbric® is a slender, low-weight facing brick which not only offers the advantages of easy handling and fast bricklaying, but also emits less CO_2 in production and transport. Wienerberger uses biomass and biofuels to produce the NATURbric®.

Facing brick series LESS for decarbonization in production

With LESS, the facing brick series from Denmark, Wienerberger has succeeded in producing a brick with reduced material input that weighs 10% less than conventional bricks, but has the same properties. This helps to save resources, reduces energy consumption, and thus contributes to the reduction of CO_2 emissions in production. In addition, since 2022 Wienerberger has replaced 50% of the natural gas consumed in Denmark with biogas, a fossil-free and CO_2-neutral energy source supplied by a Danish biogas producer. This measure constitutes a first step and is only one of several initiatives planned by Wienerberger for brick production in Denmark.

Terca Eco-brick®

On account of its low weight, achieved without any quality trade-off, the Terca Eco-brick® developed in Belgium reduces the CO_2 footprint per square meter of façade by up to one third. While most of these durable eco-bricks are currently produced and sold in Belgium, demand is picking up swiftly in other countries as well. Wienerberger in Germany, France, and Great Britain have launched their own Eco-brick® concepts and collections.

In-roof photovoltaic panels

The EU has set itself the clear target of increasing the share of renewable energy sources to at least 32% by 2030. In the future, photovoltaic installations will be the second most important source of electricity generation, surpassed only by wind power. Wienerberger will do its utmost to support the sustainable transformation of worldwide electricity generation with its smart and innovative solutions.

Wevolt X-Tile and X-Roof photovoltaic module by Exasun
Exasun is an innovative designer and producer of high-quality building-integrated glass-glass-photovoltaic systems with a high degree of efficiency and a long service life. Since January 1, 2022, Wienerberger has been the exclusive distributor of Exasun's innovative X-Tile and X-Roof systems for Europe. In partnership with Exasun, Wienerberger will consistently broaden its portfolio of solutions for the roofing business in the Netherlands and, in a second step, in other European countries.

Alegra 10 Wevolt photovaltic roof tiles
For this solution, Wienerberger integrates solar cells into conventional clay roof tiles. Solar roof tiles are well suited for new buildings as well as historical buildings, as the solar modules harmoniously fit into the roof surface. Wienerberger has intensified its cooperation with distributors of electrical components, established a network of roof setters, and put them in contact with local dealers of solar panels. Customers thus benefit from a body of expert knowledge in each phase of the construction or renovation of the roof: from taking measurements and performing the necessary calculations to installation to support after the successful integration of the solar roof tiles. For 2023, Wienerberger plans to introduce a Wevolt solar roof tile with solar cells in natural red, which will be even better suited for integration into historic roofscapes.

Wall and roof systems by Wienerberger have the potential to reduce the CO_2 emissions of buildings by up to 80% compared to old building stock from the 1970s.

SoluForce pipe systrems for hydrogen and biogas

Wienerberger plays a pioneering role in the development and supply of hydrogen and biogas pipeline systems (Reinforced Thermoplastic Piping System). Such systems are used along the entire supply chain, from the high-pressure electrolysis process at the wind turbine to end users in transport and industry. In contrast to conventional steel pipes, these systems require no maintenance, are flexible and corrosion-proof, and are available in lengths of up to 400 meters, which greatly facilitates the construction of hydrogen-based infrastructure solutions.

Adaptation to climate change with Wienerberger building and infrastructure solutions

Protecting the safety and health of our customers and product user is part of our mission to improve people's lives with our products and system solutions and to provide solutions that protect people, the environment, and the economy from damage caused by climate change and that minimize the related risks. In close cooperation with the public sector and private economic operators, Wienerberger is continuously working on the development of comprehensive, smart solutions for climate-resilient habitats.

Some examples of Wienerberger's building and infrastructure solutions that facilitate the adaptation to climate change are presented in the following sections.

Climate-resilient building solutions

Wienerberger's climate-resilient building solutions effectively protect people from the impacts of climate change, such as extreme weather conditions with heat stress, rainstorms, hailstorms, flash floods, or heavy snow loads. Overheating of buildings in summer constitutes a growing risk for human health and well-being, especially in urban areas. According to the International Energy Agency, air conditioning installations and electric fans currently account for almost 20% of electricity consumption in buildings worldwide. Wienerberger provides solutions that help to avoid the overheating of buildings in summer and, at the same time, keep their CO_2 balance low.

Thermal insulation, thermal storage capacity, and mechanical resilience of buildings
Wienerberger provides solutions for buildings by supplying building materials with high thermal insulation values, efficient thermal storage properties, and high mechanical strength. These solutions keep the indoor temperature within an acceptable range even under conditions of extreme heat and cold.

Universal box for wall-mounted shading systems
Shading the interior of buildings is an important factor in preventing summer overheating, especially in combination with the temperature-equalizing effect of the thermal mass. Targeted shading has the potential to reduce the energy required for cooling and thus lower the greenhouse gas emissions of buildings. The so-called Wienerberger universal box is a lightweight brick box in which different shading systems can be installed. The box fits perfectly into monolithic brick masonry and is available in different widths. The box facilitates installation of the shading system easy and does not suffer any damage when windows are replaced.

Prefabricated hydronic cooling systems
The desired temperature can be set by means of hydronic cooling mats placed on the surface of building elements. Such systems have the potential to replace air-conditioning systems as a more advantageous ecological and economic alternative. Wienerberger provides prefabricated hydronic cooling mats for efficient installation of such systems. Each system is designed, manufactured and pre-assembled according to customer specifications, which renders installation four to five times faster than that of conventional solutions.

Water management systems and smart technologies for climate resilience

Water scarcity, floods, failing wastewater systems and water treatment plants – these are only some of the challenges urban developers, planners, and investors have to face. In order to protect people and property from damage caused by climate change in the long term, towns and villages need well-balanced all-in solutions designed to cope with large quantities of water and rainstorm events.

In its Communication dated February 24, 2021, the European Commission presented its new climate adaptation strategy. Guided by the vision of creating a climate-resilient Europe by 2050, the European Commission will provide Europe with the necessary guidelines, policies and support programs to prepare for future climate shocks. One of the strategic goals is to broaden the knowledge base and improve the availability of climate-related data.

In this area, too, Wienerberger provides a broad range of all-encompassing infrastructure solutions that are tailor-made to meet such requirements. Complete solutions, covering everything from infrastructure to technology to software and the related cloud services, are available.

Rainwater management systems
Wienerberger has been recording a massive increase in demand for rainwater management systems. Such systems support the efforts undertaken by cities and communities in Europe to become climate-resilient through adaptation and risk mitigation. Flood and drought management has become an integral part of urban and infrastructure development. For more than a decade, Wienerberger has designed tailor-made rainwater management solutions that have proven their merits for flood protection in urban areas. In their flood control schemes, flood-prone communities rely on Raineo®, Wienerberger's proven stormwater management system, in combination with green and blue infrastructure, such as green spaces and reservoirs.

Sensor technology and software for optimal water and wastewater management
By combining water management solutions with digital control systems and smart algorithms for self-optimizing operation, Wienerberger designed an exemplary all-in solution. Through the acquisition and integration of InterAct, a provider of digital solutions, Wienerberger is in a position to provide smart all-in-one solutions comprising hardware and sensor technology, the necessary software, and cloud services to collect the data required for better management of climate risks. Digital systems are available for online monitoring of Wienerberger's water management systems. Sensors provide information on the current system status regarding the quality, volume, and temperature of the water or the condition of filters. By means of smart pumping stations, we support private customers with data management services for smart, network-based pumps. These pumps receive, monitor, process, and transmit meteorological data and trigger flood alarms. Private households will thus be supplied with relevant additional information for their water and wastewater management.

Water-saving irrigation systems for agriculture
Increasingly unpredictable weather conditions represent an added challenge for 21st century agriculture. While periods of drought tend to last longer, precipitation during the vegetation period is scarce and spread out unevenly over the year. To secure crop yields and a high quality of agricultural produce, more and more farmers decide to invest in irrigation system, even in regions that previously did not require irrigation.

Protection of transport infrastructure from climate risks

Apart from being a sought-after partner for urban flood control solutions, Wienerberger is also a leading supplier of drainage systems for roads and railway structures. Within the framework of massive investments in the extension and upgrading of Europe's key transport networks, especially in Central and Eastern Europe, Wienerberger recorded an impressive increase in road and railway drainage projects for the road and rail infrastructure based on the use of Wienerberger's stormwater drainage systems.

Positive impact on the micro-climate

Irrigation and drainage systems for green surfaces
Green spaces, especially in urban areas, contribute to a pleasant micro-climate. Wienerberger provides special irrigation and drainage systems for green façades and roofs. Based on our system solutions, water is collected, stored, and filtered for subsequent reuse for irrigation of green surfaces. The water level is optimized and maintained at that level through the use of smart, sensor-based technology.

Green flat roof solutions
The high solar reflectance of the white Leadax Roov flat-roof membrane (see also page 121 in chapter "Circular Economy") results in a lower ambient temperature, as the roof membrane, compared to conventional, dark flat-roof membranes, heats up less in the sun. Wienerberger is exploring potential partnerships for green roof solutions. These also have a positive impact on ambient temperature and the micro-climate.

Water-permeable paver systems
Our range of concrete and clay pavers comprises a broad variety of systems for infiltration through water-permeable surfaces. Such surfaces are beneficial for the micro-climate and the groundwater. Moreover, surfaces in light colors, which absorb, store, and release as little light energy as possible in the form of heat, minimize heat stress and contribute to a positive micro-climate.

Torrential rain can cause floods even on water-permeable surfaces. For cities having to adjust to changing climatic conditions, Wienerberger supplies grass pavers in new formats with geometric openings providing up to 30% drainage area.

Water management

Climate protection and the adaptation to climate change are inseparably linked with the topic of water.[1] Climate change and the resultant extreme weather events have a strong impact on the availability and quality of water, especially in urban areas and in agriculture. The impact of global warming on the water cycle constitutes a threat to sustainable development, biodiversity, and access for people to water and sanitary facilities.

According to the UN, 90% of major global disasters during the past ten years were caused by extreme weather. In its current Assessment Report, the Intergovernmental Panel on Climate Change (IPCC) projects that extreme weather events and heavy precipitation will be more frequent in the future, even if the global climate targets are met and global warming is limited to below 1.5°C by 2100 compared to the pre-industrial age. The consequences will be flash floods, high tides, and inundations.

Water is a lever for climate action. Sustainable water management is crucial for the resilience of societies, ecosystems, and the reduction of CO_2 emissions. At the same time, water is an essential resource for adapting to climate change and enhancing climate resilience.

For Wienerberger, responsible water management along our entire value chain therefore is a logical consequence. Wienerberger is making every effort to use water sparingly in production and provides a variety of product and system solutions for responsible and climate-resilient water management.

Water management with our product and system solutions

Examples of Wienerberger's product and system solutions for responsible water management are described on pages 87-88 and 101-102.

Water management in our production

Wienerberger is making every effort to use water sparingly, for instance by running it in closed circuits, and to draw it primarily from its own sources. Water from sources other than public networks (e.g. water from rivers, lakes and, in Scandinavia, the sea), used especially for cooling in plastic pipe production by Wienerberger Piping Solutions (WPS), is returned to the environment after the cooling process in conformity with the legal provisions in effect.

As a signatory to Operation Clean Sweep®, we take utmost care to avoid losses of plastic granulates during the production process. By the end of 2022, Operation Clean Sweep® was implemented in about 85% of all WPS plastic pipe plants.

Specific water use in m^3/ton	**2020**	**2021**	**2022**	**Chg. in %**
Wienerberger Group	–	0.243	**0.226**	–7

1) unwater.org

Disclosure pursuant to the Taxonomy Regulation of the EU

EXECUTIVE SUMMARY

The EU Taxonomy Regulation classifies certain economic activities and provides a grid for these "Taxonomy-eligible" activities to be classified as "Taxonomy-aligned", i.e. sustainable activities.

The activities classified so far do not yet cover all economic activities, but are currently limited to certain activities. Economic activities related to the production of exterior wall systems and roof systems are Taxonomy-eligible under the Regulation. For Wienerberger, this means that the product categories wall, façade, and roof are covered and that Taxonomy-alignment must subsequently be assessed.

Accordingly, activities in the area of piping solutions and pavers are not yet within the framework of the Taxonomy Regulation, which is why they are currently presented as non-Taxonomy-eligible. Wienerberger expects the scope of the Regulation to be extended in the future.

Out of the economic activities of the Wienerberger Group classified as taxonomy-eligible, the majority is classified as Taxonomy-aligned (78 % based on taxonomy-eligible turnover), i.e. sustainable in the sense of the Regulation.

The Regulation (EU) 2020/852[1] of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment – the so-called "Taxonomy Regulation" – entered into force on July 12, 2020. This regulation, as part of the European Green Deal, introduces a common classification system for sustainable economic activities within the European Union.

Economic activities are Taxonomy-eligible if they are covered by the regulation. They qualify as "environmentally sustainable", or Taxonomy-aligned, if they meet the criteria stated below (Article 3 of the Taxonomy-Regulation), i.e. if they

- Make a substantial contribution to at least one of the six environmental objectives
- Do no significant harm (DNSH) to any of the other environmental objectives and
- Comply with minimum safeguards (social standards)

The technical screening criteria[2] are applied to objectively classify economic activities as environmentally sustainable. The first Delegated Act published in July 2021 specifies the technical screening criteria for the first two environmental objectives:

- Climate change mitigation
- Climate change adaptation

Wienerberger examined and classified its economic activities with a view to the relevant environmental objective of climate change mitigation and developed methods for the calculation of the required KPIs, i.e. turnover, capital expenditure (Capex), and operating expenditure (Opex), for the relevant product categories.

1) https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32020R0852
2) The Technical Screening Criteria were developed by the European Commission based on the proposal from the Technical Expert Group (TEG) on Sustainable Finance. The TEG is comprised of 35 members from civil society, academia, business, and the finance sector, as well as additional members and observers from EU and international public bodies.

1. Analysis of Taxonomy-eligible activities

Based on the current Delegated Act, three economic activities were identified as "enabling activities" for the climate change mitigation objective and thus classified as Taxonomy-eligible, as in the reporting year 2021:

- **Wall:** clay blocks – key components of exterior wall systems
- **Façade:** facing bricks – key components of exterior wall systems
- **Roofing systems**

These three activities are listed in the Delegated Act under the **Manufacturing sector** and sub-sector 3.5 **"Manufacture of energy-efficient equipment for buildings"**.

Other activities of the Wienerberger Group such as piping solutions and pavers are not within the framework of the Taxonomy Regulation at present, but an expansion of the scope of the Regulation is expected.

2. Method of determining Taxonomy-eligibility

For the purpose of clarity, the Wienerberger Group applied a two-step methodology. The first step defines the economic activity, and the level of eligibility of this activity is calculated in a second step.

As regards exterior wall systems, Wienerberger differentiates between two product categories: wall (the key component clay block as significant component of an exterior wall) and façade (the key component facing brick as significant component of an exterior wall). These product categories are operated individually by Wienerberger and therefore treated separately for Taxonomy-related calculations.

External wall systems are defined as a combination of several products and key components which together perform a specific function in an intended environment, and the thermal insulation value of which can be expressed in a single unit called the "U-value" (thermal transmittance). The U-value indicates the thermal power that flows through a layer of material per square meter when the outer and inner surfaces are exposed to a constant temperature difference of one degree (1 Kelvin). The unit of the U-value is watt per square meter and kelvin (W/m^2K).

External wall system (Wall)

Step 1 – Definition of the "Wall" product category

For the classification of the "Wall" category in the portfolio of exterior wall systems, Wienerberger differentiates between three methods for the construction of exterior walls:

- Single leaf, monolithic external wall:
  - Vertically perforated clay blocks (traditional or plane ground): wall thickness ≥ 35 cm
  - Vertically perforated clay blocks with integrated insulation: wall thickness ≥ 24 cm
- External wall with a composite Thermal Insulation System (ETICS: External Thermal Insulation Composite System):
  - Vertically perforated clay blocks (traditional or plane ground): wall thickness ≥ 24, but < 35 cm
- Multi-layer external wall (consisting of wall and façade products):
  - Vertically perforated clay blocks (traditional or plane ground): thickness ≥ 14 cm, but < 24 cm
  - Facing bricks

Wienerberger produces the following key components as part of the external wall system. Without these key components, the construction of the entire external wall is not possible.

- Traditional vertically perforated clay blocks
- Plane-ground vertically perforated clay blocks
- Vertically perforated clay blocks filled with integrated insulating material
- Half clay blocks for monolithic and multi-layer walls
- Height-adjustment blocks for monolithic and multi-layer walls

Step 2 – Calculation of the Taxonomy-eligible share of the wall product category

The turnover generated from this economic activity is analysed on the basis of the key components defined in Step 1. The allocation of expenditure (Capex and Opex) was based on the turnover share of the exterior wall system. Expenditure that meets the definitions of Capex and Opex and is allocated to clay blocks, with the exclusion of expenditure that goes into the interior part of the wall, is classified as Taxonomy-eligible.

The Taxonomy-eligible part of the wall product category represents 12.6% of the total Group turnover.

External wall system (Façade)

Step 1 – Definition of the "Façade" product category

In its façade product segment, Wienerberger produces the **key component facing brick** as significant part of an external wall system:

- Facing bricks
- Brick slips
- Cladding systems
- Lintels

Without these key components, the construction of the entire external wall is not possible. The key components of the façade protect the wall and therefore play a crucial role in reducing thermal transmittance and the U-value.

Step 2 – Calculation of the Taxonomy-eligible share of the façade product category

The technical analysis performed showed that products of the category façade produced by Wienerberger are part of an external wall system and can therefore be classified as Taxonomy-eligible.

Expenditure that meets the definitions of Capex and Opex and is allocated to the product category façade, with the exclusion of expenditure that goes into the interior part of the wall, is classified as Taxonomy-eligible.

The Taxonomy-eligible part of the façade product category represents 24% of the total Group turnover.

Roofing systems

Step 1 – Definition of the "Roofing Systems" product category
Wienerberger produces the following products as part of the roofing system:

- Roof tiles
- Ceramic accessories
- Technical accessories

Without these key components, the entire roofing system cannot be built. During the construction phase, insulation material produced by third parties is built in, but insulation material alone does not constitute a roofing system.

Step 2 – Calculation of the Taxonomy-eligible share of the roofing systems product category
The assessment performed showed that Wienerberger's entire economic activity regarding roofing systems can be classified as Taxonomy-eligible. Hence, all expenses meeting the definitions of Capex and Opex, allocated to the roofing system product category, are classified as 100% Taxonomy-eligible.

The Taxonomy-eligible part of the roofing systems product category represents 15.3% of the total Group turnover.

The addition of the shares of the three above-mentioned economic activities in the Group's sales results in:

"51.9% of the Wienerberger Group's turnover is Taxonomy-eligible."

3. Method of determining Taxonomy-alignment

Three criteria have to be fulfilled in order to achieve Taxonomy alignment. For the purpose of clarity they are defined as Steps 1, 2 and 3 in this report. Step 1 assesses the technical screening criteria (U-value) developed by the Taxonomy Regulation, Step 2 ensures that no significant harm is done (DNSH) by the economic activities within the scope of the Regulation, and Step 3 reviews compliance with minimum social standards.

Step 1 – Technical screening criteria
Determination of a substantial contribution to one of the six objectives of the Taxonomy Regulation is the first step in assessing whether Taxonomy-eligible activities are also Taxonomy-aligned activities.

For the three economic activities concerned, the technical screening criteria for a substantial contribution to climate change mitigation are related to the U-value of the product itself. The economic activity serves to manufacture one or more of the following products and their key components:

- external wall systems with U-value lower or equal to 0.5 W/m^2K
- roofing systems with U-value lower or equal to 0.3 W/m^2K

External wall system (Wall)
The U-value can be determined on the basis of the thickness of the clay blocks. The review results showed that the U-value requirement of the Taxonomy Regulation is met in all countries, excluding only India. Therefore, turnover generated by the Indian production sites and the corresponding capital and operating expenditure must be excluded and considered non-aligned.

"99.5% of the economic activity for the production of key components of taxonomy-eligible external wall systems (category wall) meets the technical screening criteria and therefore makes a substantial contribution to the climate change mitigation objective."

External wall system (Façade)
In all countries where the products are produced, regulation enforces a U-value lower than 0.5 W/m²K. As the national provisions are always complied with, the results show that the entire economic activity meets the U-value requirement of the EU Taxonomy.

"100% of the economic activity for the production of key components of taxonomy-eligible external wall systems (category facade) meets the technical screening criteria and therefore makes a substantial contribution to the climate change mitigation objective."

Roofing system
To determine the U-value, research was conducted in the countries (see the chapter "Wienerberger at a Glance" on page 24) where Wienerberger produces and sells roofing systems to define the share which has built-in insulation material, and therefore achieves a certain U-value. Roofing systems without insulation material are used for farm buildings, for example, where insulation is not needed. In 2021, Wienerberger performed a study on the use of its roofing systems. This study was used again for the 2022 reporting year since no major changes emerged on this market.

The study showed the following results:

- Market volume of the pitched roof system (with or without insulation material) in these 20 countries: a total of 413.3 km²
- Market volume of insulating material for pitched roofs sold in these countries: 380.0 km²

Based on these data, the share of roofing systems with built-in insulating material was calculated as follows: (Market volume of insulation material / pitched roof market) * 100 = 91.9%

This means that just under 92% of the roofing systems sold by Wienerberger have built-in insulation material and thus achieve the required U-value at country level, which is lower than or equal to the Taxonomy requirement in all targeted countries.

"91.9% of the Taxonomy-eligible roofing system economic activity meets the technical screening criteria and therefore makes a substantial contribution to the climate change mitigation objective."

Step 2 – Do No Significant Harm (DNSH)
The Do No Significant Harm criteria refer to compliance with legal requirements, or, in the case of the circular economy objective, to specific elements of the production process and the product itself. The DNSH criteria are the same for the three economic activities within the scope of this report, i.e. Wienerberger's Taxonomy-eligible business activities.

DNSH: Climate change adaptation
The climate change adaptation DNSH criteria require a three-phase assessment of the economic activity:

1. Assessment of relevant climate risks
2. Assessment of the relevance of these climate risks and impacts under climate-related scenarios RCP (Representative Concentration Pathway) 4.5 and 8.5
3. Provision of adaptation solutions

RCP 4.5 is described by the Intergovernmental Panel on Climate Change (IPCC) as a moderate scenario in which emissions peak around 2040 and then decline. RCP 8.5 is the highest baseline emissions scenario in which emissions continue to rise throughout the twenty-first century. The latter scenario represents the most extreme scenario from a physical climate change perspective, assuming a future where almost no mitigation action is taken and emissions continue to rise at the current rate, and where global mean temperature increases by 4ºC by the end of the century relative to the pre-industrial period.

The assessment of relevant climate-related risks under the RCP 8.5 was already performed when the recommendations of the Task Force on Climate-Related Financial Disclosure (TCFD) were integrated, as reported in this chapter on page 85. Wienerberger, in collaboration with a renowned climate consultancy, assessed the relevance of the climate risks and their impacts under the RCP scenario 4.5 and one additional scenario, i.e. RCP 8.5, as required by the Taxonomy Regulation. For the third phase, internal research provided the adaptation solutions at plant level.

"Based on the external climate-risk assessment, the requirement set by the DNSH-criterion climate change adaptation is met for the three economic activities."

DNSH: Sustainable use and protection of water and marine resources
The DNSH criterion of protection of water and marine resources requires a water use and protection management plan for each production site that corresponds to the Directive 2000/60/EC of the European Parliament and the Council of 23 October 2000, establishing a framework for Community action in the field of water policy. Under the EU´s Environmental Impact Assessment (EIA) Directive 2011/52/EU, major building or development projects in the EU must first be assessed for their impact on the environment.

All Wienerberger production sites where Taxonomy-eligible economic activities are performed have assessed the impact of production on the surrounding environment and have water management plans. At this point in time Wienerberger is assessing whether the referring plans of production sites for the façade category in North America comply with the European standards and whether the applicable US and Canadian federal and local regulations are comparable to these standards and provide for comparable protection of water and marine resources. Work is still in progress on the collection of all relevant data and the review of documentation. Thus, for the time being, Wienerberger decided not to include these activities as Taxonomy-aligned activities until a conclusion based on full documentation has been reached. Assessment will continue in 2023 and Wienerberger is confident that the outcome will allow inclusion in the Taxonomy-aligned activities in the future. The technical screening criterion for substantial contribution to the climate change mitigation objective is already met (U-value) by the Taxonomy-eligible products manufactured in North America.

"The requirement set by the DNSH sustainable use and protection of water and marine resources is met for the three economic activities in Europe."

DNSH: Transition to a circular economy
The circular economy DNSH criteria target specific elements of the production process and the products themselves. The three economic activities concerned should fulfil the following aspects:

a) reuse and use of secondary raw materials,
b) design for high durability, recyclability etc.,
c) waste management that prioritises recycling, and
d) information on and traceability of substances of concern throughout the life cycle of the manufactured products.

All four aspects were analysed for each economic activity and the relevant documentation was provided. Guidelines on the use of secondary raw materials, guidelines on additives, and the Environmental Product Declarations (EPD) ensure compliance with these criteria.

"The requirement set by the DNSH transition to a circular economy is met for all three Taxonomy-eligible economic activities."

DNSH: Pollution prevention and control
This DNSH criterion requires that the production processes and products themselves do not emit or create any hazardous substances such as persistent organic pollutants (POP), mercury, substances that deplete the ozone layer, or other legally restricted substances (e.g. under Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex XVII).

Ceramic building materials are made of natural clay sediments containing clay minerals, quartz, and other minerals, mostly silicates and calcium-magnesium carbonates. The raw materials used in production do not contain hazardous substances as defined in the Taxonomy Regulation.

"The requirement set by the DNSH pollution is met for all three Taxonomy-eligible economic activities."

DNSH: Protection and restoration of biodiversity and ecosystems
The biodiversity DNSH criterion requires that an environmental impact assessment meeting European standards, or an equivalent assessment that analyses the impact of production on the surrounding environment, has been completed.

All production sites within the scope of the report have provided documentation that assesses the impact of production on the surrounding environment.

"The requirement set by the DNSH biodiversity and ecosystems is met for all three Taxonomy-eligible economic activities."

Step 3 – Minimum social safeguards
A group-wide approach ensures compliance with the minimum social standards requirements. The relevant information can be found in the chapters ESG: Governance & Management Approach (pages 35-55), Employees & Social Impacts (137-162), and in the GRI Content Index (183-190).

"The minimum social safeguards requirements are met for all three Taxonomy-eligible economic activities."

4. Results and summary

The Wienerberger Group regards Taxonomy reporting as the first step toward putting sustainability at the heart of the economy and welcomes the potential expansion of the scope of the Taxonomy Regulation to include its remaining economic activities, such as piping solutions.

The Taxonomy-relevant KPIs of the Wienerberger Group's economic activities are as follows:

Turnover

Currently, not all segments and products of the Wienerberger Group are equally covered by the Taxonomy Regulation. Therefore, 51.9% of the total revenues generated in 2022 are Taxonomy-eligible. In 2021, the share was 47.6%.

Taxonomy alignment of the Group's turnover reached 40.3% in 2022, meaning that 40.3% of all economic activities of the Wienerberger Group are sustainable within the meaning of the Taxonomy Regulation (Taxonomy-aligned).

				Substantial contribution criteria						DNSH criteria (Does Not Significantly Harm)										
Economic activities	**Code**	**Absolute Turnover**	**Proportion of Turnover**	**Climate change mitigation**	**Climate change adaptation**	**Water and marine resources**	**Circular economy**	**Pollution**	**Bio-diversity and ecosystems**	**Climate change mitigation**	**Climate change adaptation**	**Water and marine resources**	**Circular economy**	**Pollution**	**Bio-diversity and ecosystems**	**Minimum safeguards**	**Taxonomy-aligned proportion of Turnover, year 2022**	**Taxonomy-aligned proportion of Turnover, year 2021**	**Category (enabling activity)**	**Category (transi-tional activity**
		in € thousand	%	%	%	%	%	%	%	Y/N [1]	Y/N [1]	Y/N [1]	Y/N [1]	Y/N [1]	Y/N [1]	Y/N [1]	%	%	E [2]	T [3]
A. Taxonomy-eligible activities																				
A.1. Environmentally sustainable activities (Taxonomy-aligned)																				
External wall system (Wall)	C.23.32	601,944	12.1%	100%	0%	N/A [5]	N/A [5]	N/A [5]	N/A [5]	Y	Y	Y	Y	Y	Y	Y	12.1%	N/A	E [2]	
External wall system (Façade)	C.23.32	701,928	14.1%	100%	0%	N/A [5]	N/A [5]	N/A [5]	N/A [5]	Y	Y	Y	Y	Y	Y	Y	14.1%	N/A	E [2]	
Roofing systems	C.23.32	699,831	14.1%	100%	0%	N/A [5]	N/A [5]	N/A [5]	N/A [5]	Y	Y	Y	Y	Y	Y	Y	14.1%	N/A	E [2]	
Turnover of environmentally sustainable activities (Taxonomy-aligned) (A.1)		**2,003,703**	**40.3%**	**100%**	**0%**	**N/A [5]**	**N/A [5]**	**N/A [5]**	**N/A [5]**								**40.3%**	**N/A**		
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) [6]																				
External wall system (Wall)	C.23.32	26,068	0.5%																	
External wall system (Façade)	C.23.32	492,537	9.9%																	
Roofing systems	C.23.32	62,353	1.3%																	
Turnover of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		**580,958**	**11.7%**																	
Total (A.1 + A.2)		**2,584,661**	**51.9%**																	
B. Taxonomy-non-eligible activities																				
Turnover of Taxonomy-non-eligible activities (B)		**2,392,071**	**48.1%**																	
Total (A + B)		**4,976,732**	**100.0%**																	

1) Abbreviation "Y/N" = Yes/No // 2) E = Enabling Activity // 3) T = Transitional activity // 4) Format of tables prescribed by EU Delegated Act // 5) N/A in the columns "Criteria for a substantial contribution" for all objectives to which technical screening criteria have not yet been allocated (water and marine resources, circular economy, pollution prevention, and biodiversity and ecosystems). The corresponding delegated act of the EU is still outstanding. Assessment therefore cannot be performed at this stage. // Electronic data processing may result in rounding differences. // 6) Mainly activities in NOAM.

Capex[1]
Of the capital expenditure in 2022, 43.4% is related to Taxonomy-eligible economic activities.

Pursuant to the Taxonomy Regulation, capital expenditure of the companies acquired in 2022 was included in the Taxonomy-related calculation of the activities in 2022. Capital expenditure of the newly acquired companies in 2022 amounted to € 43 million.

The share of Taxonomy-eligible activities in capital expenditure reached 36.7% in the reporting year.

				Substantial contribution criteria						DNSH criteria (Does Not Significantly Harm)									
Economic activities	**Code**	**Absolute CapEx**	**Proportion of CapEx**	**Climate change mitigation**	**Climate change adaptation**	**Water and marine resources**	**Circular economy**	**Pollution**	**Bio-diversity and ecosystems**	**Climate change mitigation**	**Climate change adaptation**	**Water and marine resources**	**Circular economy**	**Pollution**	**Bio-diversity and ecosystems**	**Minimum safeguards**	**Taxonomy-aligned proportion of CapEx, year 2022**	**Taxonomy-aligned proportion of CapEx, year 2021**	**Category (enabling activity)**	**Category (transi-tional activity**
		in € thousand	%	%	%	%	%	%	%	Y/N [1]	Y/N [1]	Y/N [1]	Y/N [1]	Y/N [1]	Y/N [1]	Y/N [1]	%	%	E [2]	T [3]
A. Taxonomy-eligible activities																				
A.1. Environmentally sustainable activities (Taxonomy-aligned)																				
External wall system (Wall)	C.23.32	62,634	13.2%	100%	0%	N/A [5]	N/A [5]	N/A [5]	N/A [5]	Y	Y	Y	Y	Y	Y	Y	13.2%	N/A	E [2]	
External wall system (Façade)	C.23.32	63,500	13.3%	100%	0%	N/A [5]	N/A [5]	N/A [5]	N/A [5]	Y	Y	Y	Y	Y	Y	Y	13.3%	N/A	E [2]	
Roofing systems	C.23.32	48,715	10.2%	100%	0%	N/A [5]	N/A [5]	N/A [5]	N/A [5]	Y	Y	Y	Y	Y	Y	Y	10.2%	N/A	E [2]	
CapEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		**174,850**	**36.7%**	**100%**	**0%**	**N/A [5]**	**N/A [5]**	**N/A [5]**	**N/A [5]**								**36.7%**	**N/A**		
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) [6]																				
External wall system (Wall)	C.23.32	899	0.2%																	
External wall system (Façade)	C.23.32	26,366	5.5%																	
Roofing systems	C.23.32	4,276	0.9%																	
CapEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		**31,541**	**6.6%**																	
Total (A.1 + A.2)		**206,391**	**43.4%**																	
B. Taxonomy-non-eligible activities																				
CapEx of Taxono-my-non-eligible activities (B)		**269,527**	**56.6%**																	
Total (A + B)		**475,918**	**100.0%**																	

1) Abbreviation "Y/N" = Yes/No // 2) E = Enabling Activity // 3) T = Transitional activity // 4) Format of tables prescribed by EU Delegated Act // 5) N/A in the columns "Criteria for a substantial contribution" for all objectives to which technical screening criteria have not yet been allocated (water and marine resources, circular economy, pollution prevention, and biodiversity and ecosystems). The corresponding delegated act of the EU is still outstanding. Assessment therefore cannot be performed at this stage. // Electronic data processing may result in rounding differences. // 6) Mainly activities in NOAM.

1) Capex: Total of all additions to property, plant and equipment and intangible assets

Opex[1]

Wienerberger's Taxonomy-eligible operating expenditure, as defined in the Taxonomy Regulation, primarily included maintenance expenses and amounted to 70.2% in the 2022 reporting year.

As observed with the capex results, the eligible part of operating expenditure also increased versus the value of 65.5% reported in 2021. More than half of total operating expenditure, i.e. 53.2%, is accounted for by Taxonomy-aligned economic activities.

				Substantial contribution criteria						DNSH criteria (Does Not Significantly Harm)										
Economic activities	**Code**	**Absolute OpEx**	**Proportion of OpEx**	**Climate change mitigation**	**Climate change adaptation**	**Water and marine resources**	**Circular economy**	**Pollution**	**Bio-diversity and ecosystems**	**Climate change mitigation**	**Climate change adaptation**	**Water and marine resources**	**Circular economy**	**Pollution**	**Bio-diversity and ecosystems**	**Minimum safeguards**	**Taxonomy-aligned proportion of OpEx, year 2022**	**Taxonomy-aligned proportion of OpEx, year 2021**	**Category (enabling activity)**	**Category (transi-tional activity**
		in € thousand	%	%	%	%	%	%	%	Y/N [1]	Y/N [1]	Y/N [1]	Y/N [1]	Y/N [1]	Y/N [1]	Y/N [1]	%	%	E [2]	T [3]
A. Taxonomy-eligible activities																				
A.1. Environmentally sustainable activities (Taxonomy-aligned)																				
External wall system (Wall)	C.23.32	37,990	16.0%	100%	0%	N/A [5]	N/A [5]	N/A [5]	N/A [5]	Y	Y	Y	Y	Y	Y	Y	16.0%	N/A	E [2]	
External wall system (Façade)	C.23.32	52,388	22.1%	100%	0%	N/A [5]	N/A [5]	N/A [5]	N/A [5]	Y	Y	Y	Y	Y	Y	Y	22.1%	N/A	E [2]	
Roofing systems	C.23.32	35,724	15.1%	100%	0%	N/A [5]	N/A [5]	N/A [5]	N/A [5]	Y	Y	Y	Y	Y	Y	Y	15.1%	N/A	E [2]	
OpEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		**126,101**	**53.2%**	**100%**	**0%**	**N/A [5]**	**N/A [5]**	**N/A [5]**	**N/A [5]**								**53.2%**	**N/A**		
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) [6]																				
External wall system (Wall)	C.23.32	2,569	1.1%																	
External wall system (Façade)	C.23.32	34,437	14.5%																	
Roofing systems	C.23.32	3,136	1.3%																	
OpEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		**40,142**	**17.0%**																	
Total (A.1 + A.2)		**166,244**	**70.2%**																	
B. Taxonomy-non-eligible activities																				
Turnover of Taxonomy-non-eligible activities (B)		**70,584**	**29.8%**																	
Total (A + B)		**236,827**	**100.0%**																	

1) Abbreviation "Y/N" = Yes/No // 2) E = Enabling Activity // 3) T = Transitional activity // 4) Format of tables prescribed by EU Delegated Act // 5) N/A in the columns "Criteria for a substantial contribution" for all objectives to which technical screening criteria have not yet been allocated (water and marine resources, circular economy, pollution prevention, and biodiversity and ecosystems). The corresponding delegated act of the EU is still outstanding. Assessment therefore cannot be performed at this stage. // Electronic data processing may result in rounding differences. // 6) Mainly activities in NOAM.

1) Opex: Total of all maintenance, research and development, and rental expenses

Decarbonization in sourcing and distribution

At Wienerberger, upstream and downstream CO_2 emissions originate from the production of the raw materials we need for our products, the provision of energy required in production, and the transport of raw materials and finished products. We advance decarbonization by increasing the share of secondary raw materials in our production, which reduces the volume of CO_2 emissions generated in the production of primary raw materials such as plastic granulates for our plastic pipes or cement for our concrete products. All Wienerberger climate protection projects aimed at decarbonizing our production result in a decrease in upstream CO_2 emissions from energy. Optimized transport management helps us transport raw materials, products, and system solutions efficiently and in the most climate-friendly way possible.

In 2022, Wienerberger set up the necessary structures for the collection of its relevant Scope 3 emissions, the objective being to disclose Scope 3 emissions as of the 2023 reporting year. Targets for the reduction of our Scope 3 emissions are currently being evaluated. At the same time, Wienerberger is implementing numerous projects to reduce its Scope 3 emission. A few examples are presented in the following paragraphs.

Use of secondary raw materials and careful selection of packaging materials

As regards our plastic pipes, we want to reduce the CO_2 footprint caused by the plastic granulates needed as a raw material. To this end, we use secondary raw materials, such as recycled plastics. For further information, please refer to page 118 in the chapter "Circular Economy".

The major part of CO_2 emission from the production of concrete pavers originates upstream in raw material production. Producing cement is particularly CO_2-intensive. We are therefore committed to reducing these emissions, for example by way of research projects on the use of recycled concrete and climate-friendly cement production. In this context, partnerships with suppliers and technical or scientific institutions play an important role for us. Reducing the scrap rate in production is another measure aimed at lowering our specific CO_2 emissions in sourcing. For detailed information, please refer to pages 118-126 in the chapter "Circular Economy".

In response to our customers' demand for climate-friendly packaging solutions, Wienerberger is continuously testing possibilities of using climate-friendly, recyclable packaging materials. The conversion to packaging materials with a high content of secondary raw materials has a positive impact on the CO_2 balance in packaging and helps us save resources. For details, please refer to page 118 in the chapter "Circular Economy".

Climate protection of our suppliers

The commitment of our suppliers to climate protection is a crucial factor in Wienerberger's efforts to reduce upstream Scope 3 emissions. This has also been integrated in our Responsible Sourcing Policy 2020+ (see page 47) and the requirement of compliance with ESG criteria by our suppliers. The Wienerberger Supplier Relationship Management (SRM) tool, an internal data platform containing information on ESG performance and other aspects (see page 48), is used for the central management of relevant information on selected suppliers. Corporate Procurement examines and evaluates the strategies and initiatives of our suppliers and the results achieved by them. Moreover, Wienerberger supports selected suppliers in their climate management efforts and their initiatives aimed at reducing greenhouse gas emissions. Suppliers with a low score are contacted by Wienerberger and corrective measures are agreed upon. Outstanding supplier performance is recognized by Procurement within the framework of the "Supplier Excellence Award" program.

Optimized supply management for forward-looking planning and efficient transport route management

One of the functions of Wienerberger's group-wide supply management is to plan, optimize, and manage the routes for the transport of raw materials to our plants and the delivery of our products and system solutions to our customers. We take care to efficiently load our means of transport and thus minimize transport distances. Wherever possible, we give preference to means of transport that generate low CO_2 emissions. These processes and measures contribute toward reducing our transport-related CO_2 emissions.

Climate protection in production to reduce CO_2 emissions

The following measures taken by Wienerberger to meet the target of climate neutrality by 2050 have a direct impact on the reduction of upstream CO_2 emissions:

- **Enhancement of production and energy efficiency:** Energy-efficiency measures contribute to the reduction of upstream CO_2 emissions originating from energy sources (unless accounted for under Scope 2). Among other measures, this target can be achieved through the use of new production technologies.
- **Dematerialization and raw material efficiency:** Reduction of raw material input without any change in product quality and product properties. A reduction in transport weight results in lower upstream and downstream CO_2 emissions.
- **Switch to climate-neutral energy sources:** The use of alternative energy generation systems and sustainable energy sources, which also results in lower upstream CO_2 emissions, is being evaluated at various production sites.
- **New production technologies:** Implementation of further R&D projects exploring the use of new kiln, dryer, and heat-pump technologies and new ways of raw material preparation.

Summary and outlook

For Wienerberger, climate protection and the adaptation to climate change along the entire value chain are topics of particular importance, given Wienerberger's mission to improve people's quality of life and create a better world for future generations.

Wienerberger is committed to the long-term target of the European Union to achieve climate neutrality by 2050. Wienerberger's medium-term target is to reduce its CO_2 emissions by 40% by 2030, as compared to 2020. This goal is to be attained through targeted programs and measures.

Within the framework of our Sustainability Program 2023, our climate protection target for the entire Wienerberger Group on its way to climate neutrality by 2050 is

> *"15% less CO_2 emissions (Scope 1 and 2) by 2023 compared to 2020"*[1]

This target comprises the reduction of our Scope 1 emissions: direct CO_2 emissions from primary sources of energy and from raw materials (the latter is of particular relevance in ceramic production), as well as Scope 2 emissions: indirect CO_2 emissions from the Wienerberger Group's consumption of electricity.

> *"In 2022, Wienerberger succeeded in reducing its group-wide CO_2 emissions (Scope 1 and Scope 2) by 13.2% compared to 2020."*

1) Measured on the basis of product-group-specific KPIs

With its product and system solutions, Wienerberger contributes to climate change mitigation and the adaptation to climate change. This is part of our innovation strategy, which we implement across all business areas. A few examples are described below:

Energy-efficient or climate-neutral building solutions
Wienerberger is continuously developing sustainable innovations for energy-efficient and/or climate-neutral building solutions. These include clay blocks filled with insulating material, novel facing brick formats for double-shell exterior walls, or energy-efficient upon-rafter insulation for pitched roofs. On account of their low heat conductivity, these products and systems significantly reduce energy consumption. The need for such solutions is specifically emphasized in the recast of the EU Directive on the Energy Performance of Buildings.

Efficient heating and cooling systems
The building envelope is not the only element with potential for climate change mitigation. Space heating in households accounts for more than two thirds of energy consumption in the European Union. Additionally, rising temperatures result in enormous energy demand for air conditioning. Wienerberger provides efficient heating and cooling systems. When operated by means of a heat pump, such systems are particularly energy-efficient and create a pleasant indoor climate by ensuring a well-balanced temperature.

Solar roof tiles
Wienerberger is embarking on a new path in photovoltaics with its production of innovative solar roof tiles. On account of their compact format, installation is easy and flexible, for instance around roof windows or chimneys. As the entire roof can be used for the generation of clean energy, the energy yield is at least as high as that of a classic photovoltaic installation.

Water management
Water is an increasingly precious resource that plays an important role in sustainable housing concepts. For Wienerberger, responsible water management along the entire value chain is a logical consequence. Wienerberger uses water sparingly in its own production and provides a great variety of product and system solutions for responsible and climate-resilient water management. With Wienerberger's innovative rainwater management system, rainwater from roofs, parking lots, or other outdoor surfaces can be harvested, filtered, and stored in so-called stormboxes (underground storage facilities) for subsequent reuse.

Wienerberger's objective is to be climate-neutral by 2050
To meet this target by 2050, we will continue developing new technologies and implementing the necessary measures within the framework of the Wienerberger roadmap to climate neutrality. This includes a steady increase in production and energy efficiency, the dematerialization of our products and system solutions, the careful selection of raw materials, and the switch in energy consumption to climate-neutral electricity and low-emission or climate-neutral thermal energy sources, always combined with the development of new technologies for the reduction of CO_2 emissions[1].

The reduction of CO_2 emissions from our production reduces the entire CO_2 balance of Wienerberger product and system solutions over their life cycles. This enables our stakeholders, including architects and designers, investors and developers, to erect buildings and implement infrastructure projects with a low CO_2 footprint. It adds sustainable value to the projects and makes them fit to meet requirements of the future, such as those of the European Green Deal and the related legislative provisions.

1) Greenhouse gases such as methane, nitrous oxide, or chlorofluorocarbons (CFCs) are irrelevant in Wienerberger's production. Wienerberger therefore reports its direct greenhouse gas emissions (Greenhouse Gas Protocol, Scope 1) in tons of CO_2, which in this case is identical with tons of CO_2 equivalents. Indirect greenhouse gas emissions (Scope 2) from electricity are recorded as CO_2e (calculation according to market-based method). The absolute CO_2 emissions or the corresponding CO_2 indicators communicated in our climate protection reporting therefore always refer to emissions in carbon dioxide equivalents (CO_2e).

CIRCULAR ECONOMY

The circular economy is a central pillar of Wienerberger's Sustainability Program 2023: With a view to the efficient use of resources and the reuse of valuable substances, all new Wienerberger products are to be 100% reusable or recyclable by end of 2023 at the latest. This is our way of ensuring the long-term availability of raw materials. At the same time, we are continuously increasing the share of secondary or recycled raw materials used in production.

Target of our Sustainability Program 2023

100 %

of our new products are designed to be reusable or recyclable.

The reusability of our products is an essential aspect of innovation at Wienerberger. This is how we achieve a substantial prolongation of our products' useful life. For each product group, we develop criteria to be taken into account in the design of new products.

Circular Economy

The circular economy saves natural resources and is a prerequisite for achieving climate neutrality by 2050 and protecting biodiversity. Half of total greenhouse gas emissions and more than 90% of biodiversity loss and water stress come from resource extraction and processing.[1]

Circular products are to set new standards in the European Union. The Circular Economy Action Plan is one of the most important components of the European Green Deal. The Action Plan announces provisions targeted at products and production processes that are to support the principle of "circularity-oriented design" for all products. This is to result in a reduction in resource use and priority given to the reuse and repair of products. Moreover, demand for recycled materials is to be increased.

Wienerberger supports the European Green Deal and the related targets and measures aimed at promoting the circular economy. We regard the transition to a higher degree of circularity as an opportunity that offers numerous benefits, such as a reduced burden on the environment, higher security of raw material supply, increased competitiveness, and the promotion of innovation.[2]

The Wienerberger Sustainability Program 2023 sets out specific targets along these lines (see following page). New Wienerberger product and system solutions are designed with a view to their reusability or recyclability. This is our contribution to one of the priorities of the European Green Deal – the production of durable products that can be reused and repaired. Brick products are known for a very long service life of at least 100 years.

In connection with the requirements of the European Green Deal, Wienerberger also focuses on reducing material consumption in sourcing and production and promotes the use of secondary raw materials from internal and external sources. In this context, the concept of "urban mining" is of special importance. It aims at saving resources through the recovery and reuse of secondary raw materials. In cities, in particular, resource efficiency is enhanced through urban mining, a principle that will be gaining in importance in the years to come.

A further contribution to resource conservation made by Wienerberger consists in dematerialization, i.e. less resource use for products of equal quality, and a continuous reduction in the volume of waste and the scrap rate in our production.

Positioning itself as a full-range system provider, Wienerberger relies on smart, prefabricated system solutions that help to save resources during installation.

In the following sections, we show how Wienerberger contributes to the circular economy with its durable and circular product and system solutions, applying the principles and strategies of the circular economy along the entire value chain:

- Durable and circular product and system solutions
- Circular economy in sourcing
- Resource efficiency in production
- Resource efficiency in the installation of system solutions

1) https://ec.europa.eu/commission/presscorner/detail/de/ip_20_420
2) https://www.europarl.europa.eu/news/en/headlines/economy/20151201STO05603/circular-economy-definition-importance-and-benefits

Durable and circular product and system solutions

Wienerberger is continuosly developing new concepts for product and system solutions that can be dismantled and reused as entire elements of buildings and infrastructure. In addition to the durability of our product and system solutions, these aspects represent a significant contribution to resource conservation.

Within the framework of our new Sustainability Program 2023, the circularity target for the entire Wienerberger Group is defined as follows:

"100% of our new products are designed to be reusable or recyclable."

The reusability of our products is a crucial aspect of innovation, as it significantly prolongs the products' useful life. In 2021, the criteria to be taken into account in the process of designing new products were elaborated for the individual product groups; the corresponding indicators were first reported in 2022.

"In 2022, 98% of our new products were designed to be reusable or recyclable."

Wienerberger analyzed the reusability and recyclability of its products in the individual product groups in order to align the development of new products with this target. Hybrid or compound products constitute the greatest challenges to be addressed in this context. Although such products only account for a small part of the group-wide product portfolio, considerable efforts are being made to facilitate the separability of the materials they contain. Wienerberger also analyzed the reusability and recyclability of its traded goods (goods not produced by Wienerberger itself) and began to classify and register them. In the course of this process, it was found that a large percentage of traded merchandise is either reusable or recyclable.

The processes described above are being advanced through training programs regarding the design of reusable or recyclable products. Moreover, training sessions are being organized to heighten the employees' awareness and understanding of the importance of circularity.

In a voluntary effort, Wienerberger has for years been working intensively on the preparation of eco-balances and environmental product declarations (EPDs) for its entire product range. On this basis, we are able to transparently disclose our continuous progress toward the circular economy and facilitate comparisons with other operators. All ceramic pipes and fittings produced by Wienerberger Piping Solutions and a family of products of the concrete paver segment of Wienerberger Building Solutions in Romania have been successfully certified according to the Cradle to Cradle® concept and are being re-certified at regular intervals.

In the following sections, we present a number of product and system solutions that are particularly well-suited for reuse in closed cycles or for recycling.

ClickBrick – the reusable facing brick

The reuse of roof tiles and pavers, which has been practiced for quite some time, is an excellent example. Wienerberger successfully launched a reusable facing brick, which is marketed as the ClickBrick. Integrated into the façade structure without mortar, it can easily be dismantled and reused. The ClickBrick also meets high aesthetic quality requirements, a matter of particular importance to us in building construction. In the world of high-end façades, Wienerberger introduced completely maintenance-free, digitally engobed[1] façade panels with an extremely long useful life. Digital engobing offers the advantage of high-end design options without reducing the durability of ceramic façade solutions. The reuse of entire interior walls is another relevant research and development topic at Wienerberger.

1) Engobing is a procedure for color treatment of ceramic surfaces.

Plastic pipes with three lives

In the field of plastic pipes, a research project confirmed the possibility of reusing or recycling the plastic material used in pipe production. The concept of color coding of different pipe generations permits the cascading use of PVC. What begins its life as a yellow low-pressure gas pipe could be converted into a red cable conduit and finally recycled into a grey sewer pipe. All in all, the PVC raw material can be used up to three times. Given that PVC has a useful life of at least 100 years, the total service life of the material can, in theory, be prolonged to more than 300 years.

Urban mining for CicloBrick

We not only design our products to make them recyclable, but also use recycled material in our products.

Wienerberger applies new procedures in the production of circular products, such as the CicloBrick, a facing brick manufactured in the Netherlands. Urban mining aims at retaining the value of materials that are already present in the environment, in cities, or in everyday products and returning them into the production cycle. A current Wienerberger pilot project in the Netherlands is the CicloBrick, a facing brick in production since February 2022. The CicloBrick produced by Wienerberger Netherlands contains 20% ceramic residues selectively reclaimed from demolished buildings.

The facing brick was developed in close cooperation with New Horizon, the Dutch Urban Mining Collective. The mission of this network, which comprises manufacturers and pioneering thinkers, is to exchange knowledge and advance the circular economy. The objective pursued by the partners of the Urban Mining Collective is to use the city as a resource and reclaim raw materials from demolished buildings. Wienerberger has been gaining valuable know-how on how to make building materials even more sustainable. Currently, Wienerberger intends to further increase the percentage of secondary material contained in the CicloBrick.

THE "URBAN MINING" CONCEPT

In cities, in particular, resource efficiency is being enhanced through „urban mining". The concept of "urban mining" aims at saving resources through the recovery and reuse of secondary raw materials reclaimed from the so-called anthropogenic stock. It consists of man-made materials coming from buildings, vehicles, or large electrical appliances, objects of infrastructure such as railway tracks or pipelines, or other durable goods stored or landfilled.[1] Planning future material flows and means of resource recovery is an important aspect of urban mining.[2] The importance of urban mining will increase strongly in the coming decades.

1) https://www.umweltbundesamt.de/themen/abfall-ressourcen/abfallwirtschaft/urban-mining/das-anthropogene-lager
2) https://www.umweltbundesamt.de/themen/abfall-ressourcen/abfallwirtschaft/urban-mining#was-ist-urban-mining-

Leadax – a flat-roof membrane made from secondary raw materials

Leadax Roov is the world's only flat-roof membrane that is produced from plastic waste as a raw material and that can be recycled at the end of its useful life. It not only helps to save resources, but also has a CO_2 footprint notably smaller than that of conventional flat-roof solutions. Leadax Roov has been available in the Netherlands since mid 2022 and will be rolled out by Wienerberger to other European markets in 2023. A cooperation agreement between Wienerberger and Leadax for the distribution of Leadax Roov in Europe was signed before the global market launch.

Circularity in sourcing

One of the priority targets of the circular economy is to avoid waste by converting materials into high-quality secondary resources.

Use of secondary raw materials

From the viewpoint of resource efficiency, the recovery and reuse of end-of-life products and the use of secondary raw materials in production are matters of high priority for Wienerberger, besides the reusability of products. By using secondary raw materials, Wienerberger contributes toward reducing waste, saving natural resources, and ensuring their availability for future generations. In 2022, the share of secondary raw materials used by the Wienerberger Group was slightly below 8%.

Plastic pipe production: In 2022, the Wienerberger Piping Solutions Business Unit increased the amount of secondary raw materials used in plastic pipe production from 90 kg to 95 kg per ton of products, which corresponds to a 6% increase. According to legal provisions, the use of external secondary raw materials is only permitted for pressureless pipes (e.g. for wastewater, rainwater, electric conduits), but not for pipes used under pressure, such as pipes for potable water. For WPS plastic pipe product lines where the use of secondary raw materials is permitted by law, the amount of secondary raw materials even amounted to 77 kg per ton produced which represents a growth of 10%. Wienerberger even introduced several pipe system solutions based on 100% secondary raw materials. In this case, special attention is being paid to the quality of the secondary raw materials used. The identification, classification, and continuous monitoring of suppliers of secondary plastic materials therefore are particularly important aspects in sourcing.

The use of secondary raw materials in plastic pipe production of WPS has been well established for quite some time. Further progress was achieved by WPS in 2022: On the one hand, the use of secondary raw materials was rolled out to all WPS production sites; on the other hand, certain new products were made entirely from secondary raw materials. Moreover, in 2022 WPS again participated in the revision of various European standards, the objective being to enable the use of secondary raw materials in larger quantities. WPS currently holds the chair of the newly established "Ecological Footprint" working group of TEPPFA (The European Plastic Pipes and Fittings Association). This working group is dealing with relevant topics, such as emission data sets for plastic materials, environmental product declarations (EPDs), and issues of European chemical legislation (REACH[1]).

Within the framework of the Circular Plastics Alliance we support all efforts to increase the amount of secondary raw materials used in Europe to at least 10 million tons per year by 2025. For the declaration by the Circular Plastics Alliance, please refer to https://ec.europa.eu/docsroom/documents/36361/attachments/1/translations/en/renditions/native

In ceramic production, residual material from our own plants can easily be recycled into the production process on account of its high degree of purity. Secondary raw materials from external sources are also used as a substitute for primary raw materials. In this context, urban mining will be gaining in importance. In order to obtain secondary raw materials of adequate quality, construction debris needs to be carefully sorted and processed.

The clay block plants of the Wienerberger Building Solutions Business Unit (WBS) use secondary raw materials as a pore-forming agent to optimize the thermal insulation properties of the bricks. The quantities used are included in the raw material report of the respective product group. In 2022, more than 8% of the raw materials used in WBS were secondary raw materials.

1) Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency...

The policy applied by Wienerberger Building Solutions (WBS) regarding the use of secondary raw materials and the avoidance of hazardous substances specifies the format and content of the annual raw material report, which includes the results of chemical analyses, to be prepared by each country organization. It also indicates the release and approval processes to be complied with and documented in writing. As in the previous year, the policy was successfully implemented in 2022.

Optimization programs

Wienerberger Building Solutions (WBS) and Wienerberger Piping Solutions (WPS) are continuously optimizing their processes with a view to achieving sustainable savings of resources and costs. Such optimization programs include the Plant Improvement Program (PIP+) in brick production, the Production Excellence Program (PEP) in concrete paver production, and the Design for Lean Six Sigma (DFSS) management approach in plastic pipe production.

Secondary raw materials in packaging

Wienerberger uses an increasing amount of packaging materials made from secondary instead of primary raw materials. The use of climate-friendly, recyclable materials for packaging is being tested, not least in response to our customers' expectations. Besides reducing the amount of packaging material overall, Wienerberger also uses plastic film containing a certain amount of recycled plastics. In 2022, more than 3,000 tons of primary plastics previously used for our plastic packaging film were replaced by secondary plastics.

Another measure introduced in 2022 in Great Britain, Germany, and the Netherlands was to use completely transparent and unprinted plastic film. Packaging film of this type can be recycled more easily and reused as high-quality packaging material.

Wienerberger aims to maximize the amount of recycled materials in packaging film, while still meeting all technical requirements and standards. Another aspect to be considered in this context is the availability of secondary raw materials and the related market developments. In this regard, we work in close cooperation with our suppliers.

Circularity in production

Dematerialization – Reduced raw material input for products equal in quality

Wienerberger is reducing the raw material input for selected ceramic product groups (dematerialization), provided it is economically justifiable and technically feasible to achieve the required level of product quality. This measure serves to enhance resource efficiency and contributes to the reduction of greenhouse gas emissions in production (see pages 72-73), as illustrated by the LESS series of facing bricks produced in Denmark. Owing to the reduced material input, bricks of the LESS series weigh roughly 10% less than comparable bricks and are therefore easier to handle, while their compressive strength remains unchanged. This means that LESS facing bricks can be used for the same types of structures as conventional bricks. Thanks to these developments, together with the conversion to biogas in Denmark, CO_2 emissions in production will be significantly reduced (see also page 99).

In Wienerberger's Virtual Labs[1], computer simulations based on mathematical models calculate the properties of bricks, brick walls, and systems with a view to making them even more efficient. The simulations instantly show which parameters need to be changed to obtain the desired effect. By means of this method, Wienerberger optimizes the physical properties of its brick products. Properties such as strength, thermal insulation, and noise insulation can be adjusted to the requirements of specific applications, while raw material input and weight are kept as low as possible.

1) Wienerberger's Virtual Labs have been developed in cooperation with the Vienna University of Technology within the framework of the "Innovative Brick 2" project (2018-2021), which succeeded the earlier "Innovative Brick" project (2014-2018). The objective is to optimize brick masonry, including the production process. Both projects were supported by the Austrian Research Promotion Agency and the Austrian Climate and Energy Fund.

Waste management in production

Optimizing the closed resource cycle requires not only a reduction of production waste, but also a reduction of the scrap rate. Wherever possible, production waste (e.g. burnt brick waste, non-coated plastic waste) is returned into the production process. Production waste that cannot be recycled internally is recycled externally or, if this is not possible, disposed of by certified waste management companies, using state-of-the-art methods.

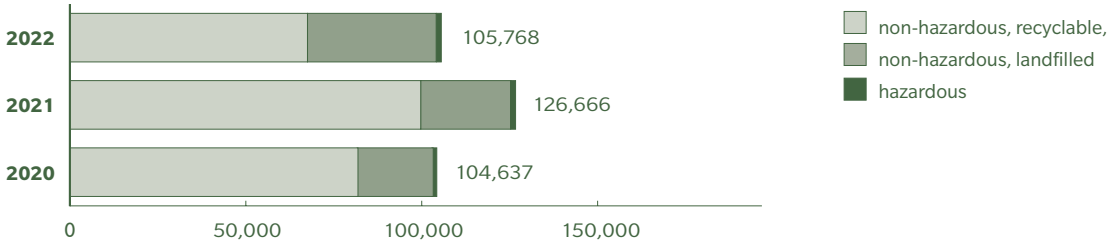
At all our plants, the optimization measures taken within the framework of our quality management system take environmentally relevant aspects into account. Some production sites have additionally been certified according to ISO 14001 Environmental Management Systems.

Ongoing optimization programs at Wienerberger Building Solutions, such as the Plant Improvement Program (PIP+) in brick production and the Production Excellence Program (PEP) in the concrete paver segment, are primarily aimed at achieving sustainable resource and cost savings through improved production processes. Within the framework of PIP+, for example, the scrap rate in brick production is checked regularly and, if necessary, appropriate measures are taken to reduce it. In 2022, the scrap rate in concrete paver production was slightly below 2%.

In the plastic pipe segment of Wienerberger Piping Solutions (WPS), we apply the Lean methodology and the Design for Lean Six Sigma management approach in order to achieve quality improvements and advance process optimization. Both methods are aimed at reducing raw material input and the scrap rate, while increasing productivity at the same time. As a signatory to Operation Clean Sweep®, we ensure that no losses of plastic granulate occur during the production process. By the end of 2022, Operation Clean Sweep® was implemented in 85% of all WPS plastic pipe plants.

In 2022, the total volume of waste generated by Wienerberger amounted to 105,768 tons. Despite an increase in production, the volume of waste was reduced by more than 20% from the previous year's level. 67% of the waste generated was non-hazardous and recyclable (2021: 79%).

Waste generation in tons



Resource efficiency in the installation of our system solutions

Prefabricated brick wall systems

By acquiring the prefab brick wall division of Walzer Bausysteme, a Lower Austrian construction company, Wienerberger expanded its Austrian business in this field. This marks yet another step for the company toward becoming a full-range provider of system solutions. Walzer's prefab brick wall division develops brick wall systems that are individually designed for automatic prefabrication, using top-quality precision-ground bricks in a patented dry-bonding procedure. Openings for window and doors and recesses for lintels and overlays are taken into account during production. This eliminates the need for time-consuming cutting of bricks at the construction site, reduces the volume of construction waste, and minimizes waste disposal costs.

With the 2021 acquisition of Struxura, a prefab producer based in Belgium, Wienerberger further broadened its range of solutions for new build and renovation. Struxura produces brick wall and concrete elements using BIM, a scalable Building Information Modelling system. Based on these digital solutions, which facilitate networking during building design, construction, and operation, Wienerberger supports the trend toward faster, more accurate, and more sustainable building construction.

Prefabricated electrical installation systems

The Electro Spider concept is a smart system solution for electrical installations. It consists of prefabricated, tailor-made electrical conduits, which are delivered prewired according to a 3D design and can be installed quickly and safely. Installation time on site can be reduced by up to 80%, wastage of material is reduced, and costs are saved. The concept is also used in industrial prefabrication.

Summary

Wienerberger supports the European Green Deal and the related targets and measures aimed at promoting the circular economy. We regard the transition to a higher degree of circularity as an opportunity that offers numerous benefits, such as a reduced burden on the environment, higher security of raw material supply, increased competitiveness, and the promotion of innovation.[1]

The Circular Economy Action Plan of the European Union announces provisions governing products and production processes that are to support the principle of "circularity-oriented design" for all products. This is to result in a reduction of resource use, with priority given to the reuse and repair of products. Moreover, demand for recycled materials is to be strengthened.

Specific targets along these lines are set out in the Wienerberger Sustainability Program 2023.

"100 % of our new products are designed to be reusable or recyclable."

New product and system solutions by Wienerberger are designed with a view to their reusability or recyclability. This is our contribution to one of the priorities of the European Green Deal – the production of durable products that can be reused and repaired. The reusability of our products is an essential aspect of our innovation efforts, as it significantly prolongs the useful life of our products.

"In 2022, 98 % of our new products were designed to be reusable or recyclable."

1) https://www.europarl.europa.eu/news/en/headlines/economy/20151201STO05603/circular-economy-definition-importance-and-benefits

In connection with the requirements of the European Green Deal, Wienerberger focuses on reducing material consumption in sourcing and production and promotes the use of secondary materials from internal and external sources. In 2022, the share of secondary raw materials in the Wienerberger Group's total raw material input was almost 8%. Within the framework of the Circular Plastics Alliance, we support all efforts to increase the amount of secondary raw materials used in Europe to at least 10 million tons per year by 2025.

A further contribution to resource conservation made by Wienerberger consists in dematerialization, i.e. the reduction in resource use with product quality remaining unchanged. At the same time, continuous efforts are being made to reduce the volume of waste and the scrap rate in our production. Despite a higher production volume, the amount of waste generated by Wienerberger in 2022 declined by more than 20%.

Positioning itself as a full-range system provider, Wienerberger relies on smart, prefabricated system solutions that help to save resources during installation.

Wienerberger is consistently developing new products that are reusable or recyclable. Moreover, we are making a constant effort to increase the share of secondary raw materials in sourcing and production. On a voluntary basis, Wienerberger has for years been working intensively on the preparation of eco-balances and environmental product declarations (EPDs) for its entire product range in the interest of transparent and comparable disclosure of these developments.

Resource conservation in sourcing and production and, in particular, the reusability and recyclability of Wienerberger product and system solutions, have a positive impact on their ecological footprint. By providing durable product and system solutions, Wienerberger enables our stakeholders, including architects and designers, investors, developers, and local authorities to erect buildings and implement infrastructure projects in line with the principles of the circular economy and with a satisfactory eco-balance. This adds sustainable value to the projects of our stakeholders and makes them fit to meet future requirements, such as those of the European Green Deal and the related legislative provisions.

BIODIVERSITY & ENVIRONMENT

The protection and preservation of our environment is firmly embedded in Wienerberger's awareness of its corporate mission: We foster biodiversity at our sites, use resources sparingly, and of course respect nature reserves. Over the past 40 years, the world has seen an unprecedented loss of biodiversity – a development we must counteract.

Target of our Sustainability Program 2023

100 %

Biodiversity Action Plans to be implemented at all our production sites

We have set ourselves a clear goal: By 2023, implement a biodiversity action plan, based on the Wienerberger Biodiversity Program, at all Wienerberger production sites.

Biodiversity & Environment

The protection and preservation of our environment is firmly embedded in Wienerberger's awareness of its corporate mission and values: we respect nature, use resources sparingly, and foster biodiversity at our sites.

> *„Nature is in crisis, placing human and planetary health at risk. This decade must be the turning point where we recognize the value of nature, place it on the path to recovery and transform our world into one where people, economies and nature thrive."*[1]

Biodiversity and Environment

The frequency of extreme environmental events, such as heatwaves, heavy rainfall, and extensive flooding, is increasing as a result of climate change. The alarming decline in biodiversity observed in the last decades is unprecedented in human history and threatens to bring disastrous consequences for the environment and people.[2] Climate change is the main driver of biodiversity loss, and the loss of biodiversity and ecosystems diminishes nature's ability to regulate greenhouse gas emissions. Climate change and biodiversity loss are therefore twin crises that call for holistic measures, and they should be tackled together.[3]

At the 15th Conference of the Parties (COP15) of the United Nations Convention on Biological Diversity (CBD; Biodiversity Convention for short) in December 2022, nature was the central topic. Governments came together to agree on a new set of targets to serve as guidelines for global measures to be taken by 2030 in order to halt and reverse nature loss. This can be achieved through global action within a comprehensive framework and with clear targets.[4] Only then can we hope to achieve a full recovery of nature by 2050.

There is growing pressure from business and financial institutions for policy and business action to transform the economy into one that values nature. Wienerberger is also part of this initiative as a supporter of the European Green Deal and the "Business for Nature" coalition.[5] With the latter we joined the Call to Action and the recent "Make it Mandatory" campaign, in which more than 300 of the world's leading companies call for a clear statement at the COP15 to make the disclosure of nature-related information a mandatory requirement.[6]

At this COP15 (Biodiversity Convention), the Kunming-Montreal Global Biodiversity Framework was agreed upon. This framework states that we need to conserve and manage 30% of the world's area and restore 30% of our ecosystems. In reaching this target companies and financial institutions are required to monitor, assess, and disclose their impacts and risks on biodiversity[7].

This Global Biodiversity Framework is necessary because the effects of the extreme environmental events mentioned earlier confront urban areas with growing challenges that require sustainable and resilient solutions in terms of building design and infrastructure. As a leading provider of innovative infrastructure systems and tailor-made all-in solutions, Wienerberger is helping cities and communities prepare and adapt to these events. With its climate-resilient system solutions for buildings and infrastructure, Wienerberger supports the targets of the European Green Deal.

At the same time, Wienerberger is pursuing the "nature positive" goal at its own production sites. The Biodiversity Program launched in 2020 aims toward a nature positive future for the whole Wienerberger Group. According to the Program, the first target is to have a biodiversity action plan in place on all our production sites.

1) Nature positive: https://www.naturepositive.org, a network of 16 leading environmental and conservation associations and research institutions
2) United Nations Sustainable Development Goals (UN SDGs): https://www.un.org/sustainabledevelopment
3) European Commission: https://ec.europa.eu/research-and-innovation/en/horizon-magazine
4) United Nations Environment Programme (UNEP): https://www.unep.org/un-biodiversity-conference-cop-15
5) Business for Nature: https://www.businessfornature.org
6) Business for Nature: https://www.businessfornature.org/make-it-mandatory-campaign
7) Convention on Biological Diversity (CBD), 2022, Kunming-Montreal Global biodiversity framework

Biodiversity Program to be implemented at all our production sites by 2023

In 2021, building on a long history of recultivating our quarries, we took another big step forward into fostering biodiversity at all our (urban) production sites. For this purpose we have designed an innovative and pragmatic approach for urban settings, where we want to improve land use and provide numerous high-quality habitats for plants and animals.

The following sections describe the measures we are taking to implement our Biodiversity Program:

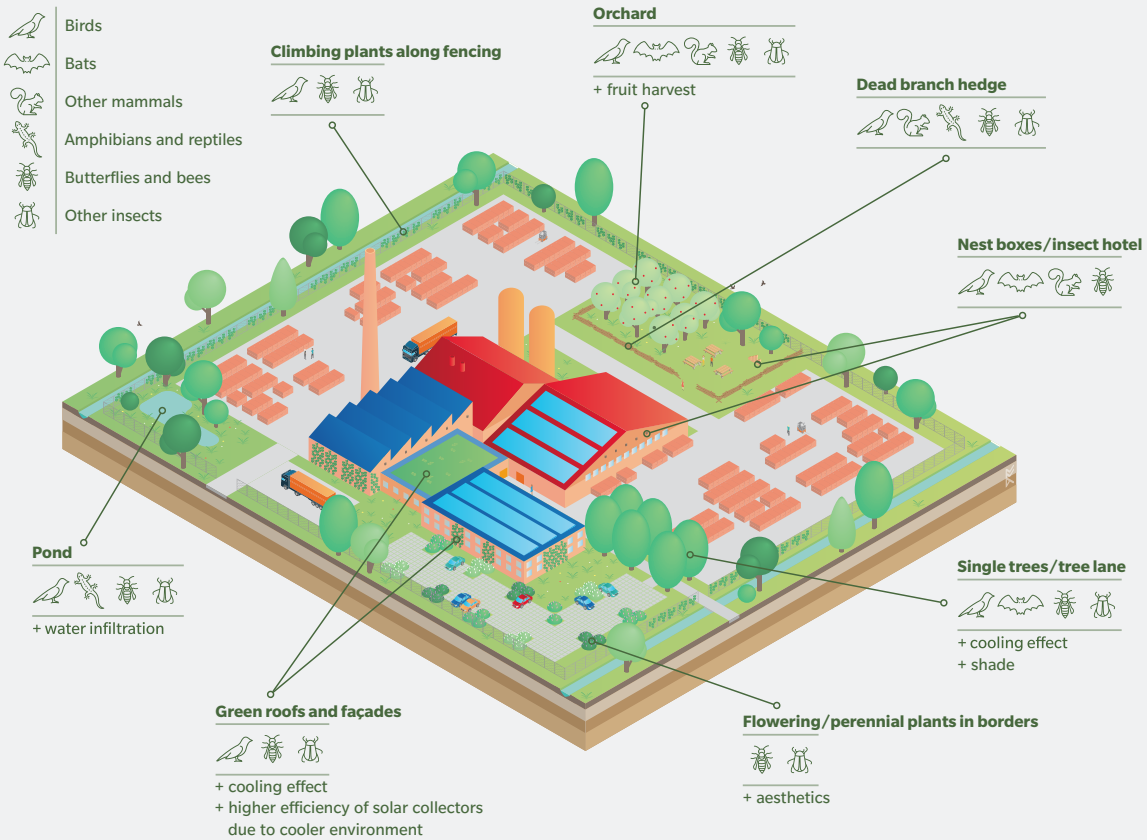
- Wienerberger's action plans to foster biodiversity
- Nature conservation during and after the use of extraction sites
- Avoidance of hazardous substances
- Contribution of products to the enhancement of biodiversity

With its ambitious Biodiversity Program, Wienerberger is on a journey toward becoming nature positive.

Wienerberger's action plans to foster biodiversity

The biodiversity action plans are a concrete way of contributing to the preservation and promotion of urban flora and fauna at our production sites all over the world. The basis for the action plans is our Wienerberger Biodiversity Measures Catalogue, which describes more than 30 measures put together by our external ecology consultant to fully exploit the biodiversity potential of our production sites. It also shows examples of these measures that have been successfully implemented at our own sites.

MEASURES ON A FICTIVE WIENERBERGER **PRODUCTION SITE**



This infographic shows measures on a fictive production site. For every measure, the infographic shows which fauna groups benefit most. Furthermore, examples of co-benefits are shown (e.g. water infiltration, fruit harvest, cooling effect, aesthetics).

The following six-step process represents the corporate standard for the elaboration of individual biodiversity action plans. Thanks to the pragmatic approach, it can be applied at all Wienerberger sites and permits the uniform implementation of biodiversity measures.

BIODIVERSITY ACTION PLANS IN SIX STEPS

Steps one to four are performed by means of a geographic information system[1] and allow comparability and progress updates throughout the Wienerberger Group. First of all, the software maps the terrain of the site (1). Subsequently, existing green infrastructure is recorded (2). On this basis, the maximum biodiversity potential is identified with support from Wienerberger's biodiversity specialists and ideas from our own employees (3). To ensure management commitment, a biodiversity action plan suited to the conditions of the respective site is then approved by the local management team, with budgetary and practical considerations being taken into account (4).

The implementation of the measures starts in partnership with a local (eco-friendly) gardening establishment and with help from our own employees (5). As a provider of building materials and infrastructure solutions, Wienerberger can use its own products for certain measures. Best practices are shared within the Group.

The last step of the process is an analysis of the effectiveness of the measures taken (6). To ensure a scientifically sound approach based on citizen science, the original situation is first surveyed in step two of the process. The species and numbers of birds, butterflies, and other insects such as bees, bumblebees and hoverflies are recorded by Wienerberger's biodiversity specialists together with an independent partner well versed in ecological matters. The presence of these species groups is an excellent indicator of habitat quality and well suited for simple and pragmatic monitoring. This method, based on citizen science, allows specially trained employees to monitor the in-migration of species and the development of their numbers following implementation of the measures. As "biodiversity ambassadors", they assume the task of monitoring the birds and insects three times a year, following the same route each time. So far we have more than 60 people on local production sites who want to help improve biodiversity and act as spokespersons for these projects. The evolution of the Biodiversity Program is monitored by means of two indicators:

- Size (in square meters) of biodiverse terrain at the production sites (newly created and/or upgraded)
- Number of species identified at the production sites

The Program can be managed, evaluated, and optimized using GIS software combined with regular monitoring of these indicators.

1) GIS software: https://www.qgis.org/en/site/

The pragmatic design of the Program means that we can also roll it out in other parts of the world. In North America, we partnered up with a local ecological company that adapted our measures catalogue to North American standards, taking legal requirements, local ecosystems, and local fauna and flora into account to create Wienerberger's North American Biodiversity Measures Catalogue. The monitoring method was also adapted to reflect North American practice. An excerpt of the common species monitoring form can be seen here.

MONITORING IN NORTH AMERICA

Some of the common species in North America that the biodiversity ambassadors can find on the production site

California Dogface (Zerene Eurydice) ☐

Monarch (Danaus plexippus) ☐

Karner blue (Plebejus melissa samuelis) ☐

Cabbage white (Pieris rapae) ☐

Blue Jay (Cyanocitta cristata) ☐

Mourning Dove (Zenaida macroura) ☐

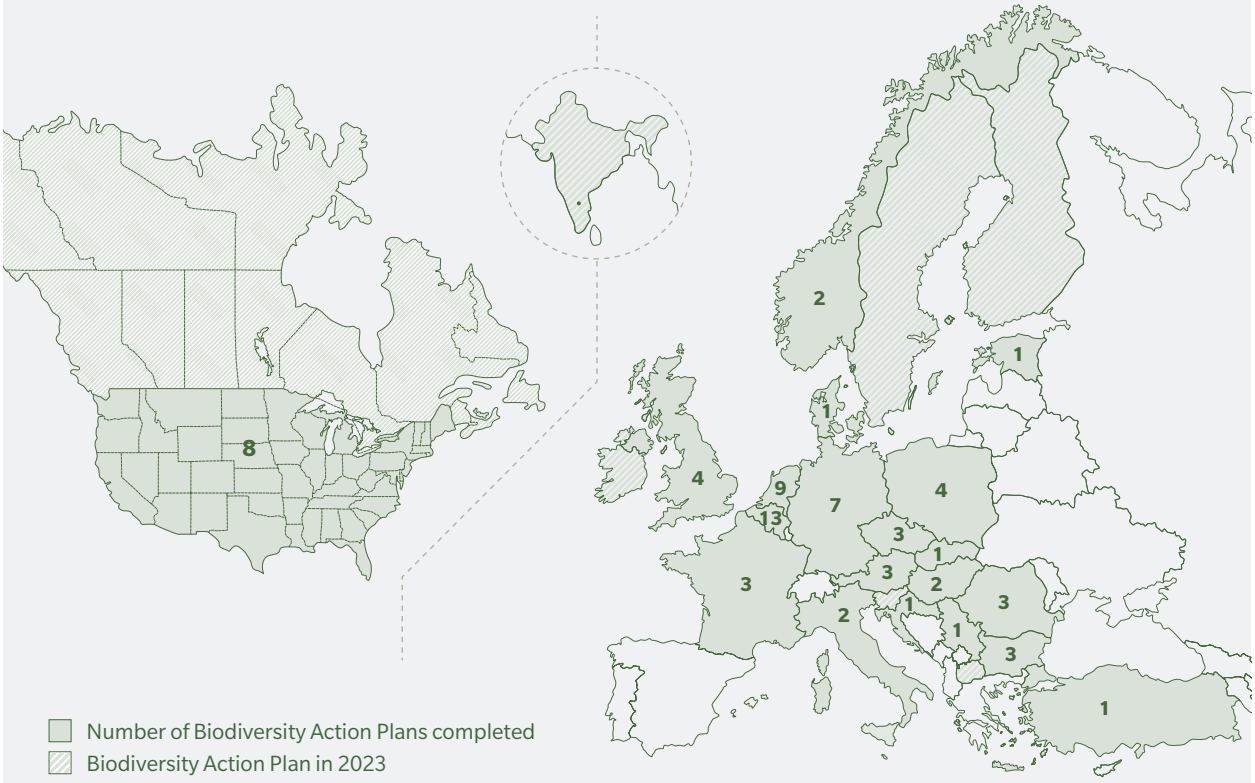
House sparrow (Passer domesticus) ☐

American goldfinch (Spinus tristis) ☐

☐ **Box in which biodiversity ambassadors enter the number of individuals seen on the production site**

By 2023, we want to have biodiversity action plans in place at all our production sites. In 2022, we elaborated more than 60 action plans for our sites and thus even outperformed our interim target of 50 plans.

BIODIVERSITY ACTION PLANS COMPLETED



As described before, Wienerberger products, production processes, and raw materials have an impact on living and non-living natural systems. Making sure we are aware of our impacts on our surroundings is essential when we are evaluating our business and its processes. We avoid extracting clay in (biodiversity) protected areas where possible, and we strive to minimize the impacts wherever we are located in such areas. We have therefore taken a close look at the location of all our operational sites (production sites and quarries) and their proximity to protected areas to assess the critical effects.

Our Biodiversity Program improves biodiversity on the production site itself by improving and creating habitats for common animal species. Knowing which species are present in the surroundings is essential in order to create the right habitats. To visualize the sites, we mapped them in a geographic information system. This allowed us to calculate the overlap with protected areas using the available data sets and evaluate the proximity of Wienerberger's production sites and quarries to Natura 2000 and Ramsar sites (except in North America).

Natura 2000 is a network of Europe's most valuable and threatened habitats (and species) created under the EU Birds and the EU Habitats Directives. They are protected by national measures and legal provisions to maintain their ecological and economic value.[1] Since Natura 2000 covers European protected areas only, our production sites in North America and India are excluded from this analysis. The Ramsar Convention is a worldwide treaty for the protection and sustainable use of wetlands and their resources.[2]

The analysis shows that no more than 15 of 216 production sites overlap with Natura 2000 protected areas, and more than half of these sites have less than 5% overlap. Most of the production sites have this overlap because they are located near major canals, rivers, or other bodies of water for historical reasons, and generally these waterways are particularly attractive for animals and plants. In the Netherlands, for example, clay qualifies as renewable raw material because it is deposited in the rivers.[3] By extracting clay in these areas, water level safety is guaranteed and natural habitats are created. Being close to waterways also means they can be used for water-based transport of products. The same goes for production sites that have overlap with Ramsar protected sites. Less than 2% of our production sites have an overlap with Ramsar wetland areas.

There are no clay pits in Europe that have an overlap with Ramsar protected areas. Less than 10% of the quarries overlap to a small extent with Natura 2000 protected areas.

Clay pits have a long working lifespan, so few (if any) are closed per year. Their end-of-life status is usually agreed upon before extraction begins, and we make every effort to give back to nature as much as possible. Currently, more than half of the clay pits used by Wienerberger are being re-natured or given over to agriculture.

To summarize, an assessment regarding impacts on the environment and especially on Natura 2000 and Ramsar areas has been conducted on all our production sites and clay pits. Where necessary, measures are in place to mitigate the effects.

Nature conservation during and after use of extraction sites

Responsible sourcing of our raw material is a fundamental part of the Wienerberger Sustainability Strategy. As a leading company of our sector, we are committed to providing high-quality products while ensuring that the natural environment is valued and protected. To this end, a critical evaluation of our clay pits is a very important step in the process of closing the sustainability circle.

A general aspect of our clay mining process is that no hazardous substances are involved, which guarantees that there is no pollution or contamination of the soil and groundwater system. Moreover, all clays are extracted exclusively from open pits, excluding the need for underground mining and the use of explosives, which makes the process safer. Strict environmental regulations are in place to ensure responsible mining operations.

For all our clay pits in Europe, an environmental impact assessment (EIA) is conducted prior to the approval of operations. A similar investigation is performed in North America. In Europe, alongside the formal approval procedure, environmental aspects, such as significant direct or indirect impacts that may arise from the extraction of our raw material, are taken into account. Project planning is improved by integrating nature and local residents from the start and minimizing any significant environmental damage. Every effort is being made to balance competing interests through recultivation, mitigation, and compensation measures. The environmental impacts thus analyzed include potential impairments of human (health and well-being), animal and plant life, as well as biodiversity, water (surface water and groundwater), soil and air quality, the climate, and cultural and other assets, as well as any interactions between them. Based on a broad and integrative analysis, an EIA enables transparent and comprehensive decision-making, e.g. on requirements to be met during operation and mitigation, compensation, and recultivation measures to offset the effects of non-avoidable human intervention.

1) European Commission, Environment: https://ec.europa.eu/environment/nature/natura2000
2) Ramsar: https://www.ramsar.org
3) Journal of Soils and Sediments, van der Meulen M. et al. (2009); Sediment management and the renewability of floodplain clay for structural ceramics

Another indispensable part of the approval procedure for the operation of a clay pit is the applicant's/operator's plan for the recultivation of the site. This is to ensure that every depleted clay pit is recultivated and given a meaningful use. For example, around 40% of the area of our extraction sites is given back to nature, while another 25% combines nature with agricultural use. We can see such added value in some of our former clay pits, such as Šumbar Lake in Croatia, now a famous fishing lake, and at the Orchard Farm site in England, which is being converted into a habitat for endangered species, such as the great crested newt and the green lizard. Another example is the Wienerberg recreational area in Vienna, now a protected site, which is home to a diverse flora and fauna including some species of conservation concern, such as the European pond turtle, Austria's only native turtle species.

In many cases, some parts of the clay pits are being recultivated while extraction operations are still ongoing. These areas are often able to provide a mosaic of habitats, even during the extraction phase. As an example, pioneer grassland and wetland vegetation is present at some sites during the extraction phase, and these niches may attract species that require nutrient-poor soils and bare ground. Clay pits have a different and unique biodiversity potential that we try to explore during the use phase.

Clay pits offer a diverse range of habitats for local fauna both during and after the extraction phase.

Avoidance of Hazardous Substances

We conscientiously ensure the avoidance and, where this is not possible, the substitution of hazardous substances. Wienerberger meets all legal requirements at the national and regional levels regarding the avoidance and substitution of hazardous substances, especially in raw materials. Compliance with all legal provisions is continuously monitored and corrective or mitigating measures are taken if necessary.

Based on an internal policy, uniform management practices regarding the avoidance of hazardous substances are in place at all production sites. The policy provides for a strict classification of all inputs and contains mandatory instructions for employees on the use of secondary raw materials and the avoidance of hazardous substances at the production sites. Compliance with all provisions is verified by means of annual raw material reports.

Contribution of Products to Fostering Biodiversity

System solutions developed by Wienerberger Piping Solutions can be used for the supply and irrigation of green roofs, façades, and surfaces on the ground. Pipe systems for the collection and storage of (rain) water, which can subsequently be used for irrigation, are also available from Wienerberger Piping Solutions. The measurement of rainwater flow through downpipes into tanks and drains using smart sensors enables urban planning authorities and others to identify places where green infrastructure could help to improve drainage and mitigate urban heat island effects. Green infrastructure elements in cities can also serve to connect core habitats of numerous animal and plant species (stepping stone biotopes).

Pipelife's Raineo® system, used in combination with the Leadax Roov membrane (see Chapter Climate Protection & Adaptation to Climate Change on page 101 and Chapter Circular Economy on page 121), enables Wienerberger to provide smart blue-green roofing solutions. Green roofs provide nesting space and are a source of food for various animal species. Additionally, (rain)water can be harvested, filtered, stored, and reused.

Eco-pavers produced by Wienerberger Building Solutions help to manage the negative consequences of extreme weather conditions, such as heavy rainstorms, which are likely to occur more frequently in the future. In combination with pipe systems developed by Wienerberger Piping Solutions, they prevent flash flooding in cities with large areas of sealed surfaces. The use of light colors prevents overheating and has a notable cooling effect, which in turn improves the micro-climate. This benefits not only people, but also animals and plants in cities.

Ceramic product solutions by Wienerberger enhance climate resilience and help foster biodiversity in urban areas. Wienerberger has designed solutions to accommodate bird and bat boxes under roofs and on façades, as well as insect hotels and nesting spaces for small mammals. This is a perfect way to foster biodiversity in urban areas without impairing the quality of life of the building's human inhabitants or changing the outward appearance of the building (see also our brochure on eco-habitat products fostering biodiversity). With a long lifespan and high recyclability, clay products are the building material of the future.

Summary

By enhancing the conditions for biodiversity on our own production sites, we make our areas healthier for fauna, flora and people. This is the first step in our journey to nature positive and is in accordance with the global biodiversity framework that was established at the COP15 of the Biodiversity Convention. Because of our pragmatic approach and our learnings we will be able to support new legislation in Europe. We will continue on our journey, on and off our sites, share the know-how with our partners in the supply chain, and contribute to a better, healthier, and greener future.

EMPLOYEES & SOCIAL IMPACTS

WIENERBERGER **EMPLOYEES**

For Wienerberger, assuming responsibility for all our employees is of primary importance. We are committed to diversity, inclusion, and equal opportunities in our company and support our employees in developing their skills and talents. Together, we can improve people's quality of life with our products and system solutions. We offer our employees a safe and motivating work environment and are committed to showing them respect and appreciation.

Targets of our Sustainability Program 2023

≥15%

women in senior management

≥30%

women in white-collar positions

Wienerberger is aware of the fact that the percentage of women in specific positions is only one of many important aspects of diversity. Our targets regarding the percentage of women are to be taken as a first step: Our main concern is not to define quotas, but to build awareness for the positive impact of gender equality.

Target 2023

10%

more hours of training per employee by 2023, as compared to 2020

At Wienerberger, we believe in advancing and supporting our employees in a targeted manner and in facilitating networking and an international exchange of knowledge.

WIENERBERGER **SOCIAL IMPACTS**

Wienerberger is committed to creating the greatest possible benefit for society. For many years, we have been supporting social projects and institutions. With a special focus on the countries we operate in, we help to provide housing and decent living conditions for people in need within the framework of social projects.

Target of our Sustainability Program 2023

200

housing units per year for people in need

Built with our products and in the markets we operate in.

Employees & Social Impacts

Our employees constitute the basis of our success and are a key factor for the successful further development of our company. We are convinced that our sustainable economic success is based on the skills, diversity, and dedication of our employees, as well as on our corporate culture.

We believe it is our responsibility to create a stable and safe work environment for all Wienerberger employees. We provide all the necessary conditions to ensure the safety and health of our employees. At the same time, we promote the advancement of individual careers in many ways. Our approach relies on an effective communication culture within the company, consistent involvement of our employees, and a motivating work environment.

Our goal is to sustainably improve the quality of life of our employees, customers, and business partners. To achieve this goal, we work in diverse teams at an international level on the basis of shared values, such as trust, respect, passion, and creativity. In 2021, Wienerberger published a comprehensive Code of Conduct, which was implemented across the Group. A group-wide whistleblowing system, set up in 2021 by Wienerberger in cooperation with SeeHearSpeakUp as its external partner, is available for all employees to report any misconduct observed – anonymously, if so desired.

Through targeted measures, we address topics such as occupational health and safety, skills development, as well as diversity and equal opportunities, as a basis for effective steering by the management. The related processes are supported by our Safety, Health and Education (SHE) reporting, for which key data on occupational safety and health, training, and employee development are collected every four months.

In the coming years, as we continue our comprehensive digitalization measures, we will be able to expand the existing analytical and steering options on the basis of granular and reliable data. We thus intend to achieve a targeted further enhancement of the work environment and our process landscape, and will address megatrends, such as the shortage of skilled labor, even more effectively.

In the following sections, we provide an overview of our initiatives, tools, and processes, as well as our performance in the following areas of human resources (HR) management:

- Occupational safety and health
- Job creation and stability of employment
- Competence development and advancement of our employees
- Diversity and equal opportunities
- Digitalization in human resources management

Alongside our commitment towards the health and safety of our employees, Wienerberger is committed to creating the greatest possible benefit for society. We are doing our utmost to ensure safety and health along our supply chain, and we care about the protection and health of local residents as well as of our customers. Moreover, Wienerberger is involved in numerous social projects and initiatives aimed at meeting the urgent demand for housing for people in need. At the end of this chapter, we offer some insight into the following aspects of our social impacts:

- Safe and healthy with Wienerberger
- Societal commitment

Occupational Safety and Health

Wienerberger takes its responsibility for providing safe and healthy working conditions for its employees very seriously. We firmly stand by our commitment to the primacy of safety as a principle of our work.

WIENERBERGER HEALTH & SAFETY POLICY

Our vision is to be the producer and supplier of building materials and infrastructure solutions with the best safety record in our sector of industry. We have set ourselves a clear goal: zero accidents.

In 2022, Wienerberger fully aligned the health & safety measures pursued by the business units with the common Wienerberger Health & Safety Policy. Our clear goal is to benefit from the achievements of the WBS and WPS Business Units over the past decades and incorporate them into new developments.

At Wienerberger, we are convinced that the health and safety of our employees generate added value for the company and for society, and lead to enhanced employee commitment. More than ever before, our company is making every effort to create a safe and healthy work environment, from the daily routine in our factories and offices to the sites of our customers and the local communities.

We employ effective health & safety management systems throughout our organization in order to ensure that we can achieve our most important goals:

- *Risks are identified and mitigated to the lowest practically feasible level.*
- *All accidents, incidents, and safety concerns reported are thouroghly investigated to determine the cause and take appropriate corrective measures.*
- *Everyone is sufficiently trained and informed to perform our activities as safely as possible.*
- *As a prerequisite for accident prevention, our plants must be well managed and properly maintained and be in perfect condition.*

As described in the following, we are working on initiatives, tools, and processes aimed at continuously improving occupational safety and health:

- Wienerberger Safety Standards
- Contingency planning
- Safety training
- Notification of work-related hazards or hazardous situations
- Procedures for the investigation of work-related safety and health incidents
- Involvement of our employees in the development of safety and health management systems at the workplace
- Occupational health service
- Safety, health, and human rights at our own raw material extraction sites
- Protection from exposure to respirable crystalline silica
- Group-wide management of the COVID-19 pandemic
- System for the collection of occupational accident data

In the following, we also disclose the development within the Wienerberger Group in respect of accident frequency, accident severity, and types of injuries, sick-leave days, and protection from exposure to respirable crystalline silica, presenting data as a three-year trend.

Wienerberger Safety Standards (WSS)

To ensure the occupational safety and health of our employees at the workplace, each business unit is implementing the WSS based on relevant legal provisions, sector-specific standards and requirements, and local rules and regulations. In 2021 the Wienerberger Health & Safety Policy has been updated throughout the Group, reflecting our Safety Standards. These policies and programs are actively implemented by our business units and country organizations.

In 2022, Wienerberger introduced the first version of the "Occupational Health & Wellbeing Standard OH&W" in order to harmonize the measures taken in the country organizations and standardize the approach towards OH&W. Additionally, so-called functional safety audits were performed to verify conformity with the corresponding European standards (e.g. on safety of machinery: EN 13849/12100). The content and activities within the OH&W standard are described in the following sections.

Contingency planning

Wienerberger employs the method of contingency planning for various safety topics and areas of work. This includes, under others, the posting of warning signs, notices on machines and, in particular, initiatives such as LOTOTO (Lock-Out, Tag-Out, Try-Out). This is a safety system which disconnects the power supply to machines and equipment while repair and maintenance work is going on and subsequently verifies that the safety mechanism is operational. To ensure compliance with the group-wide requirements, a LOTOTO standard has been implemented, which is subject to continuous further development and verification by an external partner. In 2022, the LOTOTO initiative was translated into all languages spoken within the Wienerberger Group and rolled out to all countries. In addition to the technical and mechanical safety provisions and warning signs, continuous training on occupational safety is being provided.

Safety training

Safety training at all levels is key to a successful safety culture at Wienerberger. We therefore provide target group specific training, depending on the position and field of work of the employees concerned.

Wienerberger provides various safety training programs for its employees, partly on site and in national or local languages. Besides courses with physical attendance at the production sites, e-learning programs (including elements of gamification, i.e. the transfer of game-like or game-typical elements into a non-game-like situation) are also available.

Wienerberger has launched the "Visible Management Leadership" initiative, in the course of which persons in management positions at the production sites make every effort to enhance the employees' safety and health awareness. In doing so, they visibly demonstrate their own awareness and their personal commitment to health and safety. This also serves to highlight the strengths and weaknesses of our safety system.

Every employee of the Group has to undergo a uniform introductory safety training module. Additionally, we have designed a training matrix, on the basis of which every employee is provided with an occupational safety and health training roadmap. This serves to create a work environment in which safety always comes first.

Notification of work-related hazards or hazardous situation

In the Wienerberger business units, work-related hazards or hazardous situations are identified and evaluated by means of a Health & Safety (H&S) app. Employees can easily and quickly report safety concerns via this app. Training is provided on how to use the app. Given our strict reporting requirements, not only the local H&S management, but also the central H&S team has access to the safety concerns reported to ensure appropriate measures and recommendateions are shared across all local organisations. For years, all employees have been urged to participate in the identification of hazards.

Every Wienerberger employee is obliged to immediately interrupt or stop any activity or procedure that is deemed to be unsafe or not in compliance with the safety regulations. Work is not to be resumed unless safety is again guaranteed.

Reporting safety concerns is also strongly encouraged at Group level. Depending on the area of work, including in an office setting, potential hazards can be reported to the appointed safety officers, the works council, or a safety expert. An occupational safety committee (OSC) or a comparable institution has been established in each of Wienerberger's country organizations, its task being to prioritize the risks identified and initiate appropriate measures. Safety warnings and important findings are to be evaluated at all levels of the organization. For the purpose of a thorough analysis of crucial safety and health indicators, above all lost time accidents (LTA), quarterly meetings between business units, Human Resources (HR), and employee representatives (Chairman of the European Works Council) take place.

Procedures for the investigation of work-related health and safety incidents

Wienerberger has defined and implemented clear procedures for the investigation of work-related accidents and incidents at the various management levels. Above all, the local H&S management is involved in the process. Additionally, such incidents are thoroughly analyzed at Group level (by HR, works council, and management), at business unit level (by the Head of Health & Safety), and across business units. All accidents are investigated for their causes and the risks associated with them. Extensive reports are also generated on the causes of accidents without sick leave, and corrective action is taken to prevent such accidents in the future.

As part of the "Occupational Health & Wellbeing Standard", auditing is a key method for evaluation. Audits take place on regular intervals in the form of internal audits or cross-country audits. Cross-country auditing is a strategic way of evaluating performance and sharing best practices on the basis of observations made during the audits. In 2022, the number of cross-country audits was increased from seven in the previous year to 38. In total, 143 audits were performed in the course of 2022.

Involvement of our employees in occupational safety and health management systems

Wienerberger involves its employees in the development and implementation of occupational safety and health management systems, for instance by organizing general and specific employee surveys, through the works council as the body representing employee inter- ests, safety officers, the respective occupational safety committee (OSC), and the H&S app.

Special efforts are being made to strengthen communication with "frontline" workers in order to counteract anxieties and reservations regarding safety and health protection. To this end, employees are being recognized for their efforts and best-practice examples are highlighted.

In most countries (depending on the size of the location) a Safety Committee (or Council) meets up to four times per year. Its purpose is to ensure broad representation of the local organization in the implementation of its health and safety program. At the Wienerberger Piping Solution Business Unit, for example, the set-up is as follows:

- Participants include representatives of production workers, health & safety specialists, the health & safety management team, and members of the management team.
- The agenda includes a review of the current health & safety performance, a review of policies and procedures, planned changes, and improvements to the program, as well as suggestions on how to improve health & safety in each department.
- The Committee, which includes key stakeholders and top representatives of the local management, has decision-making authority.

Occupational health services

Services provided for our employees in the field of occupational health vary from country to country. Company physicians are available to our employees in many countries. Occupational health services provided at the workplace include health screenings, vaccinations, psychological counselling, ergonomic advice, and similar services. On account of the global COVID-19 pandemic, COVID tests have been performed free of charge at many sites. Wienerberger also offers a broad range of non-medical health-related services, which are flexibly adjusted to the needs of the respective country organizations.

Safety, health, and human rights at our own raw material extraction sites

Wienerberger guarantees the protection of fundamental human rights within its own sphere of influence. When signing the Wienerberger Social Charter, Wienerberger undertook to comply with the conventions and recommendations of the International Labor Organization (ILO, a specialized agency of the United Nations). It goes without saying that these also apply to our clay extraction sites. Wienerberger makes every effort to ensure compliance with all rules and regulations on occupational safety and the protection of employees from health hazards at its extraction sites. Avoiding occupational accidents and protecting workers from exposure to dust and noise at all extraction sites operated by WBS Wienerberger are our top priorities. Wienerberger's group-wide safety standards and the safety programs implemented by WBS apply to all workers at clay pits operated by Wienerberger.

Based on the uniform, group-wide Supplier Code of Conduct, the requirements regarding occupational safety are obligatory also for operators of other clay extraction sites doing business with Wienerberger.

Protection from exposure to respirable crystalline silica

For more than ten years, Wienerberger has participated in the biannual survey regarding exposure of employees to respirable crystalline silica performed within the framework of the NEPSI social partnership agreement (Negotiation Platform on Silica https://www.nepsi.eu)[1].

Apart from that, Wienerberger is making every effort to provide the best possible protection against respirable crystalline silica[2] for its employees. In 2020, a new standard for the protection of employees from exposure to respirable crystalline silica was elaborated, which was implemented in the first half of 2021. The Respirable Crystalline Silica Standard (RCS) covers the following aspects:

- The performance of tasks or activities in an environment contaminated with respirable crystalline silica must not impair the health and wellbeing of the individual.
- The hazards and potential risks associated with the exposure to respirable crystalline silica are explained and communicated in comprehensible terms.
- Persons working with or near crystalline silicon dioxide must not be exposed to hazardous quantities of respirable crystalline silica. The necessary steps are clearly defined and appropriate measures have been implemented.
- The elimination or reduction of crystalline silicon dioxide using the hierarchy of control for exposure to respirable crystalline silica – EEESI (Eliminate, Extract, Enclose, or Suppress It) – is clarified and described in detail.
- Guidelines for air monitoring protocols, including the frequency of monitoring and the expectations of Wienerberger, are defined.

Within the framework of the "Occupational Health and Wellbeing Standard", a new data collection system is being introduced. Compliance with the standard aimed at protecting employees from exposure to respirable crystalline silica is being monitored in all countries.

Group-wide management of the COVID-19 pandemic

It goes without saying that minimizing health risks and protecting our employees was Wienerberger's foremost concern during the COVID-19 pandemic. Health protection remains a top priority. As a producing company, we also take the protection of our external partners and customers very seriously and are making every effort to support them.

Physical health
Since 2020, we have continuously upgraded our pandemic-related health and safety measures along our entire value chain and adapted them to the prevailing local conditions. Examples of measures taken include testing and vaccination services provided by the company, in-house contact tracing, the provision of personal protection material, the digitalization of further training programs, as well as work-from-home and remote working options.

Mental health
We are not only doing our utmost to guarantee the safety of our employees, but also care about their mental health. We have therefore steadily enlarged our range of services and added new forms of learning in this area. Wienerberger considers it important to pay special attention to the topic of mental health. In this context, clear rules for the digital workplace are indispensable.

An attitude of respect shown by executives also has a substantial impact on the wellbeing of employees and their ability to cope with the new, pandemic-related work environment. In 2022, Wienerberger placed special emphasis on mental health and broadened the range of services available for employees in various areas through keynote messages, additional international training programs for employees and executives, or the organization of health days. Numerous country organizations around the globe implemented various initiatives of this nature. Our country organization in Great Britain, for instance, has implemented a special app enabling all employees to download personalized content in the field of mental health (e.g. coaching, meditation, mindfulness exercises, scientific information and contributions, etc.).

1) The NEPSI system collects data on potential hazards for employees, health checks, training, the distribution and use of personal protective equipment, and technical measures, such as the enclosure of the production lines concerned.
2) Respirable crystalline silicon dioxide can penetrate into the pulmonary alveoli.

System for the collection of occupational accident data

Within the framework of Safety, Health and Education (SHE) reporting by the Wienerberger Group, all occupational accidents that lead to a loss of at least one working day for the employee concerned are documented as occupational accidents. They are reported in one central, online, safety platform that can be accessed by management as well as employees. In the portal there is a wealth of information about the circumstances of each individual accident and measures taken for accident prevention.

Accident frequency

In 2022, the frequency of accidents at Group level – defined as the number of occupational accidents per million hours worked – was reduced to 4.1 as compared to 5.4 in 2020. In total, 33,758,928 working hours have been performed in 2022. In line with the overall downward trend, accident frequency continued to decrease by around 6% from 2021 to 2022. The Wienerberger Building Solutions Business Unit, after a significant reduction in 2021, reported a stabilization of accident frequency at around 5.3 in 2022. Owing to the relatively low absolute number of occupational accidents, the North America Business Unit, amidst ongoing integration activities after recent M&A activities, saw an increase in accident frequency from 1.0 in 2021 to 2.0 in 2022, which translated into a high relative change of approximately 96%. In contrast, the Wienerberger Piping Solutions Business Unit achieved a significant reduction by 53% in 2022 (calculated on the basis of non-rounded values).

Accident frequency by operating segment [1) 2)]	2020	2021	2022	Chg. in %
Wienerberger Building Solutions East	5.4	3.8	**4.2**	+12
Wienerberger Building Solutions West	8.8	6.2	**6.2**	–0
Wienerberger Building Solutions	**7.1**	**5.0**	**5.3**	**+4**
Wienerberger Piping Solutions East	1.4	1.5	**0.8**	–44
Wienerberger Piping Solutions West	2.5	5.9	**2.4**	–59
Wienerberger Piping Solutions	**2.0**	**3.9**	**1.8**	**–53**
North America	**1.0**	**1.0**	**2.0**	**+96**
Wienerberger Group	**5.4**	**4.4**	**4.1**	**–6**

1) Number of occupational accidents / number of hours worked x 1,000.000 // including temporary and agency workers (from their first hour of work at Wienerberger) and employees under term contracts // 2) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included for the 2022 reporting year (for details see page 53). // All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

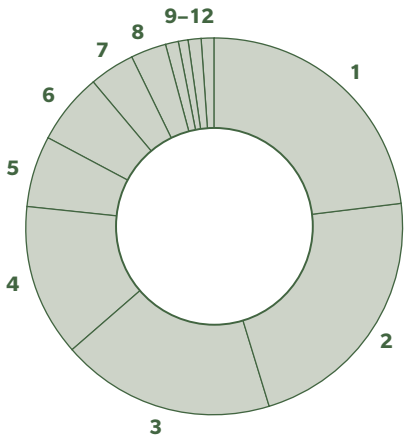
Accident severity and types of injuries

In 2022, the most frequent types of injuries of employees at Group level were sprains and strains, followed by fractures, cuts, and bruising. As every accident is investigated and analyzed in depth, immediate conclusions can be drawn, a procedure which is applied across the business to increase the safety of our employees.

Depending on the actual or potential severity of the accident, a safety call is organized to discuss the findings and share the lessons learned across the Group .

There were no fatal occupational accidents in 2022.

Types of injuries of employees within the Wienerberger Group in 2022 [1) 2)]



1	Sprain, strain	23%	7	Swelling	4%
2	Fracture	22%	8	Puncture, rupture	3%
3	Cuts	18%	9	Burn	1%
4	Bruising	13%	10	Superficial	1%
5	Crush	6%	11	Graze	1%
6	Other	6%	12	Eye injury	1%

1) Injuries resulting in a loss of at least one working day. // 2) Excluding four companies newly acquired in 2022, where the data collection structures for non-financial indicators are not yet in place or have to be optimized (for details see page 53). // Based on the specific definitions of the individual business units. // Electronic data processing may result in rounding differences.

Number of fatal occupational accidents within the Wienerberger Group	2020	2021	2022
	1	1	**0**

In 2022, accident severity, measured in accident-related sick-leave days per million hours worked, remained steady. Throughout 2022, occupational safety training continued and comprehensive measures were implemented. Despite the group-wide reduction in accident frequency, accident severity remained at the previous year's level with 180 sick-leave days reported per million hours worked (2021: 180).

The consistent efforts undertaken by the Wienerberger Building Solutions Business Unit led to a notable reduction in accident severity from 241 sick-leave days per million hours worked in 2021 to 222 in 2022 (-8%). In contrast, the North America Business Unit reported a significant increase in sick-leave days per million hours worked compared to the previous year (>100% increase). This is attributable to an accident resulting in long-term sick leave, which occurred prior to the acquisition of the company.

The Wienerberger Piping Solutions Business Unit also reported a substantial increase in accident severity by approximately 83% in 2022, which was primarily due to two accidents resulting in long-term recovery processes.

Accident severity by operating segment [1) 2)]	2020	2021	2022	Chg. in %
Wienerberger Building Solutions East	228.1	203.5	**183.0**	–10
Wienerberger Building Solutions West	241.2	275.9	**257.9**	–7
Wienerberger Building Solutions	**234.7**	**241.4**	**222.1**	**–8**
Wienerberger Piping Solutions East	33.3	17.7	**114.3**	+546
Wienerberger Piping Solutions West	65.2	45.6	**27.3**	–40
Wienerberger Piping Solutions	**50.3**	**32.9**	**60.4**	**+83**
North America	**34.6**	**13.3**	**157.9**	**>100**
Wienerberger Group	**177.6**	**180.0**	**180.1**	**+0**

1) Number of sick-leave days related to an occupational accident/ number of hours worked x 1,000.000 // including temporary and agency workers (from their first hour of work at Wienerberger) and employees under term contracts // 2) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included for the 2022 reporting year (for details see page 53). // All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

Sick-leave days

In 2022, the average number of sick-leave days (accident-related and non-accident-related) per employee of the Wienerberger Group (excluding the North America Business Unit) increased by around 6 % to 12.3 (2021: 11.5). Among other factors, this is due to the higher severity of accidents and, in some instances, longer sick-leave periods.

Sick-leave days per employee by operating segment [1) 2)]	2020	2021	2022	Chg. in %
Wienerberger Building Solutions East	10.0	11.2	**10.8**	–3
Wienerberger Building Solutions West	12.5	12.8	**14.6**	+14
Wienerberger Building Solutions	**11.3**	**12.0**	**12.8**	**+6**
Wienerberger Piping Solutions East	6.7	6.9	**7.9**	+15
Wienerberger Piping Solutions West	10.8	11.6	**12.2**	+6
Wienerberger Piping Solutions	**9.1**	**9.7**	**10.7**	**+10**
Wienerberger Group, excluding North America	**10.8**	**11.5**	**12.3**	**+6**
North America [3)]	3.4	3.1	**3.7**	+20

1) Accident-related and non-accident-related sick-leave days. Agency and temporary workers are included in data on accident-related sick-leave days. Data on non-accident-related sick-leave days include all employees directly employed by Wienerberger. // All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences. // 2) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included for the 2022 reporting year (for details see page 53). // 3) Due to special national legal provisions (regarding employees on sick leave) the indicators are not comparable to those of other business units and therefore reported separately.

Job Creation and Stability of Employment

Alongside adequate, safe, and health-preserving working conditions, fair remuneration, freedom of assembly, and the right of our employees to collective bargaining are fundamental principles of our human resources management. In 2022, about 67 % of all Wienerberger employees were covered by collective bargaining agreements. Wienerberger does not discriminate in any way against employees who, due to the local legal situation, cannot represent their interests through legally regulated bodies – such as works councils or trade unions.

By signing the Wienerberger Social Charter in 2001, Wienerberger has committed itself to creating employment and working conditions throughout the Group for which national legislation and/or collective bargaining agreements apply as a minimum standard. Wienerberger thus complies with the relevant recommendations of the International Labor Organization (ILO). It goes without saying that Wienerberger respects human rights and does not tolerate child labor and forced labor or any form of discrimination.

Moreover, Wienerberger is making every effort to ensure that all employees, regardless of the type of employment relationship (full time, part time, temporary work), are treated equally and fairly, especially in terms of remuneration and other benefits, subject to the respective national legislation and remuneration policy.

By implementing the Wienerberger Code of Conduct in 2021, we laid down a clear set of rules to be observed by the employer and by employees. For further information on the Wienerberger Code of Conduct, please refer to page 41.

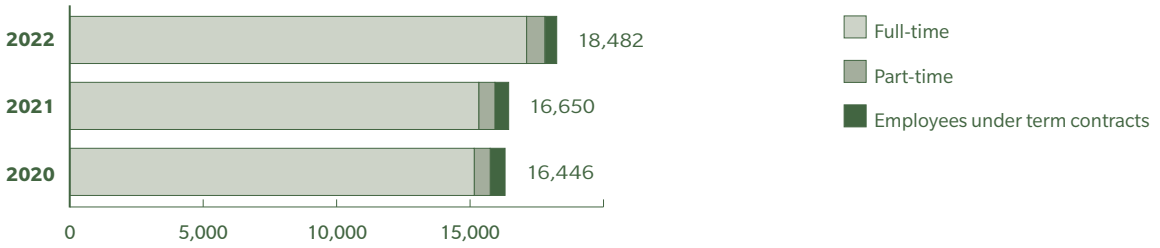
Total number of employees

In 2022, Wienerberger, on an annual average, employed a workforce of 19,078 people (full-time equivalents), i.e. approximately 8 % (1,454 full-time equivalents) more than in 2021. The higher number was primarily due to M&A activities. The most significant increase was reported by North America (+809), followed by Wienerberger Piping Solutions (+338), and Wienerberger Building Solutions (+307).

Ø Employees by operating segment [1)] Full-time equivalents	**2020**	**2021**	**2022**	**Chg. in %**
Wienerberger Building Solutions East	5,707.0	5,704.2	**5,878.0**	+3
Wienerberger Building Solutions West	6,231.6	6,722.9	**6,856.0**	+2
Wienerberger Building Solutions	**11,938.6**	**12,427.1**	**12,734.0**	**+2**
Wienerberger Piping Solutions East	1,487.1	1,486.6	**1,519.0**	+2
Wienerberger Piping Solutions West	1,840.5	2,119.7	**2,425.0**	+14
Wienerberger Piping Solutions	**3,327.7**	**3,606.3**	**3,944.0**	**+9**
North America	**1,352.3**	**1,590.7**	**2,400.4**	**+51**
Wienerberger Group	**16,618.6**	**17,624.1**	**19,078.4**	**+8**

1) Agency and temporary workers are included from their first hour of work at Wienerberger. // 2) Including the four companies newly acquired in 2022. // All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

Employees by type of employment contract [1)2)] based on headcount



1) Employees directly employed by Wienerberger // 2) Excluding four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized (for details see page 53).

In terms of headcount as of December 31, 2022, the number of employees of the Wienerberger Group was 18,482, i.e. 11% above the previous year's figure (16,650).

As of December 31, 2022, 95.7% of all employees directly and permanently employed by Wienerberger (headcount) were working full-time and 4.3% part-time. 17,974 persons (headcount), i.e. 97.3% of all Wienerberger employees, had permanent employment contracts (+0.8% compared to 2021). Employees under term contract accounted for a mere 2.7% of the workforce. A very small part of the work at Wienerberger is performed by staff legally defined as self-employed.

In principle, Wienerberger prefers to work with employees under permanent employment contracts and intends to reduce the percentage of agency workers to a minimum. We define agency workers as employees who work regularly for a Wienerberger organization, but are subject to national legal provisions and are not deemed to be Wienerberger employees. They are not directly employed by Wienerberger but, in legal terms, have an employment relationship with an external third party. If the 1,325 full-time equivalents of these agency workers are added to the total number of full-time equivalents of all Wienerberger employees in 2022, agency workers account for 6.5%.

Employee turnover

Compared to the previous year, the rate of employee turnover in the Wienerberger Group (excluding the North America Business Unit) increased by almost 3 percentage points to around 14% in 2022, corresponding to a 24% increase. The change in the rate of employee turnover from around 8% to 15% is particularly notable in the Wienerberger Piping Solutions Business Unit (+93%). This is attributable, above all, to the regions of Western and Northern Europe (+146%), where the average rate of employee turnover of around 16 % is even higher than in Central and Eastern Europe (12%). In contrast, the Wienerberger Building Solutions Business Unit reported a significantly lower increase in the rate of employee turnover by a mere percentage point to 13 % in 2022 (+12%). Here, too, the increase in Western and Northern Europe (+20%) was more pronounced than in Central and Eastern Europe (+6%), but even there the rate of employee turnover itself, standing at around 16%, exceeded that of Western and Northern Europe (12%).

As in previous years, the figures of the North America Business Unit are reported separately, since they are not fully comparable with those of the other business units due to specific national legal provisions. The percentage of the holding company, which is accounted for as part of the North America Business Unit but, given its geographic location, is not subject to these specific national provisions, is included in the total of the Wienerberger Group.

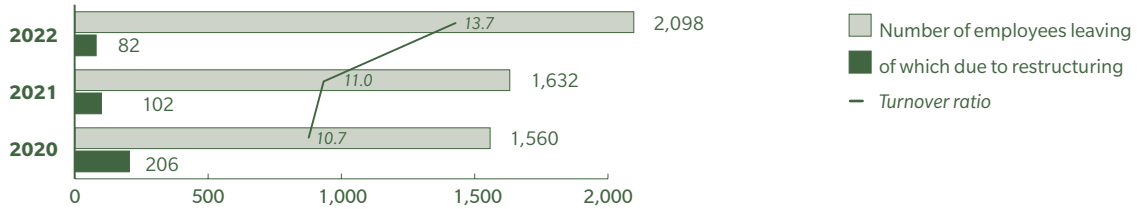
Employee turnover by operating segment [1)2)] in %	2020	2021	2022	Chg. in %
Wienerberger Building Solutions East	15	15	**16**	+6
Wienerberger Building Solutions West	8	10	**12**	+20
Wienerberger Building Solutions	**11**	**12**	**13**	**+12**
Wienerberger Piping Solutions East	10	9	**12**	+36
Wienerberger Piping Solutions West	6	7	**16**	+146
Wienerberger Piping Solutions	**8**	**8**	**15**	**+93**
Wienerberger Group, excluding North America	**11**	**11**	**14**	**+24**
North America [3)]	31	53	**33**	–37

1) Ratio of persons leaving the Wienerberger Group (termination by employee or employer or mutually agreed termination) to average number of employees (head-count) in permanent employment in the reporting year, excluding temporary and agency workers as well as workers under term contracts; persons retiring or on leave do not count as persons leaving the company. // 2) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included for the 2022 reporting year (for details see page 53). // 3) Due to special national legal provisions the indicators are not comparable to those of other business units. // All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

A total of 2,098 employees, i.e. 466 more than in the previous year, left the company in the reporting year (headcount; excluding North America, as the figures are not comparable to those of other business units due to specific national legal provisions). Restructuring measures, such as plant closures, led to the elimination of 82 jobs (4%). 2,016 employees – 321 women and 1,695 men (96%) – left the Wienerberger Group for other reasons. 476 of these employees were younger than 30 years, 1,046 were between 30 and 49 years of age, and 494 were over 50 years of age.

In 2022, the average length of service with the Wienerberger Group remained remarkably high at 11 years. We regard this as a strong vote of confidence by our employees and an indication of a high level of employee satisfaction.

Employee turnover excluding North America [1)2)] based on headcount



1) Employees with permanent employment contracts. // 2) Excluding four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized (for details see page 53).

In 2022, the number of employees newly recruited by the Wienerberger Group rose by 572 compared to the previous year (based on headcount), which corresponds to an approximate 21 % increase. Owing to Wienerberger's excellent performance in 2022, the recruitment of new employees was again stepped up. In particular, Wienerberger Building Solutions reported 367 more new entrants in 2022 than in 2021 (+22%), followed by North America with 138 more new entrants (+23%). Wienerberger Piping Solutions reported 67 more new entrants than in the previous year (+15%).

New entrants by operating segment [1) 2)] based on headcount	2020	2021	2022	Chg. in %
Wienerberger Building Solutions East	622.7	924.8	**1,204.9**	+30
Wienerberger Building Solutions West	523.0	746.0	**833.0**	+12
Wienerberger Building Solutions	**1,145.7**	**1,670.8**	**2,037.9**	**+22**
Wienerberger Piping Solutions East	201.6	182.8	**171.6**	–6
Wienerberger Piping Solutions West	177.0	270.0	**348.0**	+29
Wienerberger Piping Solutions	**378.6**	**452.8**	**519.6**	**+15**
North America	**361.7**	**592.4**	**730.5**	**+23**
Wienerberger Group	**1,886.0**	**2,716.0**	**3,288.0**	**+21**

1) Employees directly employed by Wienerberger // 2) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included for the 2022 reporting year (for details see page 53). // All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

Competence Development and Advancement of our Employees

At Wienerberger, we attach great importance to advancing and supporting our employees in a targeted fashion and in facilitating networking and an international exchange of knowledge. All Wienerberger training programs are aimed at providing training that is tailored to the employees' specific areas of work and designed to facilitate long-term succession management. The training programs comprise internal and external initial and further training measures.

Within the framework of our Sustainability Program 2023, our target for the entire Wienerberger Group regarding the development and advancement of our employees is:

"10% more hours of training per employee by 2023, as compared to 2020"

Wienerberger also takes targeted measures to increase employee satisfaction. For this reason, we conduct group-wide anonymous employee surveys at regular intervals. Based on the results obtained, we implement further measures that also take specific requirements in individual fields of business into account.

"In 2022, the number of hours of training per employee increased by around 53%, as compared to 2020 (+24%, as compared to the previous year)."

The following sections contain a detailed description of our measures and list further indicators of competence development and the advancement of our employees.

Wienerberger supports all employees whenever necessary, in particular within the framework of organizational restructuring, even beyond the end of their employment relationship. As a rule, outplacement counselling and coaching is provided to support job seekers.

Training and HR development

In 2022, as in previous years, the Wienerberger Group took a number of initiatives – always strictly in compliance with all the necessary COVID-19-related protective measures – aimed at advancing and supporting employees in a targeted fashion and facilitating an international exchange of knowledge.

In 2020, we set ourselves the target of increasing the average number of training hours per employee by 10% by 2023. Relative to a baseline of 10.6 hours, this corresponds to a target of 11.7 hours per employee. With 13.1 hours in 2021, we already outperformed this target in the previous year. In 2022, we further increased the number of training hours per employee to 16.3, which corresponds to an increase by 24 % versus the previous year and 53 % versus the reference year 2020. This shows that we have not only reached our target earlier than planned, but even outperformed it. We now intend to further develop and foster the learning mentality within the organization, the objective being to maintain the amount of time invested by our employees in initial and further training at its current level or reach an even higher level in the years to come.

To date, hours of training per country have been recorded anonymously within the framework of our Safety, Health and Education (SHE) reporting. As part of our ongoing digitalization efforts, we will create additional system-supported possibilities to document investments in education at a more granular level and make our employees more aware of their own achievements, for instance by means of a personalized digital further training history.

The necessary reduction in the number of physical meetings due to COVID-19-related contact restrictions no longer had much influence on the training formats provided in 2022. As before the pandemic, almost all further training events again took place as physical on-site meetings. The respective protective measures, such as free on-site COVID tests before the beginning of the event, were observed. Whenever necessary, suitable alternatives or hybrid formats were available.

Training hours per employee and year by operating segments [1) 2)]	2020	2021	2022	Chg. vs. base year 2020 in %
Wienerberger Building Solutions East	13.9	17.2	**23.0**	+65
Wienerberger Building Solutions West	10.3	11.8	**16.3**	+58
Wienerberger Building Solutions	**12.0**	**14.4**	**19.5**	**+62**
Wienerberger Piping Solutions East	4.9	5.7	**7.7**	+57
Wienerberger Piping Solutions West	8.2	11.6	**13.3**	+63
Wienerberger Piping Solutions	**6.8**	**9.3**	**11.3**	**+66**
North America	**6.8**	**10.4**	**7.1**	**+4**
Wienerberger Group	**10.6**	**13.1**	**16.3**	**+53**

1) Internal and external initial and further training measures per employee (headcount). International training events are not included in this table. // Employees directly employed by Wienerberger. // 2) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included for the 2022 reporting year (for details see page 53). // All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

The safety and health of all employees are matters of top priority at Wienerberger. Within the framework of our safety programs, training therefore plays an important role and is being continuously improved and upgraded. Conveying the ability to recognize potential hazards and to understand the risks associated with them is crucial in this context. Learning "safe behavior" as part of their daily working routine is important for employees. Experience gained from real-life incidents and risks as well as risk-mitigating measures are regularly taken into account. All training programs are implemented thoroughly and consistently. In 2022, the number of hours of safety training again increased significantly across the Group, almost doubling compared to 2021. The data collection tools currently used by Wienerberger do not permit a group-wide breakdown of hours spent in training by gender, age group, functional area, or position of the participants.

In 2022, our talent development programs were revised and new formats were developed. Currently, three different programs are available. A program for our "Young High Potentials" (Ready2Grow) and a development program for our "Experienced Professionals" (Ready4Experience 2.0) were newly implemented. The existing Ready4Excellence program is offered to employees who are deemed to have above-average potential and are willing to assume an international role in the future. Over 145 colleagues have participated in this successful development program in recent years and undergone training in areas such as communication, feedback, motivation, conflict and change management, and intercultural skills. Currently, 28 participants each from 15 countries are attending our Ready2Grow and Ready4Expertise 2.0 programs.

In 2022, a new initiative was launched across the Group: our mentoring program. Employees from different countries, operating segments, departments, and fields of responsibility were brought together and a platform for the exchange of experience was created. Over 70 mentors from more than 20 countries applied for this initiative. Currently, 65 mentees are participating in this newly created program.

In 2020, Wienerberger launched a digital learning platform for the Group, where various training programs, some of them available group-wide and others country-specific, can be accessed. The platform is used for the announcement of on-site training programs by HR, it supports the nomination and registration processes for such programs, and serves as a point of contact for our employees wishing to download training content purchased from external providers or taking advantage of training material produced in-house in the form of e-learning units. The number of users increased from 300 when the platform was launched in mid-2020 to more than 5,500 by the end of 2022. The platform is now being rolled out to additional country organizations with an enlarged offer of training programs, especially for e-learning.

The table on "Training hours per employee and year" includes neither international training programs, such as Ready4Excellence, which are organized centrally and financed by the holding company, nor on-the-job training. Including international training programs, the number of hours per Wienerberger employee spent in training amounted to 16.7 in 2022 (2021: 13.5 hours).

In the interest of well-structured, transparent, and long-term management of career and succession planning, an annual process for the evaluation of senior management and a succession planning process, in particular for senior management positions, have been implemented. As of December 31, 2022, 178 positions were covered, without taking the positions of the four Managing Board members with senior management status into account.

Employee satisfaction

In 2021, an employee satisfaction survey was performed among all employees of the Group. In line with the usual practice of such surveys, information on the level of employee engagement and enablement was collected. As empirically validated by numerous studies, these dimensions show very well how motivated and enabled our employees feel. Compared to the last survey in 2017/2018, the results of the 2021 survey showed an increase in both engagement (+3%) and enablement (+2%). With a return rate of 80%, participation in the 2021 employee survey was considerably higher than in the survey conducted in 2017/2018 (66%). The results of the survey were communicated to all employees at the respective sites.

Based on the results of the employee survey, measures to improve the work environment were planned in all organizations of the Wienerberger Group. Employees and employee representatives were involved in this process and the feedback received was taken into account. Measures were initiated in various areas, including improvements of the work environment (renovation, improvement of processes and structures in production, improved working tools), measures regarding the leadership culture, team-building efforts, or engaging more effectively in dialogue with external stakeholders. The package also comprised targeted initial and further training initiatives and the optimization of workflows and communication processes. Overall, more than 500 individual measures were defined, 230 of which have already been successfully implemented.

Following the regular cycle, the next employee survey is to be conducted in 2023. Preparations were begun in 2022.

Diversity and Equal Opportunities

Wienerberger is convinced that sustainable economic success is based on the diversity, the skills, and the dedication of our employees, as well as on our corporate culture. We therefore want to bring together people of any gender with diverse talents, personality features, career histories and cultural backgrounds. (For information on our diversity concept, please refer to the 2022 Corporate Governance Report on page 202). The resultant diversity of competencies and the internationality of our employees reflect the diversity of our customers, investors, business partners, and markets, reaffirm our innovative mindset, and make us fit for the challenges of a dynamic and fast-changing business environment.

The principles of human resources management at Wienerberger ensure that all employees, regardless of age, gender, culture, religion, origin, or other diversity features, have the same rights and opportunities. Based on these principles, Wienerberger does not tolerate any form of discrimination.

In 2009, we started to collect data on diversity and equal opportunities within the framework of our sustainability reporting. Since the beginning of data collection, no incidents of discrimination have been reported. This positive result was confirmed by the whistleblower process introduced in 2021 (see page 41) and the analyses of the 2021 employee survey.

Cultural diversity is a positive feature of Wienerberger's identity and its corporate culture. The international character of the company is strengthened through a system of job rotation between different functional areas and country organizations. Employees are being encouraged to spend some time working for a Wienerberger company abroad or assume a permanent position there. Such moves are being supported by our central Global Mobility Team based at Wienerberger's headquarters. In a further effort to foster diversity, training programs and e-learning courses in diversity were implemented in 2022. Moreover, diversity aspects have been firmly embedded in all HR processes. Intercultural training and awareness building for central aspects of diversity have become an important component of Wienerberger's initial and further training programs.

Within the framework of our Sustainability Program 2023, we have set the following diversity targets for the employees of the entire Wienerberger Group:

"At least 15% women in senior management positions"

"At least 30% women in white-collar positions"

Wienerberger is aware of the fact that the percentage of women in specific positions is only one of many important aspects of diversity and regards these targets as a first step. In pursuing our targets regarding the percentage of women in specific positions, we do not aim to define quotas, but want to build positive awareness for gender equality.

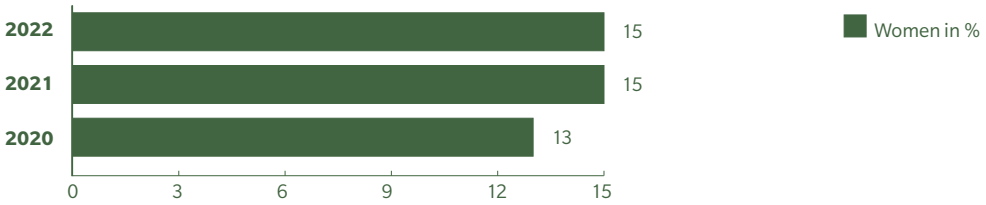
Share of women

In 2022, the number of women employed by the Wienerberger Group increased by almost 17% to 2,991. Women accounted for approximately 16% of the total workforce of the Wienerberger Group.

"In 2022, the percentage of women in senior management positions remained stable at 15%."

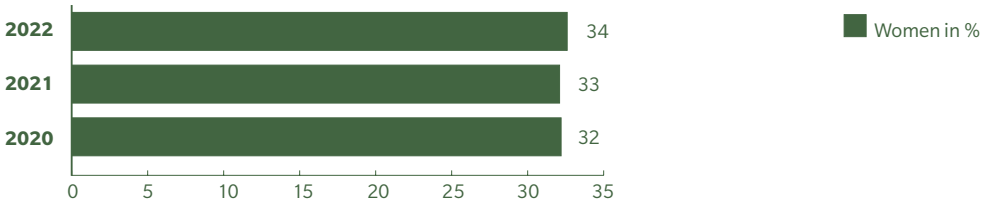
We continue to give preference to women in senior management and executive positions, provided their qualifications are equivalent to those of male candidates. Further measures for the advancement of women include coaching sessions for women about to reach the "next level" or efforts to draw attention to successful women both within the company and in external communication.

Share of women in senior management positions [1)2)] based on headcount



1) Exclusively employees directly employed by Wienerberger. // 2) Excluding four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included for the 2022 reporting year (for details see page 53). // All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences..

Share of women in white-collar positions [1)2)] based on headcount



1) Exclusively employees directly employed by Wienerberger. // Share of women in administration and sales (including marketing and inventories) // 2) Excluding four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included for the 2022 reporting year (for details see page 53). // All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

"In 2022, the percentage of women working in white-collar positions increased slightly by one percentage point from the previous year's value of approximately 33% to 34%."

In 2019, a woman was appointed to the Managing Board of Wienerberger AG, where she has held the position of Chief Operational Officer (COO) of Wienerberger Building Solutions since 2020. In 2022, the share of women on the four-member Managing Board therefore was 25%. As regards the Supervisory Board, 33% of its members were women in 2022 (2021: 40%).

As at December 31, 2022, the total percentage of women employed by the Wienerberger Group was around 16%, i.e. 1 percentage point (+5%) above the previous year's value of around 15%.

Numbers and percentages of women by function area [1)2)]		31/12/2020	31/12/2021	31/12/2022	Chg. in %
Women	headcount	2,479	2,560	**2,991**	+17
In production	in %	5	5	**6**	+19
Administration	in %	46	45	**47**	+5
Sales (including marketing and inventories)	in %	26	27	**28**	+3
In white-collar positions (administration and sales) [3)]	in %	32	33	**34**	+3
Wienerberger Group		**15**	**15**	**16**	**+5**

1) All employees directly employed by Wienerberger. // 2) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included for the 2022 reporting year (for details see page 53). // 3) All employees except in production. Sales including marketing and inventories // All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

Paternal leave at Wienerberger

In principle, Wienerberger wants to offer all its employees the possibility of taking parental leave within the framework of the legal provisions in effect and in accordance with their individual wishes. Legislation on this topic and prevailing practices vary greatly from country to country. We therefore do not intend to compare data across all countries from a central perspective. The current situation in Austria is as follows:

In 2022, 1,220 persons employed by Wienerberger in Austria (i.e. all employees) – approximately 24% women and 76% men – were entitled to take parental leave. Parental leave was actually taken by 33 of them. Five of these employees, i.e. just over 5%, were men taking advantage of the so-called "daddy month" or other statutory periods of leave. The remaining 28 were women taking parental leave. Of all those who took parental leave or stayed home for a so-called "daddy months" in the reporting year or parts thereof, about 96% of all female and 100% of all male colleagues returned to work after their period of leave. In the 2022 reporting year, 32 of 33 employees returned to the company after termination of their parental leave.

Types of employment contracts

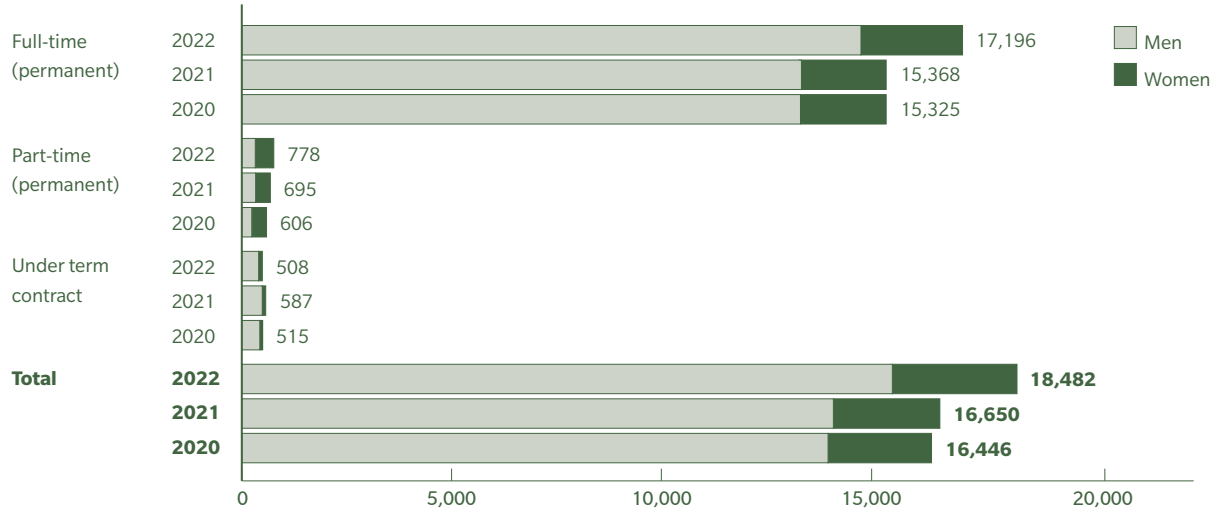
In 2022, the percentage of women in permanent employment working full-time was 84.6%, corresponding to a decrease by 0.5 percentage points compared to the previous year (2021: 85.1%). The percentage of permanently employed women working part-time was 15.4% in 2022.

The percentage of permanently employed men working full-time in 2022 was 97.8% (2021: 97.6%). A mere 2.2% of all permanently employed men were working part-time.

Overall, the 2022 numbers of Wienerberger employees under permanent employment contracts working part-time show that more than half of them (56.9%) are women. 43.1% of employees working part-time are men.

Of all women directly employed by Wienerberger in 2022, 3.6% were working under term contracts. Of all men directly employed by Wienerberger, 2.6% had term contracts.

Employees by type of employment contract and gender [1)2)] based on headcount

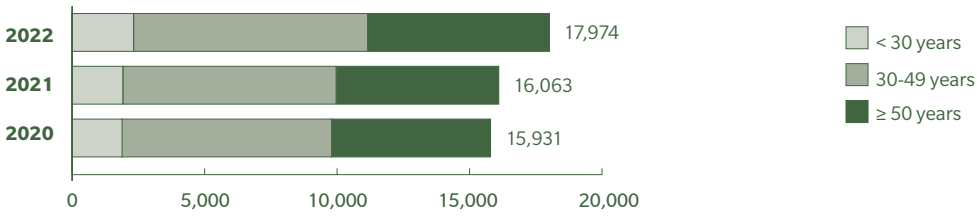


1) Exclusively employees directly employed by Wienerberger. // Share of women in administration and sales (including marketing and inventories). // 2) Excluding four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included for the 2022 reporting year (for details see page 53). // All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

Age structure

The average length of service of 11 years with the Wienerberger Group is reflected in the age structure of our permanently employed workforce in 2022, which hardly changed in comparison to 2021. In 2022, 49% of our employees were between 30 and 49 years old (minus one percentage point compared to 2021).13% were younger than 30 (plus one percentage point compared to 2021), and 38% were older than 50 years, unchanged from the previous year.

Age structure of our employees [1)2)] based on headcount



1) Employees under permanent employment contracts. // 2) Excluding four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included for the 2022 reporting year (for details see page 53).

Digitalization in Human Resources Management

Digitalization projects in HR management, as in other areas, facilitate the group-wide collection of data, which can then be structured and evaluated by a simple mouse click and interpreted in the form of meaningful KPIs, the ultimate goal being to further improve the work environment at Wienerberger. To this end, the introduction of a group-wide HR information system was begun 2021. In the future, the system will not only serve as a data source for the calculation of HR-related non-financial indicators, but be developed into a central People Platform at Wienerberger.

In this context, the strategic HR and People Processes were further harmonized in the course of 2022. Efforts in the field of digitalization were focused on the system-supported annual employee development interview, including target agreements, the annual salary review process, and succession planning and high-potential nomination processes. Within the framework of the group-wide rollout of the HR information system, these proven HR processes are being offered to all country organizations for local implementation. This allows a growing target group to benefit from a digital user experience and, at the same time, it leads to the harmonization of HR processes across national borders, which in turn has a positive impact on group-wide cooperation on all HR-related topics. By the end of 2022, the HR information system was rolled out to eight countries, covering approximately 7,200 employee data sets. The rollout of the system and the further development of digital HR processes will continue in 2023.

Safe and Healthy with Wienerberger

We are committed to protecting people's safety and health along our supply chain and during the installation and use of our products.

A safe and healthy work environment, as well as safe and healthy living conditions along the entire value chain, is a matter of high priority for Wienerberger. We therefore focus not only on the safety and health of our employees, but also on the safety and health along the supply chain, of local residents, customers, and users of our products.

- *We are committed to maintaining good relations with local residents in the vicinity of our plants and clay pits.*
- *We are committed to ensuring a healthy indoor climate and good air quality in buildings.*
- *We are committed to providing climate-resilient housing.*

Protection of local residents

Local residents and the environment are directly affected by our production activities and the extraction of raw materials. We are making every effort to minimize these impacts by employing the most advanced technologies in our plants, taking efficient measures to reduce emissions, and optimizing our logistics. As regards the extraction of clay, Wienerberger has committed itself to taking extensive health and safety measures and minimizing the exposure of employees and local residents to noise and dust. A trusting relationship with local residents and effective measures to protect their health and safety are important to Wienerberger. We therefore seek to engage in open dialogue with all those concerned.

Safe and easy use of our products

We are continuously optimizing our products and system solutions in order to facilitate their use by our customers: architects, design engineers, home builders, and craftspeople.

Ease of installation is an essential factor for users of our products. At Wienerberger Building Solutions, for instance, we support architects and design engineers with analog and digital design tools and personal advice. Concrete pavers are being improved for easier installation. At Wienerberger Piping Solutions, years of work have gone into solutions that facilitate the installation and use of plastic piping systems.

Our qualified and well-trained employees as well as our service centers support our customers to the best of their abilities in the application of our products and system solutions.

It goes without saying that Wienerberger complies with all legal requirements at European, national, and regional level regarding the avoidance and substitution of hazardous substances (see chapter "Biodiversity & Environment", pages 127-136).

Healthy and climate-resilient housing and living

Rising expectations to be met in the design of affordable, energy-efficient, and climate-resilient housing and infrastructure represent new challenges for society. With our energy-efficient building material solutions we contribute to the protection of the environment and support healthy living through an optimized indoor climate. Wienerberger products and system solutions are an integral part of sustainable building concepts. They are not only extremely durable, but also guarantee a high quality of indoor air, reduce indoor heating requirements in winter, create a pleasant indoor climate in summer, and thus contribute to the development of climate-resilient architecture, not least on account of their heat storage capacity.

Given the increasing pace of climate change (as evidenced, for instance, by rising summer temperatures and the growing frequency of heat waves), the influence of open spaces on the micro-climate is gaining in importance. With its products and system solutions, Wienerberger supports measures that contribute to the adaptation to climate change (see chapter Climate Protection & Adaptation to Climate Change, pages 68-117).

Societal Commitment

As a supplier of building material and infrastructure solutions, we want to use our products and our know-how to the greatest possible benefit of society. We continuously support a large number of social projects and organizations in almost all the countries we operate in. We are convinced that we can help best in our fields of core competence: through the provision of solutions for building construction and infrastructure and the dissemination of sustainable building know-how.

Within the framework of our Sustainability Program 2023, our target for the entire Wienerberger Group is:

"200 housing units[1] per year for people in need, built with our products in the markets we operate in"

In accordance with the Wienerberger donations policy, we support people in need through product donations in the markets we operate in. Additionally, we provide building construction and infrastructure know-how for social construction projects. Moreover, cooperative volunteering campaigns are organized, with Wienerberger employees providing hands-on assistance in the construction of houses on site.

"In 2022, Wienerberger helped people in need by supporting the construction and renovation of a total of 254 housing units."

Cooperation with Habitat for Humanity

Providing sustainable, safe, and affordable housing is an important concern of Wienerberger. Over a period of more than ten years since 2012, the company has been supporting social projects in various countries in cooperation with Habitat for Humanity, an international non-profit organization.

HABITAT FOR HUMANITY *(non-profit organisation)*

Habitat for Humanity, an international non-profit organization founded in the USA in 1976, focuses on the provision of sustainable housing for and with people in need in the poorest regions of the world. All its projects are based on the principle of "helping people help themselves". Habitat for Humanity actively advocates every human being's right to shelter.

According to Habitat for Humanity, Wienerberger has helped about 4,910 people since the beginning of its cooperation with the non-profit organization in 2012 and enabled them to live under healthier and safer conditions. The cooperation with Habitat for Humanity also contributes substantially toward drawing the public's attention to the importance of affordable housing. So called "housing forums" are co-organized with Habitat for Humanity, the objective being to build heightened awareness of the importance of social housing among political stakeholders and the public administration. In total, about 900,000 people were affected by the changes in legislation at national and municipal level and the advocacy work performed within this partnership.

1) Housing unit for humanitarian projects: Buildings: Construction/renovation of residential and non-residential buildings. One housing unit = one single-family house / one apartment / a predefined surface in a non-residential building // Infrastructure (drinking-water or wastewater connection): Construction/renovation: connection of four housing units to drinking water supply or wastewater disposal / connection per predefined surface in a non-residential building = one housing unit

Wienerberger has provided its support to the organisation in Bulgaria, Great Britain, Hungary, North Macedonia, Poland, Romania, Slovakia, and the United States. Wienerberger also engaged in Habitat's advocacy work to increase awareness of housing issues and advocate for developing improved policies in Central and Eastern Europe. Tondach and Pipelife subsidiary companies for roof and pipe products are now also included in this long-time partnership. The new three-year partnership agreement calls for Wienerberger to construct or renovate more than 200 homes per year and help many more people by influencing housing policies in the region.

In the following, we present several projects implemented together with Habitat for Humanity:

Examples of projects carried out in cooperation with Habitat for Humanity

Hungary, Sellye, Kákics – renovation of damaged private houses: In 2021, families in this region had their roofs severely damaged by stormy weather and hailstorms. This renovation work was pursued with twelve further families in 2022. The delivery of tiles helped the renovation work on ten of the twelve affected houses.

Hungary, Szajk – renovation of farmhouse building for disabled residents: A large old farmhouse was bought by the 'Accept Me Foundation' ("Fogadj El" Alapítvány) to provide six rooms for twelve disabled residents. The complete renovation of the roof was finished at the end of 2022. The second building of the foundation will provide space for residents to do creative work.

Poland, Slawno – roof renovation of a damaged private house: In 2022, an elderly woman saw her home destroyed by a fire; she was unable to meet the costs of renovation. Wienerberger donated products for the roof renovation (roof tiles, roof membrane, and other roof equipment) and the renovation work started. By December 2022 the repairs were almost finished, and the woman and her family were looking forward to living in decent conditions again.

Poland, Kotkowo – Construction project in Warminsko-Mazurskie Voivodeship: Habitat Poland has launched a new construction project which forms part of Habitat's Renovation and Construction Program for low-income families in housing need. The project is led by our partner, 'Tour de Fundacja'. The foundation transforms the lives of children with disabilities by organizing charity cycling tours. Currently, Tour de Fundacja is building a house with six dwelling units in Kotkowo for families with children with disabilities. The house, located near a lake, will consist of four rooms upstairs, and a room and a living room downstairs in order to accommodate six families with children with disabilities. During the holiday season, the house is to serve as a holiday home for Tour de Fundacja's beneficiaries. Over the rest of the year, it will be a place where the foundation will provide short-term therapy. The construction of the roof should be completed very soon. The project will provide safe shelter for approx. 40 individuals per year.

Romania, Poduri – New Homes Poduri, Bacău County: In 2022, Habitat for Humanity Romania built six homes (three duplexes) in Poduri. In mid-July we held a five-day high-speed construction event to build a duplex (two housing units), helped by an average of 40 volunteers per day. In another lightning action in the second week of August, again with the help of 40 volunteers, a second duplex with two housing units was built. The construction of another duplex house with two residential units took place during the year with the support of several volunteer teams. In total we were able to help six families in need who have now received new, safe homes.

USA – Habitat for Humanity of the River Valley (formerly HFH of Madison County): Products received from our North American subsidiary General Shale were used in the exterior construction of four homes (single-family detached units) in Huntsville, Alabama, for families in need. Construction on the homes has been completed, and two of the four partner families have already received the keys to their homes.

USA – Habitat for Humanity of Greater Memphis: Memphis Habitat focused its new home production in North Memphis, an area north of downtown, and has since built 11 single-family detached units. This project brought new investment to North Memphis via construction of new homes on formerly vacant lots and creation of new property taxpayers. The exterior walls of the newly constructed homes are made of clay blocks donated by General Shale.

Local partnerships and cooperation projects

Besides its cooperation with Habitat for Humanity, Wienerberger also carries out various construction and renovation projects for people in need, which are organized locally by its country organizations. In 2022, thanks to the commitment of our country organizations, Wienerberger supported the construction or renovation of a total of 162 housing units. Such projects were carried out in Belgium, Bulgaria, Croatia, the Czech Republic, France, Poland, and Romania. Support was provided through product donations and, in some cases, by our employees volunteering on site. A few examples of projects carried out in 2022 are presented in the following.

In **Norway**, Pipelife has for many years supported sports and culture activities for children and teens in the local community where we have plants. The general aim is to contribute to creating a healthy environment and support enjoyable leisure activities for children and young people. Pipelife Norway spends funds on sponsorship of local teams and activities in the local communities around Surnadal, Ringebu, and Stathelle.

In **France**, Wienerberger participated with the French Roofing and Masonry Tile Association Federation (Fédération Française de Tuiles et Briques, FFTB) in the realization of a large building near Paris. As part of the project, clay blocks were delivered to the "Abbé Pierre foundation" for the construction of housing for people in need. Furthermore, clay roof tiles were also donated to people who needed help after the hailstorm in the department of Allier, central France.

Slovakia borders Ukraine and was therefore one of the countries first approached by people fleeing the war in spring 2022. In order to provide the best possible assistance to those fleeing Ukraine, Wienerberger decided to provide financial support to the non-profit organization People in Need. At the same time, Wienerberger organized a fundraising campaign among its employees. Voluntary work in refugee centers was promoted and individual support was provided for people who took in refugees. A housing unit for Ukrainian refugees was also set up in the office in Slovakia.

After the beginning of the war in Ukraine, Wienerberger agreed on a long-term cooperation with the "Happy Kids Foundation", which cares for orphans evacuated from Ukraine in **Poland**. In particular, two orphanages in the towns of Duszniki Zdrój and Bardo will be supported so that the basic needs of the children housed there can be met. In addition, the Foundation has built five housing units in 2022.

In **Poland**, Wienerberger also supported the "Oczami Brata" foundation, which provides care for people with disabilities. Thanks to Wienerberger's donation, the "Dom Oczami Brata" is now being built with living quarters for 16 persons. Workshops and the foundation's office will also be housed in the building. A total of seven residential buildings have been constructed so far. The opening of "Dom Oczami Brata" is planned for the second quarter of 2023.

Our commitment will remain strong in the years to come, and we will be making every effort to live up to our claim to be a useful member of society and to create value for all.

COMPREHENSIVE OVERVIEW OF NON-FINANCIAL INDICATORS 2022

Comprehensive Overview of Non-Financial Indicators 2022

ESG: Governance & Management Approach

Corporate Governance at Wienerberger Number within the Wienerberger Group		2020	2021	2022
Number of incidents of corruption	Number in reporting year	0	0	**0**
Number of anti- trust violations	Number in reporting year	0	0	**0**

Climate Protection & Adaptation to Climate Change

Index of specific direct (Scope 1) and indirect (Scope 2) CO_2 emissions [1)2)] in %, based on kg CO_2/quantity of products ready for sale (2020 = 100%)	2020	2021	2022	Chg. vs. Baseline year 2020 in %
Clay blocks	100.0	92.7	**85.1**	–14.9
Roof tiles (clay and concrete)	100.0	94.2	**90.0**	–10.0
Facing bricks and clay pavers	100.0	95.1	**90.9**	–9.1
Concrete pavers	100.0	89.5	**0.0**	–100.0
Wienerberger Building Solutions	**100.0**	**93.6**	**87.0**	**–13.0**
Plastic pipes	100.0	5.6	**6.5**	–93.5
Ceramic pipes	100.0	97.7	**95.3**	–4.7
Wienerberger Piping Solutions	**100.0**	**31.2**	**34.1**	**–65.9**
Facing bricks and concrete pavers	100.0	99.4	**94.1**	–5.9
Façade (calcium silicate products)	100.0	97.5	**95.5**	–4.5
Concrete products	100.0	94.2	**95.8**	–4.2
Plastic pipes	100.0	95.0	**98.4**	–1.6
North America	**100.0**	**99.0**	**94.2**	**–5.8**
Wienerberger Group	**100.0**	**91.9**	**86.8**	**–13.2**

1) The calculation excluded CO_2 emissions from biogenic input materials. // 2) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included for the 2022 reporting year (for details, see page 53). // The calculation of indirect CO_2 emissions from purchased electricity is based on the current CO_2 emission factors of Corporate Procurement. // For all non-financial indicators, the rates of change compared to previous reporting periods are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

Index of specific direct CO_2 emissions (Scope 1) [1) 2)] in %, based on kg CO_2/quantity of products ready for sale (2020 = 100%)	**2020**	**2021**	**2022**	**Chg. vs. Baseline year 2020 in %**
Clay blocks	100	96	**92**	–8
Roof tiles (clay and concrete)	100	98	**96**	–4
Facing bricks and clay pavers	100	99	**95**	–5
Concrete pavers [3)]	100	100	**100**	0
Wienerberger Building Solutions	**100**	**97**	**93**	**–7**
Plastic pipes	100	99	**100**	0
Ceramic pipes	100	98	**95**	–5
Wienerberger Piping Solutions	**100**	**99**	**99**	**–1**
Facing bricks and concrete pavers	100	100	**95**	–5
Façade (calcium silicate products)	100	100	**96**	–4
Concrete products	100	98	**99**	–1
Plastic pipes [3)]	100	100	**100**	0
North America	**100**	**100**	**96**	**–4**
Wienerberger Group	**100**	**97**	**94**	**–6**

1) Direct specific CO_2 emissions (Scope 1) refer to CO_2 emissions from raw materials (in ceramic production) as well as the fuel emissions of the entire Wienerberger Group. The calculation did not include CO_2 emissions from biogenic input materials. // 2) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included for the 2022 reporting year (for details, see page 53). // 3) As certain product groups do not generate Scope 1 emissions, the value remains unchanged compared to the previous year. // For all non-financial indicators, the rates of change compared to previous reporting periods are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

Index of specific indirect CO_2 emissions (Scope 2) [1) 2)] in %, based on kg CO_2/quantity of products ready for sale (2020 = 100%)	**2020**	**2021**	**2022**	**Chg. vs. Baseline year 2020 in %**
Clay blocks	100	97	**93**	–7
Roof tiles (clay and concrete)	100	96	**94**	–6
Facing bricks and clay pavers	100	96	**96**	–4
Concrete pavers	100	89	**0**	–100
Wienerberger Building Solutions	**100**	**97**	**94**	**–6**
Plastic pipes	100	6	**6**	–94
Ceramic pipes [3)]	100	100	**100**	0
Wienerberger Piping Solutions	**100**	**32**	**35**	**–65**
Facing bricks and concrete pavers	100	99	**99**	–1
Façade (calcium silicate products)	100	98	**99**	–1
Concrete products	100	97	**97**	–3
Plastic pipes	100	95	**98**	–2
North America	**100**	**99**	**99**	**–1**
Wienerberger Group	**100**	**95**	**93**	**–7**

1) The calculation of specific indirect CO_2 emissions from purchased electricity is based on the current CO_2 emission factors of Corporate Procurement. // 2) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included in the 2022 reporting year (for details see page 53). // 3) As no Scope 2 emissions were generated through the production of ceramic pipes by Wienerberger Piping Solutions from 2020 to 2022, the values remain unchanged compared to the previous year. // For all non-financial indicators, the rates of change vs. previous periods are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

Absolute direct (Scope 1) and indirect (Scope 2) CO_2 emissions [1) 2)] in kilotons	**2020**	**2021**	**2022**	**Chg. vs. Baseline year 2020 in %**
Clay blocks	1,468.4	1,477.1	**1,473.3**	+0
Roof tiles (clay and concrete)	376.4	398.5	**403.9**	+7
Facing bricks and clay pavers	537.3	559.4	**554.7**	+3
Concrete pavers	0.0	9.5	**0.0**	–
Wienerberger Building Solutions	**2,392.8**	**2,444.5**	**2,431.9**	**+2**
Plastic pipes	61.8	3.5	**3.6**	–94
Ceramic pipes	20.9	23.5	**23.7**	+13
Wienerberger Piping Solutions	**82.8**	**27.0**	**27.3**	**–67**
Facing bricks and concrete pavers	154.1	165.3	**440.0**	+186
Façade (calcium silicate products)	6.9	7.7	**8.0**	+17
Concrete products	0.9	1.0	**2.4**	+160
Plastic pipes	0.0	13.7	**13.3**	–
North America	**174.5**	**187.7**	**463.7**	**+167**
Wienerberger Group	**2,650.1**	**2,659.2**	**2,922.9**	**+10**

1) Direct CO_2 emissions (Scope 1): ETS and non-ETS. ETS source: EU Transaction Log (EUTL). Non-ETS: Calculation in accordance with national rules (Switzerland) or on the basis of EU standard emission factors. For plants in the USA CO_2 emissions from the production process are also reported. Including CO_2 emissions from biogenic input material. Quantities from Wienerberger's CO_2 monitoring corresponding to national rules. The calculation of indirect CO_2 emissions from purchased electricity is based on the current CO_2 emission factors of Corporate Procurement. // 2) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included in the 2022 reporting year (for details see page 53). // For all non-financial indicators, the rates of change vs. previous periods are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

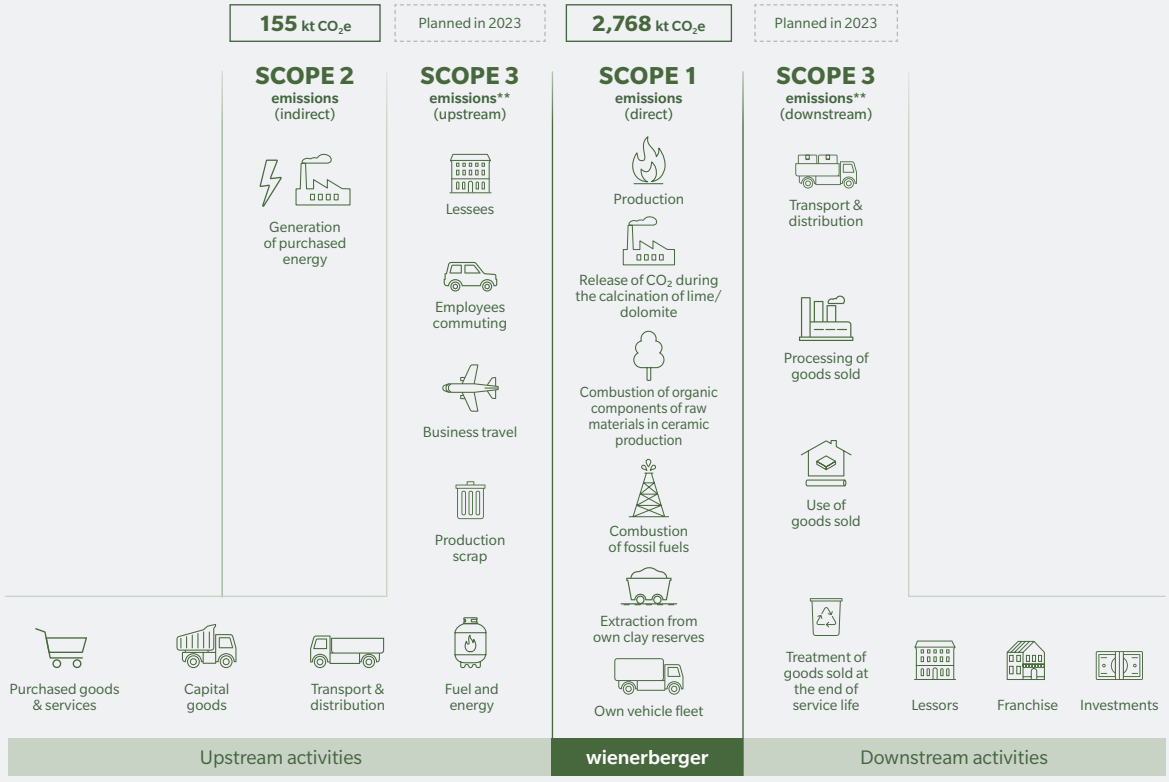
Absolute direct CO_2 emissions from primary energy sources and raw materials (Scope 1) [1) 2)] in kilotons	**2020**	**2021**	**2022**	**Chg. vs. Baseline year 2020 in %**
Clay blocks	1,355.3	1,396.7	**1,436.3**	+6
Roof tiles (clay and concrete)	328.8	360.8	**376.0**	+14
Facing bricks and clay pavers	513.8	557.0	**551.7**	+7
Concrete pavers	–	0.0	**0.0**	–
Wienerberger Building Solutions	**2,197.8**	**2,314.4**	**2,364.0**	**+8**
Plastic pipes	3.8	3.5	**3.6**	–5
Ceramic pipes	20.9	23.5	**23.7**	+13
Wienerberger Piping Solutions	**24.7**	**27.0**	**27.3**	**+11**
Facing bricks and concrete pavers	125.4	135.9	**370.1**	+195
Façade (calcium silicate products)	5.3	6.1	**6.2**	+17
Concrete products	0.1	0.1	**0.0**	–34
Plastic pipes	–	0.0	**0.0**	–
North America	**131.4**	**142.1**	**376.4**	**+188**
Wienerberger Group	**2,355.0**	**2,483.5**	**2,767.7**	**+18**

1) ETS and non-ETS. ETS source: EU Transaction Log (EUTL). Non-ETS: Calculation in accordance with national rules (Switzerland) or on the basis of EU standard emission factors. For plants in the USA CO_2 emissions from the production process are also reported. Including CO_2 emissions from biogenic input material. Quantities from Wienerberger's CO_2 monitoring corresponding to national rules. // 2) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included in the 2022 reporting year (for details see page 53). // For all non-financial indicators, the rates of change vs. previous periods are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

Absolute indirect CO_2 emissions from electricity (Scope 2) [1] in kilotons	**2020**	**2021**	**2022**	**Chg. vs. base year 2020 in %**
Clay blocks	113.2	80.4	**37.0**	–67
Roof tiles (clay and concrete)	47.7	37.7	**27.9**	–41
Facing bricks and clay pavers	23.6	2.5	**3.0**	–87
Concrete pavers	10.6	9.5	**0.0**	–100
Wienerberger Building Solutions	**195.0**	**130.1**	**67.9**	**–65**
Plastic pipes	58.1	0.0	**0.0**	–100
Ceramic pipes	0.0	0.0	**0.0**	–
Wienerberger Piping Solutions	**58.1**	**0.0**	**0.0**	**–100**
Facing bricks and concrete pavers	28.7	29.3	**69.9**	144
Façade (calcium silicate products)	1.5	1.6	**1.8**	19
Concrete products	0.9	1.0	**2.3**	174
Plastic pipes	12.1	13.7	**13.3**	10
North America	**43.1**	**45.6**	**87.3**	**102**
Wienerberger Group	**296.2**	**175.6**	**155.2**	**–48**

1) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included in the 2022 reporting year (for details see page 53). // For all non-financial indicators, the rates of change vs. previous periods are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

ABSOLUTE CO_2e EMISSIONS* SCOPE 1 AND 2 IN 2022



** Greenhouse gases such as methane, nitrous oxide, or CFCs (chlorofluorocarbons) do not matter in Wienerberger's production. Absolute direct CO_2 emissions (Scope 1) from our production processes are therefore identical with carbon dioxide equivalents: Indirect CO_2 emissions (Scope 2) from electricity are recorded as CO_2e (calculation according to market-based method). The absolute CO_2 emissions or the corresponding CO_2 indicators communicated in our reporting on climate protection always refer to emissions of carbon dioxide equivalents (CO_2e).*

*** Scope 3 emissions, i.e. indirect emissions caused, for instance, through the purchase, transport, or sale of raw materials, other materials, and franchise products are are disclosed as of the 2023 reporting year. The data collection structures and processes were optimized accordingly in 2022.*

Index of specific energy consumption [1)2)] in %, based on kWh/quantity of products ready for sale (2020 = 100 %)	**2020**	**2021**	**2022**	**Chg. vs. Baseline year 2020 in %**
Clay blocks	100	101	**101**	+1
Roof tiles (clay and concrete)	100	98	**98**	–2
Facing bricks and clay pavers	100	99	**97**	–3
Concrete pavers	100	101	**91**	–9
Wienerberger Building Solutions	**100**	**100**	**99**	**–1**
Plastic pipes	100	99	**105**	+4
Ceramic pipes	100	93	**90**	–10
Wienerberger Piping Solutions	**100**	**97**	**98**	**–2**
Facing bricks and concrete pavers	100	100	**93**	–7
Façade (calcium silicate products)	100	99	**94**	–6
Concrete products	100	92	**98**	–2
Plastic pipes	100	95	**98**	–2
North America	**100**	**100**	**93**	**–7**
Wienerberger Group	**100**	**99**	**97**	**–3**

1) Total energy consumption includes energy consumed in production, but excludes administration (except in a few individual cases where separate invoicing is not possible). // 2) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included in the 2022 reporting year (for details see page 53). // For all non-financial indicators, the rates of change vs. previous periods are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

Consumption of energy sources [1)2)] in gigawatt-hours	**2020**	**2021**	**2022**	**Chg. vs. Baseline year 2020 in %**
Natural gas	6,319.0	6,837.0	**8,205.7**	+30
Total of other fossil energy sources [3)]	72.0	66.0	**67.0**	–6
Electricity	1,040.3	1,090.0	**1,210.2**	+16
Wienerberger Group	**7,431.0**	**7,993.0**	**9,482.9**	**+28**
Percentage of renewable energy in total electricity consumption in %	42 %	56 %	**54%**	+30

1) Total energy consumption includes energy consumed in production, but excludes administration (except in a few individual cases where separate invoicing is not possible). // 2) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included in the 2022 reporting year (for details see page 53). // 3) Coal, fuel oil, and LNG // For all non-financial indicators, the rates of change vs. previous periods are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

Specific water use in m^3/ton	**2020**	**2021**	**2022**	**Chg. in %**
Wienerberger Group	–	0.243	**0.226**	–7

				Substantial contribution criteria						DNSH criteria (Does Not Significantly Harm)										
Economic activities	**Code**	**Absolute Turnover**	**Proportion of Turnover**	**Climate change mitigation**	**Climate change adaptation**	**Water and marine resources**	**Circular economy**	**Pollution**	**Bio-diversity and ecosystems**	**Climate change mitigation**	**Climate change adaptation**	**Water and marine resources**	**Circular economy**	**Pollution**	**Bio-diversity and ecosystems**	**Minimum safeguards**	**Taxonomy-aligned proportion of Turnover, year 2022**	**Taxonomy-aligned proportion of Turnover, year 2021**	**Category (enabling activity)**	**Category (transi-tional activity**
		in € thousand	%	%	%	%	%	%	%	Y/N [1]	Y/N [1]	Y/N [1]	Y/N [1]	Y/N [1]	Y/N [1]	Y/N [1]	%	%	E [2]	T [3]
A. Taxonomy-eligible activities																				
A.1. Environmentally sustainable activities (Taxonomy-aligned)																				
External wall system (Wall)	C.23.32	601,944	12.1%	100%	0%	N/A [5]	N/A [5]	N/A [5]	N/A [5]	Y	Y	Y	Y	Y	Y	Y	12.1%	N/A	E [2]	
External wall system (Façade)	C.23.32	701,928	14.1%	100%	0%	N/A [5]	N/A [5]	N/A [5]	N/A [5]	Y	Y	Y	Y	Y	Y	Y	14.1%	N/A	E [2]	
Roofing systems	C.23.32	699,831	14.1%	100%	0%	N/A [5]	N/A [5]	N/A [5]	N/A [5]	Y	Y	Y	Y	Y	Y	Y	14.1%	N/A	E [2]	
Turnover of environmentally sustainable activities (Taxonomy-aligned) (A.1)		**2,003,703**	**40.3%**	**100%**	**0%**	**N/A [5]**	**N/A [5]**	**N/A [5]**	**N/A [5]**								**40.3%**	**N/A**		
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) [6]																				
External wall system (Wall)	C.23.32	26,068	0.5%																	
External wall system (Façade)	C.23.32	492,537	9.9%																	
Roofing systems	C.23.32	62,353	1.3%																	
Turnover of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		**580,958**	**11.7%**																	
Total (A.1 + A.2)		**2,584,661**	**51.9%**																	
B. Taxonomy-non-eligible activities																				
Turnover of Taxonomy-non-eligible activities (B)		**2,392,071**	**48.1%**																	
Total (A + B)		**4,976,732**	**100.0%**																	

1) Abbreviation "Y/N" = Yes/No // 2) E = Enabling Activity // 3) T = Transitional activity // 4) Format of tables prescribed by EU Delegated Act // 5) N/A in the columns "Criteria for a substantial contribution" for all objectives to which technical screening criteria have not yet been allocated (water and marine resources, circular economy, pollution prevention, and biodiversity and ecosystems). The corresponding delegated act of the EU is still outstanding. Assessment therefore cannot be performed at this stage. // Electronic data processing may result in rounding differences. // 6) Mainly activities in NOAM.

				Substantial contribution criteria						DNSH criteria (Does Not Significantly Harm)										
Economic activities	**Code**	**Absolute CapEx**	**Proportion of CapEx**	**Climate change mitigation**	**Climate change adaptation**	**Water and marine resources**	**Circular economy**	**Pollution**	**Bio-diversity and ecosystems**	**Climate change mitigation**	**Climate change adaptation**	**Water and marine resources**	**Circular economy**	**Pollution**	**Bio-diversity and ecosystems**	**Minimum safeguards**	**Taxonomy-aligned proportion of CapEx, year 2022**	**Taxonomy-aligned proportion of CapEx, year 2021**	**Category (enabling activity)**	**Category (transi-tional activity**
		in € thousand	%	%	%	%	%	%	%	Y/N [1]	Y/N [1]	Y/N [1]	Y/N [1]	Y/N [1]	Y/N [1]	Y/N [1]	%	%	E [2]	T [3]
A. Taxonomy-eligible activities																				
A.1. Environmentally sustainable activities (Taxonomy-aligned)																				
External wall system (Wall)	C.23.32	62,634	13.2%	100%	0%	N/A [5]	N/A [5]	N/A [5]	N/A [5]	Y	Y	Y	Y	Y	Y	Y	13.2%	N/A	E [2]	
External wall system (Façade)	C.23.32	63,500	13.3%	100%	0%	N/A [5]	N/A [5]	N/A [5]	N/A [5]	Y	Y	Y	Y	Y	Y	Y	13.3%	N/A	E [2]	
Roofing systems	C.23.32	48,715	10.2%	100%	0%	N/A [5]	N/A [5]	N/A [5]	N/A [5]	Y	Y	Y	Y	Y	Y	Y	10.2%	N/A	E [2]	
CapEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		**174,850**	**36.7%**	**100%**	**0%**	**N/A [5]**	**N/A [5]**	**N/A [5]**	**N/A [5]**								**36.7%**	**N/A**		
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) [6]																				
External wall system (Wall)	C.23.32	899	0.2%																	
External wall system (Façade)	C.23.32	26,366	5.5%																	
Roofing systems	C.23.32	4,276	0.9%																	
CapEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		**31,541**	**6.6%**																	
Total (A.1 + A.2)		**206,391**	**43.4%**																	
B. Taxonomy-non-eligible activities																				
CapEx of Taxono-my-non-eligible activities (B)		**269,527**	**56.6%**																	
Total (A + B)		**475,918**	**100.0%**																	

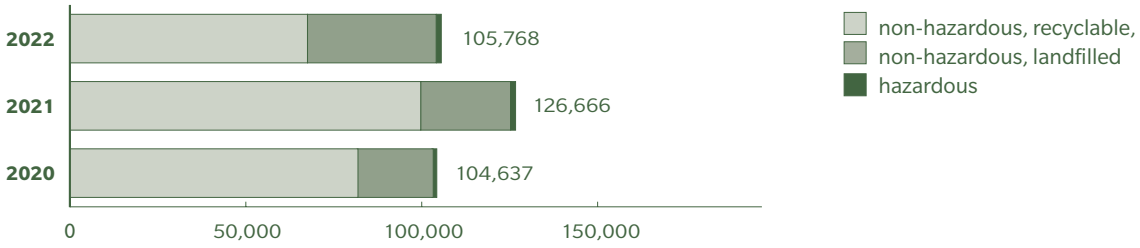
1) Abbreviation "Y/N" = Yes/No // 2) E = Enabling Activity // 3) T = Transitional activity // 4) Format of tables prescribed by EU Delegated Act // 5) N/A in the columns "Criteria for a substantial contribution" for all objectives to which technical screening criteria have not yet been allocated (water and marine resources, circular economy, pollution prevention, and biodiversity and ecosystems). The corresponding delegated act of the EU is still outstanding. Assessment therefore cannot be performed at this stage. // Electronic data processing may result in rounding differences. // 6) Mainly activities in NOAM.

				Substantial contribution criteria						DNSH criteria (Does Not Significantly Harm)										
Economic activities	**Code**	**Absolute OpEx**	**Proportion of OpEx**	**Climate change mitigation**	**Climate change adaptation**	**Water and marine resources**	**Circular economy**	**Pollution**	**Bio-diversity and ecosystems**	**Climate change mitigation**	**Climate change adaptation**	**Water and marine resources**	**Circular economy**	**Pollution**	**Bio-diversity and ecosystems**	**Minimum safeguards**	**Taxonomy-aligned proportion of OpEx, year 2022**	**Taxonomy-aligned proportion of OpEx, year 2021**	**Category (enabling activity)**	**Category (transi-tional activity**
		in € thousand	%	%	%	%	%	%	%	Y/N [1]	Y/N [1]	Y/N [1]	Y/N [1]	Y/N [1]	Y/N [1]	Y/N [1]	%	%	E [2]	T [3]
A. Taxonomy-eligible activities																				
A.1. Environmentally sustainable activities (Taxonomy-aligned)																				
External wall system (Wall)	C.23.32	37,990	16.0%	100%	0%	N/A [5]	N/A [5]	N/A [5]	N/A [5]	Y	Y	Y	Y	Y	Y	Y	16.0%	N/A	E [2]	
External wall system (Façade)	C.23.32	52,388	22.1%	100%	0%	N/A [5]	N/A [5]	N/A [5]	N/A [5]	Y	Y	Y	Y	Y	Y	Y	22.1%	N/A	E [2]	
Roofing systems	C.23.32	35,724	15.1%	100%	0%	N/A [5]	N/A [5]	N/A [5]	N/A [5]	Y	Y	Y	Y	Y	Y	Y	15.1%	N/A	E [2]	
OpEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		**126,101**	**53.2%**	**100%**	**0%**	**N/A [5]**	**N/A [5]**	**N/A [5]**	**N/A [5]**								**53.2%**	**N/A**		
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) [6]																				
External wall system (Wall)	C.23.32	2,569	1.1%																	
External wall system (Façade)	C.23.32	34,437	14.5%																	
Roofing systems	C.23.32	3,136	1.3%																	
OpEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		**40,142**	**17.0%**																	
Total (A.1 + A.2)		**166,244**	**70.2%**																	
B. Taxonomy-non-eligible activities																				
Turnover of Taxonomy-non-eligible activities (B)		**70,584**	**29.8%**																	
Total (A + B)		**236,827**	**100.0%**																	

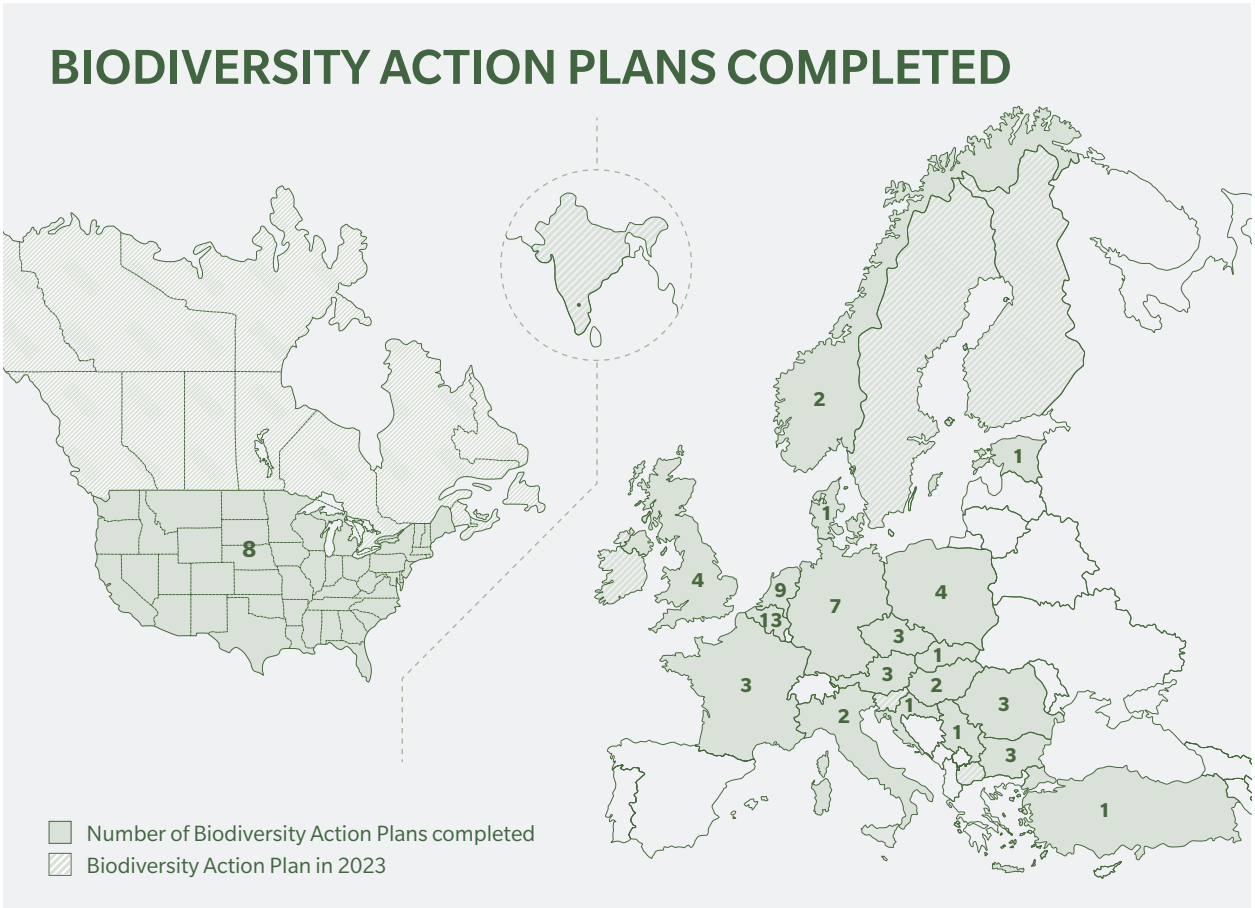
1) Abbreviation "Y/N" = Yes/No // 2) E = Enabling Activity // 3) T = Transitional activity // 4) Format of tables prescribed by EU Delegated Act // 5) N/A in the columns "Criteria for a substantial contribution" for all objectives to which technical screening criteria have not yet been allocated (water and marine resources, circular economy, pollution prevention, and biodiversity and ecosystems). The corresponding delegated act of the EU is still outstanding. Assessment therefore cannot be performed at this stage. // Electronic data processing may result in rounding differences. // 6) Mainly activities in NOAM.

Circular Economy

Waste generation in tons



Biodiversity and Environment



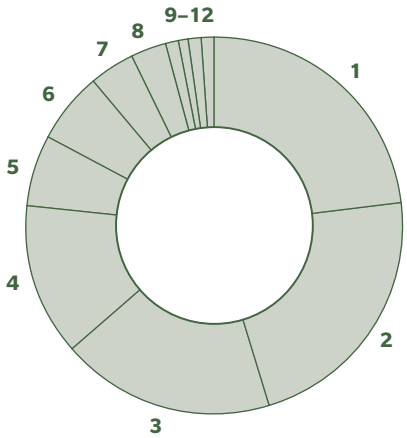
Employees & Social Impacts

Occupational Safety and Health

Accident frequency by operating segment [1) 2)]	2020	2021	2022	Chg. in %
Wienerberger Building Solutions East	5.4	3.8	**4.2**	+12
Wienerberger Building Solutions West	8.8	6.2	**6.2**	–0
Wienerberger Building Solutions	**7.1**	**5.0**	**5.3**	**+4**
Wienerberger Piping Solutions East	1.4	1.5	**0.8**	–44
Wienerberger Piping Solutions West	2.5	5.9	**2.4**	–59
Wienerberger Piping Solutions	**2.0**	**3.9**	**1.8**	**–53**
North America	**1.0**	**1.0**	**2.0**	**+96**
Wienerberger Group	**5.4**	**4.4**	**4.1**	**–6**

1) Number of occupational accidents / number of hours worked x 1,000.000 // including temporary and agency workers (from their first hour of work at Wienerberger) and employees under term contracts // 2) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included for the 2022 reporting year (for details see page 53). // All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

Types of injuries of employees within the Wienerberger Group in 2022 [1) 2)]



1	Sprain, strain	23%	**7**	Swelling	4%
2	Fracture	22%	**8**	Puncture, rupture	3%
3	Cuts	18%	**9**	Burn	1%
4	Bruising	13%	**10**	Superficial	1%
5	Crush	6%	**11**	Graze	1%
6	Other	6%	**12**	Eye injury	1%

1) Injuries resulting in a loss of at least one working day. // 2) Excluding four companies newly acquired in 2022, where the data collection structures for non-financial indicators are not yet in place or have to be optimized (for details see page 53) // Based on the specific definitions of the individual business units. // Electronic data processing may result in rounding differences.

Number of fatal occupational accidents within the Wienerberger Group	2020	2021	2022
	1	1	**0**

Accident severity by operating segment [1)2)]	2020	2021	2022	Chg. in %
Wienerberger Building Solutions East	228.1	203.5	**183.0**	–10
Wienerberger Building Solutions West	241.2	275.9	**257.9**	–7
Wienerberger Building Solutions	**234.7**	**241.4**	**222.1**	**–8**
Wienerberger Piping Solutions East	33.3	17.7	**114.3**	+546
Wienerberger Piping Solutions West	65.2	45.6	**27.3**	–40
Wienerberger Piping Solutions	**50.3**	**32.9**	**60.4**	**+83**
North America	**34.6**	**13.3**	**157.9**	**>100**
Wienerberger Group	**177.6**	**180.0**	**180.1**	**+0**

1) Number of sick-leave days related to an occupational accident/ number of hours worked x 1,000.000 // including temporary and agency workers (from their first hour of work at Wienerberger) and employees under term contracts // 2) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included for the 2022 reporting year (for details see page 53). // All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

Sick-leave days per employee by operating segment [1)2)]	2020	2021	2022	Chg. in %
Wienerberger Building Solutions East	10.0	11.2	**10.8**	–3
Wienerberger Building Solutions West	12.5	12.8	**14.6**	+14
Wienerberger Building Solutions	**11.3**	**12.0**	**12.8**	**+6**
Wienerberger Piping Solutions East	6.7	6.9	**7.9**	+15
Wienerberger Piping Solutions West	10.8	11.6	**12.2**	+6
Wienerberger Piping Solutions	**9.1**	**9.7**	**10.7**	**+10**
Wienerberger Group, excluding North America	**10.8**	**11.5**	**12.3**	**+6**
North America [3)]	3.4	3.1	**3.7**	+20

1) Accident-related and non-accident-related sick-leave days. Agency and temporary workers are included in data on accident-related sick-leave days. Data on non-accident-related sick-leave days include all employees directly employed by Wienerberger. // All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences. // 2) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included for the 2022 reporting year (for details see page 53). // 3) Due to special national legal provisions (regarding employees on sick leave) the indicators are not comparable to those of other business units and therefore reported separately.

Non-accident-related sick-leave days per employee by operating segment [1) 2)]	2020	2021	2022	Chg. in %
Wienerberger Building Solutions East	9.5	10.8	**10.5**	–3
Wienerberger Building Solutions West	12.1	12.3	**14.1**	+15
Wienerberger Building Solutions	**10.9**	**11.6**	**12.4**	**+7**
Wienerberger Piping Solutions East	6.6	6.8	**7.7**	+12
Wienerberger Piping Solutions West	10.7	11.5	**12.2**	+6
Wienerberger Piping Solutions	**9.0**	**9.7**	**10.6**	**+9**
Wienerberger Group, excluding North America	**10.5**	**11.2**	**11.9**	**+7**
North America [3)]	3.3	3.0	**3.4**	+13

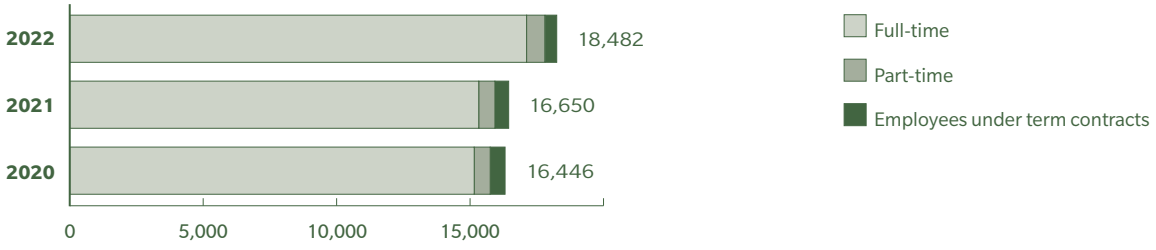
1) Data on non-accident-related sick-leave days include all employees directly employed by Wienerberger. // All non-financial indicators were calculated on the basis of non-rounded values. Electronic data processing may result in round differences. // 2) For five companies newly acquired in 2021, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included for the 2021 reporting year (for details see page 53). // 3) Due to special national legal provisions (regarding employees on sick leave) the indicators are not comparable to those of other business units and therefore reported separately.

Job Creation and Stability of Employment

Ø Employees by operating segment [1)] Full-time equivalents	2020	2021	2022	Chg. in %
Wienerberger Building Solutions East	5,707.0	5,704.2	**5,878.0**	+3
Wienerberger Building Solutions West	6,231.6	6,722.9	**6,856.0**	+2
Wienerberger Building Solutions	**11,938.6**	**12,427.1**	**12,734.0**	**+2**
Wienerberger Piping Solutions East	1,487.1	1,486.6	**1,519.0**	+2
Wienerberger Piping Solutions West	1,840.5	2,119.7	**2,425.0**	+14
Wienerberger Piping Solutions	**3,327.7**	**3,606.3**	**3,944.0**	**+9**
North America	**1,352.3**	**1,590.7**	**2,400.4**	**+51**
Wienerberger Group	**16,618.6**	**17,624.1**	**19,078.4**	**+8**

1) Agency and temporary workers are included from their first hour of work at Wienerberger. // 2) Including the four companies newly acquired in 2022. // All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

Employees by type of employment contract [1) 2)] based on headcount



1) Employees directly employed by Wienerberger // 2) Excluding four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized (for details see page 53).

Ø Employees by functional area [1)2)] based on headcount	2020	2021	2022	Chg. in %
Production	10,268.0	10,393.0	**11,626.0**	+12
Administration	1,879.0	1,971.0	**2,063.0**	+5
Sales (including marketing and inventories)	4,299.0	4,286.0	**4,793.0**	+12
Wienerberger Group	**16,446.0**	**16,650.0**	**18,482.0**	**+11**

1) Employees directly employed by Wienerberger // 2) Excluding four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized (for details see page 53). // All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

Employees with permanent employment contracts [1)2)] based on headcount	2020	2021	2022	Chg. in %
Wienerberger Building Solutions East	5,475.5	5,569.4	**5,837.8**	+5
Wienerberger Building Solutions West	6,034.0	6,075.0	**6,175.0**	+2
Wienerberger Building Solutions	**11,509.5**	**11,644.4**	**12,012.8**	**+3**
Wienerberger Piping Solutions East	1,372.0	1,295.8	**1,325.6**	+2
Wienerberger Piping Solutions West	1,790.0	1,889.0	**2,294.0**	+21
Wienerberger Piping Solutions	**3,162.0**	**3,184.8**	**3,619.6**	**+14**
North America	**1,259.6**	**1,233.9**	**2,341.7**	**+90**
Wienerberger Group	**15,931.0**	**16,063.0**	**17,974.0**	**+12**

1) Employees directly employed by Wienerberger // 2) Excluding four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized (for details see page 53). All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

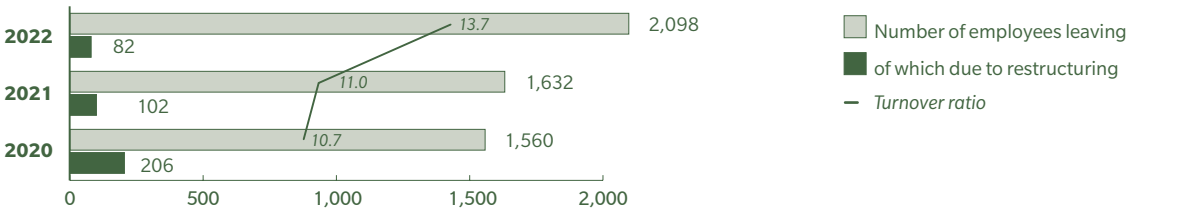
Employees under term contracts [1)2)] based on headcount	2020	2021	2022	Chg. in %
Wienerberger Building Solutions East	136.3	168.0	**128.9**	–23
Wienerberger Building Solutions West	258.0	288.0	**273.0**	–5
Wienerberger Building Solutions	**394.3**	**456.0**	**401.9**	**–12**
Wienerberger Piping Solutions East	18.4	17.0	**19.0**	+12
Wienerberger Piping Solutions West	102.0	113.0	**86.0**	–24
Wienerberger Piping Solutions	**120.4**	**130.0**	**105.0**	**–19**
North America	**0.3**	**1.0**	**1.2**	**+20**
Wienerberger Group	**515.0**	**587.0**	**508.0**	**–13**

1) Employees directly employed by Wienerberger // 2) Excluding four companies newly acquired in 2022, where the necessary data collection structures for non- financial indicators are not yet in place or have to be optimized (for details see page 53). All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

Employee turnover by operating segment [1) 2)] in %	2020	2021	2022	Chg. in %
Wienerberger Building Solutions East	15	15	**16**	+6
Wienerberger Building Solutions West	8	10	**12**	+20
Wienerberger Building Solutions	**11**	**12**	**13**	**+12**
Wienerberger Piping Solutions East	10	9	**12**	+36
Wienerberger Piping Solutions West	6	7	**16**	+146
Wienerberger Piping Solutions	**8**	**8**	**15**	**+93**
Wienerberger Group, excluding North America	**11**	**11**	**14**	**+24**
North America [3)]	31	53	**33**	–37

1) Ratio of persons leaving the Wienerberger Group (termination by employee or employer or mutually agreed termination) to average number of employees (head-count) in permanent employment in the reporting year, excluding temporary and agency workers as well as workers under term contracts; persons retiring or on leave do not count as persons leaving the company. // 2) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included for the 2022 reporting year (for details see page 53). // 3) Due to special national legal provisions the indicators are not comparable to those of other business units. // All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

Employee turnover excluding North America [1) 2)] based on headcount



1) Employees with permanent employment contracts. // 2) Excluding four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized (for details see page 53).

Leaves not due to restructuring, broken down by gender (excluding North America) [1) 2)] based on headcount	2020	2021	2022	Chg. in %
Men	1,124.0	1,301.0	**1,695.0**	+30
Women	230.0	229.0	**321.0**	+40
Wienerberger Group, excluding North America	**1,354.0**	**1,530.0**	**2,016.0**	**+32**

1) Employees with permanent employment contracts. // 2) Excluding four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized (for details see page 53). // All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

Leaves not due to restructuring, broken down by age group (excluding North America) [1) 2)] based on headcount	**2020**	**2021**	**2022**	**Chg. in %**
< 30 years	280.0	328.0	**476.0**	+45
30–49 years	679.0	787.0	**1,046.0**	+33
> 50 years	395.0	415.0	**494.0**	+19
Wienerberger Group, excluding North America	**1,354.0**	**1,530.0**	**2,016.0**	**+32**

1) Employees with permanent employment contracts. // 2) Excluding four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized (for details see page 53). // All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

Leaves not due to restructuring, broken down by functional area (excluding North America) [1) 2)] based on headcount	**2020**	**2021**	**2022**	**Chg. in %**
Production	862.0	1,027.0	**1,363.0**	+33
Administration	154.0	179.0	**227.0**	+27
Sales (including marketing and inventories)	338.0	324.0	**426.0**	+31
Wienerberger Group	**1,354.0**	**1,530.0**	**2,016.0**	**+32**

1) Employees with permanent employment contracts. // 2) Excluding four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized (for details see page 53). // All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

New entrants by operating segment [1) 2)] based on headcount	**2020**	**2021**	**2022**	**Chg. in %**
Wienerberger Building Solutions East	622.7	924.8	**1,204.9**	+30
Wienerberger Building Solutions West	523.0	746.0	**833.0**	+12
Wienerberger Building Solutions	**1,145.7**	**1,670.8**	**2,037.9**	**+22**
Wienerberger Piping Solutions East	201.6	182.8	**171.6**	–6
Wienerberger Piping Solutions West	177.0	270.0	**348.0**	+29
Wienerberger Piping Solutions	**378.6**	**452.8**	**519.6**	**+15**
North America	**361.7**	**592.4**	**730.5**	**+23**
Wienerberger Group	**1,886.0**	**2,716.0**	**3,288.0**	**+21**

1) Employees directly employed by Wienerberger // 2) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included for the 2022 reporting year (for details see page 53). // All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

Competence Development and Advancement of our Employees

Training hours per employee and year by operating segments [1) 2)]	2020	2021	2022	Chg. vs. base year 2020 in %
Wienerberger Building Solutions East	13.9	17.2	**23.0**	+65
Wienerberger Building Solutions West	10.3	11.8	**16.3**	+58
Wienerberger Building Solutions	**12.0**	**14.4**	**19.5**	**+62**
Wienerberger Piping Solutions East	4.9	5.7	**7.7**	+57
Wienerberger Piping Solutions West	8.2	11.6	**13.3**	+63
Wienerberger Piping Solutions	**6.8**	**9.3**	**11.3**	**+66**
North America	**6.8**	**10.4**	**7.1**	**+4**
Wienerberger Group	**10.6**	**13.1**	**16.3**	**+53**

1) Internal and external initial and further training measures per employee (headcount). International training events are not included in this table. // Employees directly employed by Wienerberger. // 2) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included for the 2022 reporting year (for details see page 53). // All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

Average training expenses per employee [1) 2)] based on headcount, in Euro	2020	2021	2022
	228.0	273.5	**334.1**

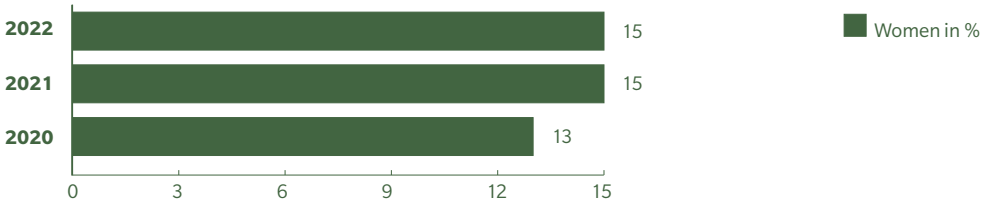
1) Internal and external initial and further training measures per employee directly employed by Wienerberger (headcount). International training hours are not included in this table. International training events are not included in this table. // Employees directly employed by Wienerberger. // 2) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included for the 2022 reporting year (for details see page 53). // All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

Diversity and Equal Opportunities

Share of women on the Managing Board based on headcount	2020	2021	2022
Managing Board, headcount	4	4	**4**
Thereof women	1	1	**1**
Share of women in %	**25**	**25**	**25**

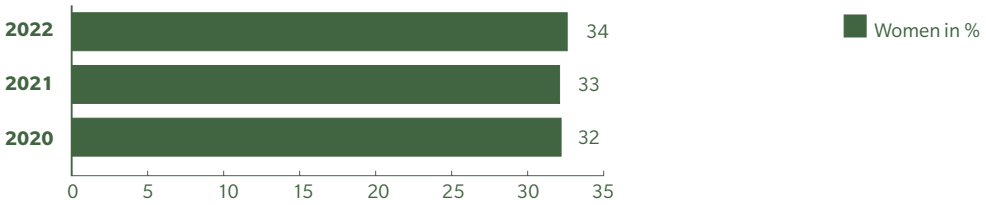
Share of women on the Supervisory Board based on headcount	2020	2021	2022
Supervisory Board, headcount	10	10	**11**
Thereof women	3	4	**3**
Share of women in %	**30**	**40**	**27**

Share of women in senior management positions [1)2)] based on headcount



1) Exclusively employees directly employed by Wienerberger // 2) Excluding four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included for the 2022 reporting year (for details see page 53). // All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

Share of women in white-collar positions [1)2)] based on headcount

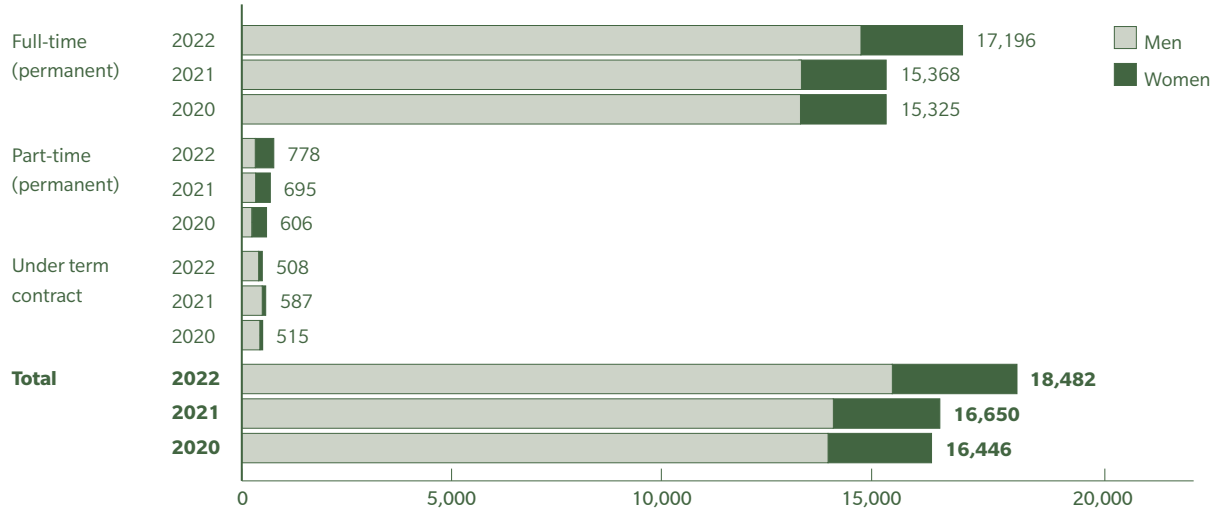


1) Exclusively employees directly employed by Wienerberger // Share of women in administration and sales (including marketing and inventories). // 2) Excluding four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included for the 2022 reporting year (for details see page 53). // All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

Numbers and percentages of women by function area [1)2)]		**31/12/2020**	**31/12/2021**	**31/12/2022**	**Chg. in %**
Women	headcount	2,479	2,560	**2,991**	+17
In production	in %	5	5	**6**	+19
Administration	in %	46	45	**47**	+5
Sales (including marketing and inventories)	in %	26	27	**28**	+3
In white-collar positions (administration and sales) [3)]	in %	32	33	**34**	+3
Wienerberger Group		**15**	**15**	**16**	**+5**

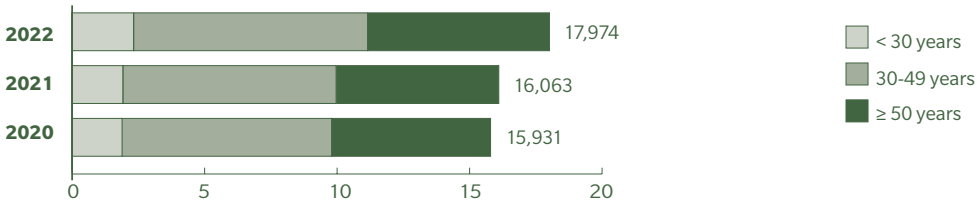
1) All employees directly employed by Wienerberger. // 2) For four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included for the 2022 reporting year (for details see page 53). // 3) All employees except in production. Sales including marketing and inventories // All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

Employees by type of employment contract and gender [1)2)] based on headcount



1) Exclusively employees directly employed by Wienerberger // Share of women in administration and sales (including marketing and inventories) // 2) Excluding four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included for the 2022 reporting year (for details see page 53). // All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

Age structure of our employees [1)2)] based on headcount



1) Employees under permanent employment contracts // 2) Excluding four companies newly acquired in 2022, where the necessary data collection structures for non-financial indicators are not yet in place or have to be optimized, the indicators are not included for the 2022 reporting year (for details see page 53).

GRI CONTENT INDEX

GRI Content Index

Statement of use
Wienerberger has reported in accordance with the GRI Standards for the period from 1 January 2022 to 31 December 2022.

GRI	Disclosure	Page	Omissions, Explanation
Universal Standards			
GRI 1	**Foundation (2021)**		
GRI 2	**General Disclosures (2021)**		
	1. The organization and its reporting practices		
2-1	Organizational details	16-34; Imprint: 347	
2-2	Entities included in the organization's sustainability reporting	21-24; 55-57	
2-3	Reporting period, frequency, and contact point	55-57; 214-1215 Imprint: 347	
2-4	Restatements of information	55-57	
2-5	External assurance	55-57; 214-215	
	2. Activities and workers		
2-6	Activities, value chain and other business relationships	16-34	
2-7	Employees	17; 20; 161-171; 194-200	
2-8	Workers who are not employees	152-163	
	3. Governance		
2-9	Governance structure and composition	36-39; 207-212	
2-10	Nomination and selection of the highest governance body	Corporate Governance Report: 213-217	
2-11	Chair of the highest governance body	Corporate Governance Report: 209-212	
2-12	Role of the highest governance body in overseeing the management of impacts	CEO Letter: 4-5; 36-39	
2-13	Delegation of responsibility for managing impacts	36-39	
2-14	Role of the highest governance body in sustainability reporting	36-39	
2-15	Conflicts of interest	Corporate Governance Report: 213-216	
2-16	Communication of critical concerns	40-46	
2-17	Collective knowledge of the highest governance body	36-39; Corporate Governance Report:207-212	
2-18	Evaluation of the performance of the highest governance body	Corporate Governance Report:213-216	

GRI	Disclosure	Page	Omissions, Explanation
2-19	Remuneration policies	34; Wienerberger Remuneration Report 2022	
2-20	Process to determine remuneration	34; Wienerberger Remuneration Report 2022	
2-21	Ratio of total annual compensation (compensation of the CEO in relation to the average compensation of a full-time employee)	Wienerberger Remuneration Report 2022	
	4. Strategies, policies and practices		
2-22	Statement on sustainable development strategy	CEO Letter: 4-5; 36; 59-60	
2-23	Policy commitments	36-55; 57-67	
2-24	Embedding policy commitments	36-55; 57-67	
2-25	Processes to remediate negative impacts	36-55; 57-67	
2-26	Mechanisms for seeking advice and raising concerns	40-43	
2-27	Compliance with laws and regulations	40-46	
2-28	Membership associations	122	
	5. Stakeholder management		
2-29	Approach to stakeholder engagement	30-33; 57-58	
2-30	Collective bargaining agreements	148-151	

GRI 3	Material Topics (2021)	
3-1	Process to determine material topics	57-67
3-2	List of material topics	58

GRI	Disclosure	Page	Omissions, Explanation

Topic Standards

GRI 201	Economic performance (2016)		
3-3	Management of material topics (2021)	20-21; 57-67	
201-1	Direct economic value generated and distributed	Management Report: 220-252 Financial Statements: 253-336	
201-2	Financial implications and other risks and opportunities due to climate change	39-40; 55; 68-117 Management Report: 248 Management Report: 323	
201-3	Defined benefit plan obligations and other retirement plans	Financial Statements: 253-336	

GRI 205	Anti-corruption (2016)		
3-3	Management of material topics (2021)	35; 40-46; 57-67	
205-1	Operations assessed for risks related to corruption	40-45; Management Report: 327-331	
205-2	Communication and training about anti-corruption policies and procedures	40-45	
205-3	Confirmed incidents of corruption and actions taken	40-45; 164	

GRI 206	Anti-competitive Behavior (2016)		
3-3	Management of material topics (2021)	40-45; 57-67	
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	40-45; 164	

GRI 301	Materials (2016)		
3-3	Management of material topics (2021)	57-67; 118-126	
301-1	Materials used by weight or volume	122-123	Due to the confidentiality of product-formulations, a breakdown of renewable and non-renewable materials by weight or volume cannot be disclosed at present. Renewable raw materials are mainly used in ceramic production, wherever technically possible, as aggregates in the form of secondary raw materials.
301-2	Recycled input materials used	122-123	

GRI	Disclosure	Page	Omissions, Explanation
GRI 302	**Energy (2016)**		
3-3	Management of material topics (2021)	57-67; 122-123; 98-99	
302-1	Energy consumption within the organization	68-75; 83-84	
302-2	Energy consumption outside of the organization	70; 82; 115	
302-3	Energy intensity	84	
302-4	Reduction of energy consumption	72-84; 98-99	
302-5	Reductions in energy requirements of products and services	72-84	
GRI 304	**Biodiversity(2016)**		
3-3	Management of material topics (2021)	57-67; 127-136	
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	134-135	
304-2	Significant impacts of activities, products and services on biodiversity	127-136	
304-3	Habitats protected or restored	133-135	
GRI 305	**Emissions (2016)**		
3-3	Management of material topics (2021)	57-67; 68-75; 85-97	
305-1	Direct (Scope 1) GHG emissions	80	
305-2	Energy indirect (Scope 2) GHG emissions	81	
305-3	Other indirect (Scope 3) GHG emissions	70; 82; 115	In 2022, Wienerberger prepared the data collection structures required to record the Group's relevant Scope 3 emissions, the objective being to disclose Scope 3 emissions within the framework of the 2023 Annual Report.
305-4	GHG emissions intensity	76-78	The specific values are presented as an index in % relative to the defined reference year, the baseline being set at 100%- The specific CO2 emissions in % shown in the index are based on kg CO_2/quantity of products ready for sale (2020 = 100%)..
305-5	Reduction of GHG emissions	68-82	
305-7	Nitrogen oxides (NO_x), sulfur oxides (SO_x), and other significant air emissions	70	The flue gas analyses carried out regularly at our plants have shown that of the greenhouse gases mentioned (N_2O, SF_6 etc.) CO_2 itself is the only relevant one. Wienerberger therefore reports its direct greenhouse gas emissions (Greenhouse Gas Protocol, Scope 1) in tons of CO_2, which in this case is identical to tons of CO_2 equivalents..

GRI	Disclosure	Page	Omissions, Explanation
GRI 306	**Waste (2020)**		
3-3	Management of material topics (2021)	57-67; 119-126	
306-1	Waste generation and significant waste-related impacts	119-126	
306-2	Management of significant waste-related impacts	119-126	
306-3	Waste generated	124	
306-4	Waste diverted from disposal	124	
306-5	Waste directed to disposal	124	
GRI 308	**Supplier Environmental Assessment (2016)**		
3-3	Management of material topics (2021)	57-67; 46-52	
308-1	New suppliers that were screened using environmental criteria	46-52	
308-2	Negative environmental impacts in the supply chain and actions taken	46-52	Due to the data collection structures in place at Wienerberger, differentiation between employees and workers who are not employees is currently not provided for. For the time being, the only information provided on high-consequence work-related injuries is the type of injury. GRI-compliant presentation is being evaluated. .
GRI 401	**Employment (2016)**		
3-3	Management of material topics (2021)	57-67; 138-139;148	
401-1	New employee hires and employee turnover	149-151; 178-179	.
GRI 403	**Occupational Health and Safety (2018)**		
3-3	Management of material topics (2021)	57-67; 139-147	
403-1	Occupational health and safety management system	139-147	
403-2	Hazard identification, risk assessment, and incident investigation	139-147	
403-3	Occupational health services	139-147	
403-4	Worker participation, consultation, and communication on occupational health and safety	139-147	
403-5	Worker training on occupational health and safety	139-147	
403-6	Promotion of worker health	139-147	
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	139-147	
403-8	Workers covered by an occupational health and safety management system	139-147	

GRI	Disclosure	Page	Omissions, Explanation
403-9	Work-related injuries	146	Due to the data collection structures at Wienerberger, no differentiation is currently made between salaried employees and non-employees in accordance with GRI.
GRI 404	**Training and Education (2016)**		
3-3	Management of material topics (2021)	49; 57-67;151-153; 158	
404-1	Average hours of training per year per employee	151-152	GRI-compliant differentiation by gender and employee category is currently not available. GRI-compliant presentation is being evaluated.
404-2	Programs for upgrading employee skills and transition assistance programs	151-152	
GRI 405	**Diversity and Equal Opportunity (2016)**		
3-3	Management of material topics (2021)	57-67; 154-158	
405-1	Diversity of governance bodies and employees	154-158; 180-182	Currently, differentiation of the management and control bodies by age group is not available. GRI-compliant presentation is being evaluated.
GRI 406	**Non-discrimination (2016)**		
3-3	Management of material topics (2021)	57-67; 148-157	
406-1	Incidents of discrimination and corrective actions taken	154	
GRI 413	**Local Communities (2016)**		
3-3	Management of material topics (2021)	32	
413-2	Operations with significant actual and potential negative impacts on local communities	158-159	
GRI 414	**Supplier Social Assessment (2016)**		
3-3	Management of material topics (2021)	57-67; 46-52	
414-1	New suppliers that were screened using social criteria	46-52	
414-2	Negative social impacts in the supply chain and actions taken	46-52	Complete GRI-compliant reporting is not yet available at present. Further detailed reporting for a GRI-compliant presentation for the next reporting periods is under review.

GRI	Disclosure	Page	Omissions, Explanation
GRI 416	**Customer Health and Safetyt (2016)**		
3-3	Management of material topics (2021)	57-67; 46; 158-159	
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	129; 135; 158-159	Complete GRI-compliant reporting is not yet available at present. Further detailed reporting for a GRI-compliant presentation for the next reporting periods is under review.

Confirmation by the Managing Board

We herewith confirm to the best of our knowledge that this Report was compiled in conformity with the provisions of the Sustainability and Diversity Improvement Act (NaDiVeG) and contains all the information available on material non-financial matters.

Vienna, March 14th, 2023
The Managing Board of Wienerberger AG

Heimo Scheuch
Chairman of the Managing Board of Wienerberger AG
CEO

Gerhard Hanke
Member of the Managing Board of Wienerberger AG
CFO

Solveig Menard-Galli
Member of the Managing Board of Wienerberger AG
COO East

Harald Schwarzmayr
Member of the Managing Board of Wienerberger AG
COO West

Auditor's Report

Courtesy Translation of the Audit Report of the Independent Assurance on Non-Financial Reporting*

Introduction

We have performed procedures to obtain limited assurance as to whether any matters have come to our attention that cause us to believe that the consolidated non-financial report as of December 31, 2022 has not been prepared, in all material respects, in accordance with the reporting criteria. The reporting criteria consist of the GRI Standards issued by the Global Sustainability Standards Board (GSSB) and the reporting requirements mentioned in § 267a UGB (NaDiVeG).

Furthermore, we have performed procedures to obtain limited assurance as to whether any matters have come to our attention that cause us to believe that the EU taxonomy information disclosed is not prepared, in all material respects, in accordance with Art. 8 of Regulation (EU) 2020/852 (Taxonomy Regulation).

Responsibility of the management

The legal representatives of Wienerberger AG are responsible for the preparation of the report content in accordance with the reporting criteria and for the selection of the disclosures to be verified. The reporting criteria consist of the GRI Standards issued by the Global Sustainability Standards Board (GSSB) and the reporting requirements mentioned in § 267a UGB (NaDiVeG). Furthermore, they are responsible for reporting the disclosed information on the EU taxonomy in accordance with Art. 8 of Regulation (EU) 2020/852 (Taxonomy Regulation).

This responsibility includes the selection and application of appropriate methods for preparing the report, making assumptions and estimates of individual non-financial disclosures that are plausible under the given circumstances. The responsibility further includes the internal controls, which have been determined as necessary by the management to enable the preparation of a consolidated non-financial report that is free from misstatement, whether due to fraud or error.

Responsibility of the auditor

Our responsibility is to express a limited assurance opinion as to whether any matters have come to our attention that cause us to believe that the consolidated non-financial report as of December 31, 2022 has not been prepared, in all material respects, in accordance with the reporting criteria. The reporting criteria consist of the GRI Standards issued by the Global Sustainability Standards Board (GSSB) and the reporting requirements mentioned in § 267a UGB (NaDiVeG).

Furthermore, it is our responsibility to express a limited assurance opinion as to whether any matters have come to our attention that cause us to believe that the EU taxonomy information disclosed is not prepared, in all material respects, in accordance with Art. 8 of Regulation (EU) 2020/852 (Taxonomy Regulation).

We conducted our engagement in accordance with the International Standard on Assurance Engagements ISAE 3000 (Revised), "Assurance Engagements Other Than Audits or Reviews of Historical Financial Information" issued by the International Auditing and Assurance Standards Board (IAASB) in order to obtain limited assurance on the subject matters.

ISAE 3000 (Revised) requires us to plan and perform the engagement in a way that enables us to obtain limited assurance that nothing has come to our attention that causes us to believe that the consolidated non-financial report has not, in any material aspect, been prepared in accordance with the GRI Standards and § 267a UGB (NaDiVeG), and that the disclosed information on the EU taxonomy has not been prepared in accordance with Art. 8 of Regulation (EU) 2020/852 (Taxonomy Regulation).

In a limited assurance engagement, the evidence-gathering procedures are more limited than in a reasonable assurance engagement and therefore, less assurance can be obtained. The choice of audit procedures lies in the due discretion of the auditor.

As part of our audit, we have performed, inter alia, the following audit procedures and other activities as far as they are relevant to the limited assurance engagement:

- Interview of the employees named by Wienerberger AG regarding the sustainability strategy, the sustainability principles and the sustainability management
- Interviews of employees of Wienerberger AG to assess the methods of data collection, data processing and internal controls
- Matching the non-financial disclosures shown in the consolidated non-financial report with the documents provided
- Video conferences with responsible persons of WBS Norway
- Conducting a media analysis
- Review of the disclosed information according to § 267a UGB and GRI Standards
- Review of the disclosed information on the EU taxonomy for compliance with Art. 8 of Regulation (EU) 2020/852 (Taxonomy Regulation)

We believe that the audit evidence we have obtained is sufficient and appropriate to serve as a basis for our assessment.

The objective of our engagement is neither an audit of financial statements nor an auditor's review of financial statements. Likewise, neither the detection and clarification of criminal offences, such as embezzlement or other acts of breach of trust and administrative offenses, nor the assessment of the effectiveness and efficiency of the management is the object of our engagement.

Summarized Conclusion

Based on our work, nothing has come to our attention that causes us to believe that the consolidated non-financial report of Wienerberger AG as of December 31, 2022, has not, in any material aspects, been prepared in accordance with GRI Standards.

Furthermore, nothing has come to our attention that causes us to believe that the reporting requirements of § 267a UGB (NaDiVeG) are not met by the consolidated non-financial report.

Additionally, based on our audit procedures, nothing has come to our attention that causes us to believe that the disclosed information on the EU taxonomy has not been prepared in accordance with Art. 8 of Regulation (EU) 2020/852 (Taxonomy Regulation).

Conditions of Contract

The basis for this engagement are the "General Conditions of Contract for the Public Accounting Professions", as issued by the Chamber of Tax Advisers and Auditors in Austria (according to appendix). In accordance with chapter 7 of these terms and conditions, our liability shall be limited to intent and gross negligence. In cases of gross negligence, the maximum liability is limited to a maximum of five times the fee. This amount constitutes a total maximum liability cap, which may only be utilized once up to this maximum amount, even if there is more than one claimant or more than one claim has been asserted.

Vienna, March 15, 2023

Deloitte Audit Wirtschaftsprüfungs GmbH

Mag. Gerhard Marterbauer
Austrian Certified Public Accountant

ppa. Margaretha Germann
Austrian Certified Public Accountant

**) Attention: This letter has been translated from German to English for referencing purposes only. Please refer to the officially legally binding version as written and signed in German. Only the German version is the legally binding version.*