

The background of the entire page is a complex, abstract network diagram. It consists of numerous small circular nodes connected by thin, light-colored lines. The nodes are colored in three distinct ways: some are orange, some are red, and others are dark grey. The lines connecting them form a dense, web-like structure that fills the entire frame, with some areas appearing more concentrated than others. The overall effect is one of interconnectedness and complexity.

wienerberger

# Building the Future

Sustainability Update 2017

# Quantitative Targets of the Wienerberger Sustainability Roadmap 2020

Target definitions	Deadlines	Performance		
Employees		2015	2016	2017 <sup>1)</sup>
<b>Safety of our employees</b>				
Group level: Zero accidents	Every year	8*	7*	5*
<b>Health of our employees</b>				
Group level: Percentage of ceramic production sites reporting core indicators on protection against exposure to respirable crystalline silica > 95%	2020	98%	No data collected	98%
<b>Production</b>				
<b>Energy efficiency</b>				
North America <sup>2)</sup> : Reduction of natural gas consumption at selected production sites by 5% per site as compared to 2015	2017	Reference year	4%	4%
Clay Building Materials Europe: Reduction of specific energy consumption by 20% as compared to 2010	2020	8%	10%	12%
Pipeline <sup>3)</sup> : Reduction of specific energy consumption in production by 20% as compared to 2010	2020	5%	2%	-5%
<b>Climate action</b>				
North America <sup>2)</sup> : Conversion of all main production sites from coal to natural gas	2017	50%	80%	100%
Steinzeug-Keramo: Compensation of 5% of the annual CO <sub>2</sub> emissions generated in the respective plant through climate protection projects	2018	>5%	>5%	>5%
Clay Building Materials Europe: Reduction of specific CO <sub>2</sub> emissions from primary energy sources by 20% as compared to 2010	2020	0%	2%	4%
Pipeline <sup>3)</sup> : Reduction of specific indirect CO <sub>2</sub> emissions from electricity in production by 20% as compared to 2010	2020	17%	17%	16%
<b>Water</b>				
Pipeline <sup>3)</sup> : Reduction of water consumption from public networks to 0.55 m <sup>3</sup> per ton of products produced	2020	0.66 m <sup>3</sup> /ton	0.81 m <sup>3</sup> /ton	0.95 m <sup>3</sup> /ton
<b>Resource efficiency and waste management</b>				
Semmelrock: Reduction of scrap rate by 50% as compared to 2014	2017	19.1%	34.0%	45.3%
<b>Products</b>				
<b>Innovative products</b>				
Clay Building Materials Europe: Share of innovative products in revenues constant at 25%	Every year	27%	26%	31%
North America <sup>2)</sup> : 50% share of innovative products in total revenues	2017 and 2018	46%	49%	51%
Pipeline <sup>3)</sup> : Share of innovative products in revenues constant at 20%	Every year	21%	20%	19%
Semmelrock: Share of innovative products in revenues constant at 30%	Every year	39%	37%	38%
Steinzeug-Keramo: Share of innovative products in revenues constant at 35%	Every year	41%	39%	42%
<b>Recyclability, recycling and re-use</b>				
Pipeline <sup>3) 4)</sup> : Increase of the share of recycled material per ton of products produced to 70 kg	2020	64.6 kg/ton	65.4 kg/ton	67.2 kg/ton
<b>Social responsibility</b>				
<b>Business ethics &amp; compliance</b>				
Group level: Zero incidents of corruption	Every year	0	0	0

1) Since 2017, strategic decisions regarding sustainability management at the Pipeline production site in North America have no longer been taken by the Pipeline Business Unit, but by the North America Division. In the reporting period, however, the production site is neither part of Pipeline's nor of North America's Sustainability Roadmap 2020. This change has an impact on the indicators relating to Pipeline's and North America's quantitative targets, but it does not influence the production-related indicators, which are presented by product group. The integration of the production site into the Sustainability Roadmap 2020 is being prepared.

## Status

In 2017 accident frequency was significantly reduced throughout the Group and in each Division, in some of them by over 18% and 22% as compared to the previous year. At the same time, accident frequency increased in individual operating segments of certain Divisions. To our great regret, two fatal occupational accidents happened in the reporting year. We thoroughly analyze the causes of these developments and consistently pursue the zero accident target.

The target was again met in 2017, including all ceramic production sites newly acquired since 2015. Measures to protect our employees against respirable crystalline silica will be continued and detailed reports will be presented voluntarily every two years.

At one main production site the consumption of natural gas was reduced by 4% compared to 2015. It was due to the conversion of selected production sites from high-emission energy sources to natural gas that the defined target of reducing the absolute consumption of natural gas was not fully reached in 2017.

Owing to further successful reduction measures taken in 2017, specific energy consumption in production was 11.7% lower than in 2010.

In 2017, specific energy consumption in production was 5% above the reference value of 2010. The negative value indicates an increase of the specific energy consumption. The steep increase in specific energy consumption is due to the further development in the product mix.

The North America Division succeeded in converting all remaining active coal-fueled production sites to natural gas in 2017. Thus, the target set for the Division was reached.

Within the framework of Cradle to Cradle® re-certification in 2017, at least 5% of the annual CO<sub>2</sub> emissions generated in the respective plant were compensated.

In 2017, specific CO<sub>2</sub> emission from primary energy sources in production amounted to 96% of the value reported in 2013 and were further reduced from the level reported in 2016.

In 2017, indirect specific CO<sub>2</sub> emissions from electricity were 1% above the previous year's value. Among other factors, this development was influenced by changes in the product mix.

Water consumption from public networks per ton of products produced increased significantly from the previous year's level. This development was influenced by technological aspects and changes in the product mix. Technological optimization measures are being taken. The defined target is maintained.

The target set for 2017 was almost attained. Based on improved technologies, tools and processes, as well as awareness building for resource efficiency among our employees, efforts are being made to further reduce the scrap rate.

The quantitative target set for the Business Unit in 2017 was reached.

The quantitative target set for the Business Unit in 2017 was reached.

The quantitative target set for the Business Unit in 2017 was missed by a narrow margin, as some of the criteria of the definition no longer applied to individual products. A further increase in the share of innovative products in revenues is expected for 2018.

The quantitative target set for the Business Unit in 2017 was reached.

The quantitative target set for the Business Unit in 2017 was reached.

Compared with the previous year, the share of recycled material per ton of products produced increased by 1.8 kg/ton.

As in previous years, no charges were brought against Wienerberger for suspected corruption nor had any penalties to be paid in 2017.

*Our Sustainability Roadmap 2020 is a self-imposed commitment to continuously improve our ecological, social, societal and economic performance across the entire value creation process of the Wienerberger Group (diagram on page 20/21).*

Essentially, this process is based on four major **value chains**: tiles and bricks, ceramic pipes, plastic pipes and concrete pavers. Along these value chains, about **500 stakeholders** specified those aspects and challenges which they regarded as most important for the Wienerberger Group and its impacts on society (detailed process description on page 19). The results of this **materiality analysis** have been aggregated in our first Group-wide **materiality matrix**, which was published in our 2016 Sustainability Report.

The aspects and challenges which our stakeholders viewed as most important for the Wienerberger Group served as input for the sustainability program for the period from 2017 to 2020 – our **Sustainability Roadmap 2020** (details on page 22). The Roadmap specifies the quantitative targets we want to achieve every year, such as zero accidents or zero incidents of corruption at Group level, or by 2020, at the latest.

The table on this page shows the extent to which we met our quantitative targets by 31/12/2017. For a more detailed overview, including further explanations, please refer to pages 26 to 29.

2) North America: excl. Pipelife production site // 3) Pipelife: up to 2016 incl. production site in North America // 4) Re-statement: After publication of the 2016 Sustainability Report, Pipelife reported a higher share of recycled material used in 2016 and the indicator was restated accordingly. // \* Accident frequency as a reporting unit defined as: Number of occupational accidents / number of hours worked x 1,000,000; including temporary and agency workers as well as employees under term contracts.

# Mission Statement

## *Our Vision*

*We want to be the most highly regarded producer of building materials and infrastructure solutions and the preferred employer in our markets. We share our values, our knowledge, our experience and our success.*

## *Our Mission*

*We improve people's quality of life by providing outstanding, sustainable building material and infrastructure solutions.*



**wienerberger**

## *Our Goal*

*The primary goal of our entrepreneurial activities is to achieve a sustainable increase in the value of the company in accordance with ecological, social and economic principles.*

## *Our Values*

*Expertise – Passion – Integrity and Respect –  
Customer Orientation – Entrepreneurship –  
Quality – Responsibility*

*Our values form the basis of our entrepreneurial activities.  
We live by our values and share them in our day-to-day cooperation.*

# Building the Future

*Cities are the future.*

*Innovative building material and infrastructure solutions that are efficient, durable and affordable make cities worth living in and go easy on the environment. These solutions are designed and produced by people with visions, passion and a sense of responsibility in a company that is committed to the goals of sustainability and inspired by its values in all its operations. This is the key to Wienerberger's success.*



# Key Indicators – Wienerberger Group

Corporate indicators		2015	2016	2017	Chg. in %
Revenues	in MEUR	2,972.4	2,973.8	3,119.7	+5
EBITDA	in MEUR	369.7	404.3	415.0	+3
EBIT	in MEUR	163.1	190.6	178.7	-6
Profit before tax	in MEUR	107.0	158.5	144.9	-9
Free cash flow	in MEUR	135.1	246.5	152.5	-38
Net debt	in MEUR	534.1	631.6	566.4	-10
Gearing	in %	26.0	34.2	29.6	-
Employees		2015	2016	2017	Chg. in %
Ø Employees as at 31/12	Full-time equivalents (FTEs)	15,813	15,990	16,297	+1.9
Employees as at 31/12	Headcount	15,690	15,878	16,258	+2.4
Accident frequency	Number of occupational accidents/ number of hours worked x 1,000,000	8.0	6.5	5.4	-16.8
Accident severity	Accident-related sick-leave days/ number of hours worked x 1,000,000	209	177	173	-2.1
Ø Sick-leave days / employee <sup>1)</sup>	in days	9.1	9.6	10.2	+6.5
Ø Training hours / employee <sup>2)</sup>	in hours	15.5	12.7	13.6	+7.1
Ø Training costs / employee	in €	211	228	255	+11.8
Percentage of women	in %, relative to total headcount	13.5	13.6	13.8	-
Employee turnover <sup>1)</sup>	in %	9.2	9.0	9.2	-
Production		2015 <sup>1)</sup>	2016	2017	Chg. in %
Total energy consumption <sup>3)</sup>	in GWh	7,628	7,591	7,889	+3.9
Specific energy consumption <sup>3) 4)</sup>	Index in % based on kWh/ton (2013 = 100%)	101.3	100.0	99.1	-0.8
Total CO <sub>2</sub> emissions <sup>5)</sup>	in kilo tons	2,064	2,046	2,171	+6.1
Specific CO <sub>2</sub> emissions <sup>5) 6)</sup>	Index in % based on kg CO <sub>2</sub> /ton (2013 = 100%)	99.4	96.1	93.9	-2.3
Water consumption	in million m <sup>3</sup>	4.0	4.2	4.2	+0.7
Water withdrawal from public networks	in %	34.3	33.5	33.7	-
Products		2015	2016	2017	Chg. in %
Share of innovative products in total revenues	in %	27.7	26.9	29.7	-

1) Excluding North America, as the indicators are not fully comparable to those of other Divisions due to specific local regulations regarding employee-related data collection. //

2) Internal and external initial and further training measures per employee. International training events are not included. // 3) Total energy consumption comprises energy consumed in production, excluding administration, except in countries where separate accounting is not possible. // 4) The indicators for 2015 and 2016 were restated, as the data base in ceramic production was updated. // 5) Exclusively direct emissions from ceramic production. // 6) Specific CO<sub>2</sub> emissions exclusively refer to fuel emissions. // 7) The index of specific energy consumption in ceramic pipe production indicated for the reporting year 2016 was restated, as the data base for this area of production was updated.

**General statements applying to all parts of the 2017 Sustainability Update:** Rates of change against previous years are calculated on the basis of non-rounded values for all non-financial indicators. // Free cash flow equals cash flow from operating activities minus cash flow from investing activities plus growth capex. // For calculation methods, see the corresponding chapters of the 2017 Sustainability Update. The reporting limits are indicated in the chapter "Reporting Profile". // Total energy consumption comprises energy consumed in production, excluding administration, except in countries where separate accounting is not possible. // Rounding differences may be due to electronic data processing. // Agency and temporary workers were previously included only after 3 months of uninterrupted work at Wienerberger. From 2017 onwards, all agency and temporary workers are included in the calculation of accident indicators from their first hour of work at Wienerberger, as are full-time equivalents. // In our sustainability reporting, the percentage of women is indicated in % of total headcount. Diverging data in previous Sustainability Reports are to be neglected.

# Key Non-Financial Indicators by Product Group

Bricks and tiles		2015	2016	2017	Chg. in %
Employees as at 31/12	Headcount	11,495	11,654	11,970	+2.7
Accident frequency	Number of occupational accidents / number of hours worked x 1,000,000	8.0	6.2	5.3	-14.3
Percentage of women	in %, relative to total headcount	12.9	13.2	13.3	-
Employees turnover <sup>1)</sup>	in %	8.9	8.0	8.5	-
Specific energy consumption <sup>3) 4)</sup>					
Clay blocks	Index in % based on kWh/ton (2010 = 100%)	80.2	79.3	77.5	-2.3
Roof tiles	Index in % based on kWh/ton (2010 = 100%)	87.0	85.8	85.7	-0.1
Facing bricks	Index in % based on kWh/ton (2010 = 100%)	102.2	104.3	103.6	-0.6
Specific CO <sub>2</sub> emissions <sup>5) 6)</sup>					
Clay blocks	Index in % based on kg CO <sub>2</sub> /ton (2013 = 100%)	93.2	92.1	89.6	-2.8
Roof tiles	Index in % based on kg CO <sub>2</sub> /ton (2013 = 100%)	88.0	87.1	87.4	+0.3
Facing bricks	Index in % based on kg CO <sub>2</sub> /ton (2013 = 100%)	95.2	95.0	93.0	-2.0
Specific water consumption	in m <sup>3</sup> /ton	0.15	0.15	0.15	-3.8
Share of innovative products in total revenues	in %	29.4	28.8	33.0	-
Ceramic pipes					
Employees as at 31/12	Headcount	612	561	539	-3.9
Accident frequency	Number of occupational accidents / number of hours worked x 1,000,000	34.3	32.5	9.8	-69.9
Percentage of women	in %, relative to total headcount	8.5	7.8	8.7	-
Employee turnover	in %	2.8	7.1	2.6	-
Specific energy consumption <sup>3) 4) 7)</sup>	Index in % based on kWh/ton (2013 = 100%)	103.1	111.8	122.0	+9.1
Specific CO <sub>2</sub> emissions <sup>5) 6)</sup>	Index in % based on kg CO <sub>2</sub> /ton (2013 = 100%)	105.4	111.9	123.8	+10.7
Specific water consumption	in m <sup>3</sup> /ton	0.23	0.26	0.24	-7.8
Share of innovative products in total revenues	in %	40.7	39.4	42.0	-
Plastic pipes					
Employees as at 31/12	Headcount	2,481	2,577	2,662	+3.3
Accident frequency	Number of occupational accidents / number of hours worked x 1,000,000	3.3	3.9	3.8	-2.0
Percentage of women	in %, relative to total headcount	15.3	14.9	14.9	-
Employee turnover <sup>1)</sup>	in %	10.8	11.4	11.4	-
Specific energy consumption	Index in % based on kWh/ton (2010 = 100%)	94.6	98.2	98.9	+0.7
Specific indirect CO <sub>2</sub> emissions from electricity	Index in % based on kg CO <sub>2</sub> /ton (2010 = 100%)	83.0	83.0	84.0	+1.2
Specific water consumption	in m <sup>3</sup> /ton	4.70	5.11	5.04	-1.5
Share of innovative products in total revenues	in %	21.0	20.0	19.1	-
Concrete pavers					
Employees as at 31/12	Headcount	987	976	963	-1.3
Accident frequency	Number of occupational accidents / number of hours worked x 1,000,000	5.1	4.4	9.5	>100
Percentage of women	in %, relative to total headcount	15.3	14.9	16.2	-
Employee turnover	in %	11.7	15.3	16.6	-
Specific energy consumption	Index in % based on kWh/ton (2010 = 100%)	88.9	93.1	95.0	+2.0
Specific water consumption	in m <sup>3</sup> /ton	0.05	0.06	0.05	-8.5
Share of innovative products in total revenues	in %	39.0	36.9	37.6	-

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# Introduction by the Chief Executive Officer



Heimo Scheuch, Chief Executive Officer  
Wienerberger AG

## *Ladies and Gentlemen,*

2017 was a successful year for the Wienerberger Group: We generated record revenues of over € 3.1 billion and a net profit of € 123 million, while our net debt was reduced by 10%. At the same time, we achieved substantial progress in the implementation of our Sustainability Roadmap 2020. This goes to show that a company committed to the principles of sustainability is able to improve its performance and enhance its enterprise value, not despite this commitment but because of it.

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*We are in the midst of implementing the Wienerberger Sustainability Roadmap 2020 in order to continuously improve our ecological, social and societal performance.*

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Wienerberger's 2017 Annual Report takes stock of our achievements in financial terms and offers an outlook on upcoming developments, always with a special focus

on our shareholders' interests. Non-financial aspects and indicators are presented in aggregated form. The Wienerberger Sustainability Report, published for 2017 as a Sustainability Update, is targeted at our many other stakeholders, above all our employees, customers and suppliers, and presents our financial and, in particular, our non-financial achievements as well as the impact of the Wienerberger Group's activities on society, as required by the Global Reporting Initiative (GRI). It is our intention to present a transparent and coherent view of how we pursue our mission, which is to improve people's quality of life by supplying sustainable building material and infrastructure solutions of outstanding quality. In order to come increasingly closer to our vision of being the most highly regarded producer of building material and infrastructure solutions and the preferred employer in our markets, we are striving for continuous self-improvement. By presenting our management approach, we provide clear insights into our high-quality corporate governance, our strategy and the future orientation of our company.



As the technology and innovation leader of our sector, the Wienerberger Group is aware of its heavy responsibility for the improvement of living conditions on Planet Earth. The Sustainable Development Goals of the United Nations (17 SDGs) are the yardstick against which policy-makers as well as global players like ourselves have to measure their performance. Wienerberger is directly concerned with several of these goals, be it promoting decent work (SDG 8), building resilient infrastructure and fostering innovation (SDG 9), making cities inclusive, safe, resilient and sustainable (SDG 11), ensuring sustainable consumption and production patterns (SDG 12) or taking action to combat climate change and its impacts (SDG 13).

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*In our two main product groups, we are aiming at a 20% reduction in specific energy consumption by 2020 compared to 2010.*

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We are well on track, as shown by our contributions to ensuring sustainable consumption and production patterns (SDG 12) and to combating climate change (SDG 13). In absolute terms, our consumption of energy increased in 2017 over the value reported in 2016, partly as a result of higher production volumes, but energy consumption by ton of products produced (specific energy consumption) decreased by another 0.8% Group-wide and by 1.7% in ceramic production. For our two main product groups (bricks and tiles, plastic pipes) we are aiming at a 20% reduction in specific energy consumption by 2020 compared to 2010. At the same time, we are accelerating our conversion to climate-friendlier energy sources. In 2017, for instance, our specific CO<sub>2</sub> emissions from ceramic production were reduced by a satisfactory 2.3% from the previous year's level. Our North America Division fully met its target of completely converting all main production sites from coal to natural gas.

With digitally assisted design processes and construction methods, including products with high thermal insulation properties, we make it easier for our customers to meet the requirements of energy efficiency in building construction (SDG 13). Another objective is to make cities safer, more resilient and more sustainable (SDG 11). Our second-generation Raineo Stormbox is ideally suited to solve the problems caused by heavy rainfall; it collects, cleans and stores rainwater for later reuse, which is an extremely efficient way of preventing flash flooding in urban areas.

Research and development (R&D) are among the priorities of Wienerberger's strategic planning. The most essential tasks of R&D include the optimization of production processes (SDG 12) and the development of innovative products and system solutions for a resilient infrastructure (SDG 9). In 2017, our R&D expenditure came to approx. € 11 million. At Group level, innovative products accounted for almost 30% of total revenues. We will continue working on future-oriented solutions by placing a special focus on the digitalization of processes in all business areas and the step-by-step introduction of Industry 4.0 in production. Our aim is to optimize all processes, ranging from production planning to sales and administration. With this in mind, we have set up an innovation lab within the company, which enables us to establish structured contacts with start-ups. At the end of 2017, we organized an open call for innovation, followed by an Innovation Day in January 2018, which provided a platform for lively exchanges with numerous representatives of start-ups.

Innovative solutions are also required in the context of continuing urbanization. According to a UN study, two thirds of the world population will be living in cities by 2050, but hardly any of these cities will have been designed on a drawing board or computer. A major effort will therefore be to redesign the inhumane suburbs of many European metropolises – not to mention cities outside Europe – to make these places attractive again for people to live in. In our role as technology and innovation leader, we will do our utmost to develop innovative



solutions, always bearing in mind that we have to cover the “luxury” segment and, at the same time, provide acceptable and affordable social housing.

This takes me to another issue of special importance to me: I cannot overemphasize the key role our employees play in the successful further development of our company. Therefore, it is important to us that our employees worldwide live our corporate values regardless of nation, gender, age, etc. It is our vision to be the preferred employer in every region in which we operate.

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*Compared to the previous year, the frequency of accidents within the Wienerberger Group was significantly reduced by another 16.8% in 2017.*

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In 2017, the Wienerberger Group employed a work-force of more than 16,000 people. By ensuring that our employees are fairly remunerated at all our production sites, we contribute to their social security. As an industrial producer, the occupational safety and health of all our employees is an absolute priority for us. It is our goal to reduce the number of occupational accidents throughout the Group to zero every year. We are happy to report that the frequency of accidents within the Wienerberger Group was reduced by another 16.8% in 2017, while the severity of accidents went down by 2.1% compared to 2016. To our deepest regret and despite all our efforts, two fatal occupational accidents occurred in 2017. We studied the circumstances of the accidents in great depth in order to derive targeted measures aimed at further improving occupational safety in our plants. We continue to pursue our “zero accident” target.

We regard our corporate values – expertise, passion, integrity and respect, customer orientation, entrepreneurship, quality and responsibility – as the driving forces that encourage our employees to develop their potential to the full. The fundamental prerequisites are employee motivation and satisfaction, as well as a culture of trust within the company. In the course of 2018, we will roll out the employee survey to all country organizations of

the Wienerberger Group and subsequently take the necessary measures to further improve the level of employee satisfaction.

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*In the near future, we will apply a Group-wide “Supplier Code of Conduct”.*

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Another challenge faced by Wienerberger is the growing globalization of supply chains. We are expected not only to guarantee the quality of our finished products, but also to guarantee compliance with social and ecological minimum standards of the raw materials, products and services we need to produce and market our products.

By signing the UN Global Compact in 2003, we committed ourselves to ensuring that its ten principles regarding human rights, occupational health and safety, environmental protection and the fight against corruption are observed not only within our own sphere of control, but also along our supply chains. We actively promote an ethical approach in all our entrepreneurial actions and therefore are increasingly adopting supplier guidelines that oblige our suppliers to comply with social and ethical minimum standards. In the near future, we will apply a Group-wide “Supplier Code of Conduct”. Please refer to pages 90 to 94 for our 2017 Communication on Progress on the UN Global Compact.

We intend to consistently pursue our course in the years to come and take all the measures necessary to attain our goals. I am confident that you, our esteemed readers, will accompany us on our way.

Yours



# Wienerberger at a Glance

## *Company Profile*

Wienerberger is an international supplier of innovative building material and infrastructure solutions with headquarters in Vienna. We are the only multinational producer of clay blocks, facing bricks and clay roof tiles, pipe systems made of plastics and ceramics, and concrete and clay pavers. As at 31/12/2017, Wienerberger operated 197 production sites in 30 countries of the world and exported its products to international markets. We are the worldwide market leader in bricks and the No 1 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.

## *History of the Company*

Wienerberger was founded in 1819 by Alois Miesbach in the Wienerberg district on the southern outskirts of Vienna. In 1869, this Austrian brick manufacturer became one of the first companies to be listed on the Vienna Stock Exchange. Wienerberger is a free float company with 100% of its shares being publicly traded. For details on the shareholder structure, please refer to the 2017 Annual Report.

The company took its first step towards internationalization with the takeover of the Oltmanns Group in 1986, which was followed by a successful expansion into Eastern Europe, France and the Benelux countries during the 1990s. At about the same time, Pipelife (plastic pipes) was established as a joint venture and the Group diversified its activities to include ceramic pipes and concrete pavers.

After a further period of expansion in Europe, the Wienerberger Group developed into a global player with the takeover of General Shale in the USA in 1999. Another strategic milestone was set in 2003 with the Group's entry into the roofing systems market through the acquisition of Koramic and the steady expansion of this business in the following years. With the full takeover of Semmelrock (2010), Steinzeug-Keramo (2011), Pipelife

(2012) and Tondach Gleinstätten (2014), Wienerberger completed its transformation into an international supplier of building material systems comprising the Clay Building Materials Division, the Pipes & Pavers Europe Division and the North America Division.

## *Mission Statement*

It is our vision to be the most highly regarded producer of building material and infrastructure solutions and the preferred employer in our markets. Our mission is to improve people's quality of life by providing outstanding, sustainable building material and infrastructure solutions. The primary goal of our entrepreneurial activities is to achieve a sustainable increase in the value of the company in accordance with ecological, social and economic principles. Day after day, approximately 16,000 employees are making every effort to translate this vision into reality through their commitment and their professional approach. This excellent cooperation is based on a firmly rooted corporate culture, which is characterized by shared values – expertise, passion, integrity and respect, customer orientation, entrepreneurship, quality and responsibility – and provides the foundation for our organization.

## *Strategy*

Our corporate strategy is determined by our vision and our mission. Three core areas of strategic importance have been identified as essential for Wienerberger's sustainable success: organic growth, operational excellence as well as value-creating growth investments and portfolio optimization.

In order to generate organic growth, we focus on innovations, deepened customer relations and a profound knowledge of local markets, as well as the development and implementation of digital solutions across our entire value chain. We want to create lasting value for all our customers by providing durable, flexible and innovative building material and infrastructure solutions.





To this end, we are continuously at work to improve and further develop our products and system solutions for all fields of application, including the recycling and re-use of our products. We are making every effort to adjust these developments to the needs of our customers. Through our innovations we not only meet the increasing demand for tailor-made solutions, but also offer solutions to cope with the growing complexity of the design and execution of construction projects. In this context, we take the individual needs of specific customer groups, stakeholders and decision-makers into account, offering comprehensive advisory services and supporting projects from the planning phase to execution. Within the framework of our digital agenda, we increasingly rely on digital and mobile solutions for fast exchanges of data and information. Thus, we are playing a leading role in the digital transformation of our industry.

The optimization of our production processes and our organizational structures also supports our economic and ecological objectives. Our Operational Excellence Program enables us to achieve cost savings and reduce the input of resources.

Value-creating investments serve the strategic goals of exploring new fields of business and achieving deeper market penetrating in existing operating segments. These investments include corporate acquisitions, the take-over of individual plants and capacity extensions.

Moreover, we are continuously reviewing our industrial portfolio for its strategic orientation and its growth potential. If we identify activities that do not meet our criteria for future growth, we are ready to implement optimization measures or initiate structured divestment processes.

### ***Corporate Governance at Wienerberger***

Strict principles of good governance and transparency as well as the continuous development of an efficient corporate control system form the basis of corporate governance at Wienerberger. In 2017, Wienerberger complied with all rules and recommendations of the Austrian Corporate Governance Code.

Internal guidelines applicable throughout the Group, such as a compliance code to prevent insider trading and a code of conduct for lobbying activities, provide a framework for all the Group's activities. A Compliance Officer, supported by a deputy, has been appointed to monitor compliance. For a detailed presentation of the activities relating to corporate governance at Wienerberger in the reporting year, please refer to the chapter "Management Approach" and the 2017 Annual Report. Our corporate governance principles are communicated in detail on the Wienerberger website.

### ***The Year 2017 in Review***

2017 was an excellent year for the Wienerberger Group, in which we reached a number of notable milestones. Our revenues grew by 5% to € 3,119.7 million, the highest ever in the history of the company. Thanks to continuous operational improvements, EBITDA increased for the fifth consecutive year, reaching € 415.0 million, up by 3% from 2016. This translated into a 50% increase in our net profit to € 123.2 million, the highest in the last ten years. At the same time, we were able to reduce our net debt by 10% from € 631.16 million to € 566.4 million. Thus, the year under review was marked by a successful combination of value-creating growth and financial discipline. We intend to further pursue this strategy in the years to come and to broaden our existing platform through acquisitions in high-margin growth areas.



In 2017, a dividend of € 0.27 per share, corresponding to a total of € 31.6 million, was paid out from the Group's 2016 net profit. The hybrid coupon paid out came to € 29.9 million. Payments to public bodies, comprising taxes on income and other taxes (excluding deferred taxes) rose to € 75.5 million in 2017 on account of the improvement in earnings and the resultant higher tax burden of € 60.5 million.

Based on the strong performance of the Group and the positive outlook for the current year, the dividend paid out in 2018 for the business year 2017 was increased by 11% to € 0.30 per share. Additionally, our shareholders received a one-time special dividend of € 0.10 per share distributed by the ANC Private Foundation. For more information about the Foundation, please refer to page 197 of the 2017 Annual Report.

**Financial flows to stakeholders**  
in € million

	2015	2016	2017	Chg. in %
Corporate revenues <sup>1)</sup>	3,028.4	3,042.9	<b>3,180.2</b>	+5
Operating expenses <sup>2)</sup>	-1,876.0	-1,861.7	<b>-1,944.0</b>	+4
Wages, salaries and benefits <sup>3)</sup>	-756.9	-751.8	<b>-794.5</b>	+6
Payments to providers of equity <sup>4)</sup>	-38.5	-61.9	<b>-61.5</b>	-1
Payments to providers of foreign capital	-45.8	-33.6	<b>-38.5</b>	+15
Payments to public bodies <sup>5)</sup>	-48.9	-60.5	<b>-75.5</b>	+25

1) Revenues and other operating income // 2) Cost of goods sold, selling expenses, administrative expenses and other operating expenses, excluding wages, salaries and benefits, depreciation and amortization, impairments and taxes other than taxes on income // 3) Excluding agency workers and company cars; including employee-related restructuring costs // 4) Hybrid coupon and dividend recognized in the year of cash flow // 5) Excluding deferred taxes

General note: The first three lines are expense- and/or income-based; the last three lines are cash transactions.

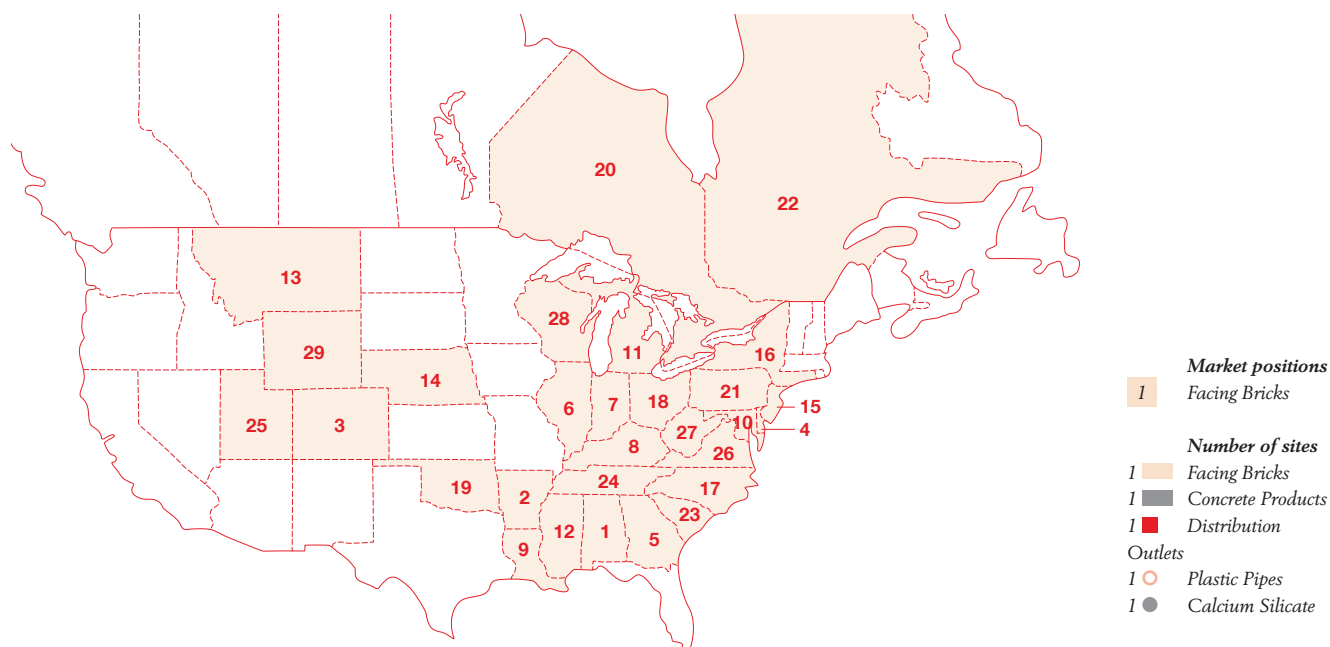


### Production Sites and Market Positions

Wienerberger is the only multinational producer of bricks, roof tiles, concrete pavers and pipe systems with a total of 197 production sites in 30 countries and activities in international export markets. We are the world's largest

producer of bricks and number one on the clay roof tile market in Europe. Furthermore we hold leading positions in pipe systems in Europe and concrete pavers in Central-East Europe.

### Wienerberger Markets in North America



1 Alabama	3		1 ■	16 New York*	3				
2 Arkansas*	4			17 North Carolina	1	1 ■		4 ■	
3 Colorado	1	1 ■	1 ■	18 Ohio*	2				
4 Delaware*	5			19 Oklahoma*	6				
5 Georgia	1	2 ■		20 Ontario					1 ●
6 Illinois	3		2 ■	21 Pennsylvania*	3				
7 Indiana	1	1 ■	2 ■	22 Quebec					1 ●
8 Kentucky	1		2 ■	23 South Carolina	4			1 ■	
9 Louisiana*	2			24 Tennessee	1	1 ■	1 ■	6 ■	
10 Maryland*	2			25 Utah*	2				
11 Michigan	2		2 ■	26 Virginia	1	1 ■		1 ■	
12 Mississippi	1	1 ■		27 West Virginia*	1				
13 Montana	1		1 ■	28 Wisconsin*	5				
14 Nebraska*	6			29 Wyoming	1			1 ■	
15 New Jersey*	3								

\* Markets are served through exports from neighboring states.

Status December 2017



## Wienerberger in India

Number of sites  
1 Clay Blocks

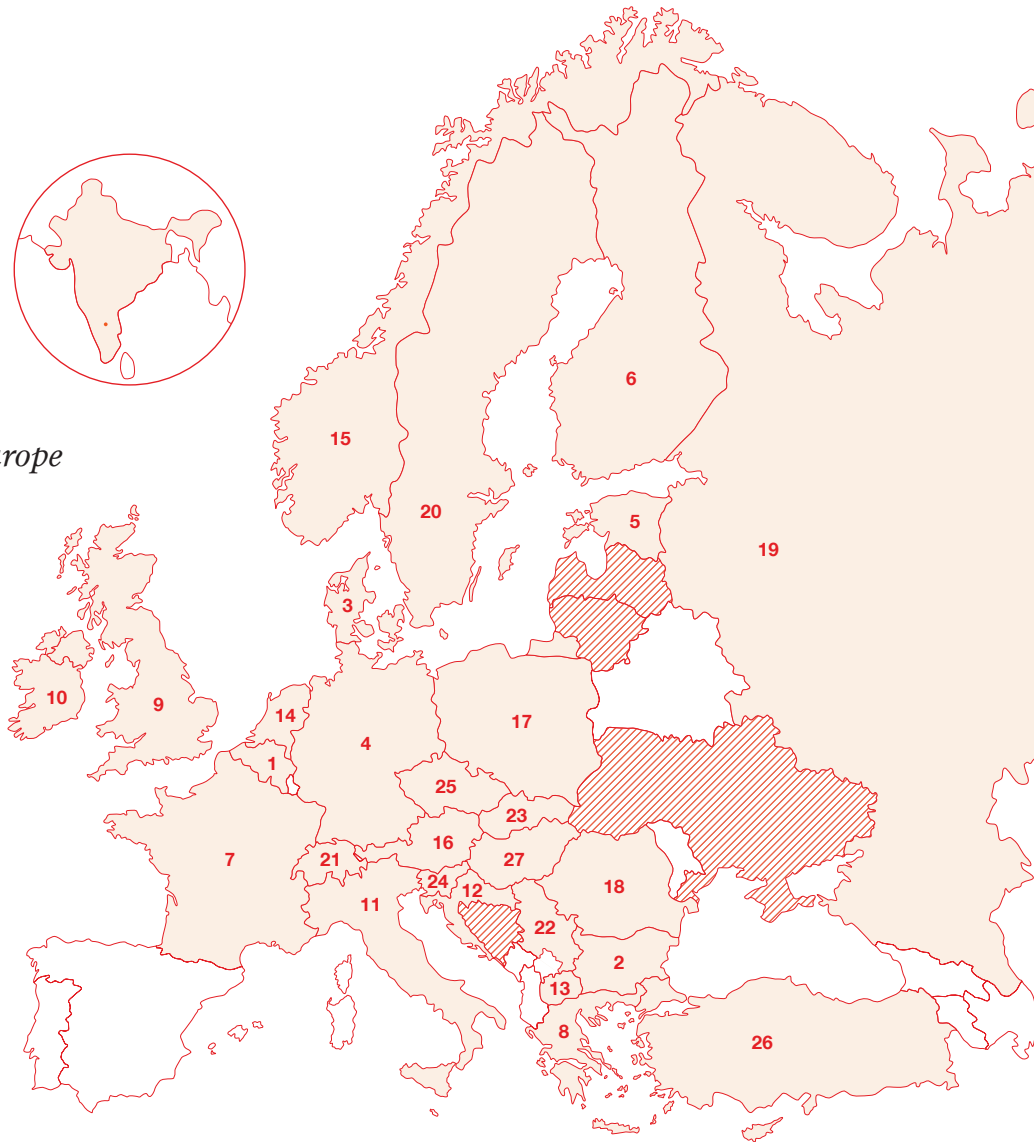


## Wienerberger Markets in Europe

Markets with production sites  
Export markets

Market positions  
1 Clay Blocks and/or Facing Bricks  
1 Clay Roof Tiles

Number of sites  
1 Clay Blocks  
1 Facing Bricks  
1 Roofing Systems  
1 Pavers  
1 Plastic Pipes  
1 Ceramic Pipes



1 Belgium	1	1	3	6	2		2	1	15 Norway*								2
2 Bulgaria	1	2	1			1	1	1	16 Austria	1	1	7	1	2	4	1	
3 Denmark*				2					17 Poland	1	2	7	1	1	5	2	
4 Germany	1	4	15	3	4	1	1	2	18 Romania	1	1	4			2		
5 Estonia	1			1				1	19 Russia	1		2				1	
6 Finland*				1				4	20 Sweden*			2				2	
7 France	2	4	4	1	3		2	2	21 Switzerland	3	1	1		2			
8 Greece							1	1	22 Serbia		1			1			
9 Great Britain	2	1		9	4				23 Slovakia	1	1	2			1		
10 Ireland							1	1	24 Slovenia	1	1	1		1			
11 Italy	1		4						25 Czech Republic	1	1	7		4	1	2	
12 Croatia	1	1	1		2	1			26 Turkey							1	
13 Macedonia		1			1				27 Hungary	1	1	6		2	2	1	
14 Netherlands	1	1	1	7	3	5	2										

\* In the clay business the Nordic markets (Denmark, Finland, Norway and Sweden), in which we hold a No. 2 market position, are managed by a regional management.

Status December 2017

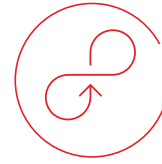








# Management Approach



# Management Approach

Wienerberger is determined to provide an appropriate and well-balanced insight into the essential issues addressed by our group of companies and the related effects. We also want to disclose information about how we manage these effects at Group level and in our Business Units. We therefore decided to focus our report above all on those issues that are of material importance not only for Wienerberger, but also for our stakeholders. This approach meets the requirements of the GRI G4 Reporting Guidelines which we follow in our reporting. For a comprehensive presentation of our management approach, please refer to page 16 of our 2016 Sustainability Report. This chapter comprises three parts:

- **Our Management approach:** Presentation of our management approach for the individual topics and the way we pursue our economic, ecological, social and societal targets
- **Our 2014 materiality analysis:** Presentation of the issues and aspects classified as material by our stakeholders
- **Our Sustainability Roadmap 2020:** A self-imposed commitment to continuously improve Wienerberger's ecological, social, societal and economic performance

## Our Management Approach

### Mission statement and strategy

Wienerberger views the economy as an integral part of society that has the obligation to serve people and create value for all. Our mission is to improve people's quality of life by providing sustainable building materials and infrastructure solutions of outstanding quality.

Our reputation is the basis of our success. Our goal is to be the most highly regarded producer of building material and infrastructure solutions and the preferred employer in our markets. Our entrepreneurial activities are based on our values: expertise, passion, integrity and respect, customer orientation, entrepreneurship, quality and responsibility.

The primary goal of our entrepreneurial activities is to achieve a sustainable increase in the value of the company in accordance with ecological, social and economic principles.

To achieve this goal, we have defined a clear strategy focused on organic growth and operational excellence as well as growth investments and portfolio optimization. In our strategic considerations, we take into account the interests of our organization as well as those of our stakeholders, with whom we are closely associated through long-term relations. We take our role as a responsible member of society very seriously. For us, this responsibility encompasses the observance of ethical principles in all our actions, honest communication, active involvement in the creation of a transparent economic environment, personal accountability for everything we do, and acting as a reliable and useful member of society. By acceding to the UN Global Compact in 2003, Wienerberger officially committed itself to observing the principles of human rights, labor standards, environmental protection – including the precautionary principle – and the fight against corruption.

### Corporate Governance at Wienerberger

The responsible management of the Wienerberger Group with a view to its long-term development is an essential prerequisite for the achievement of our corporate goal: to sustainably increase the value of the company in accordance with ecological, social and economic principles. As a listed company with international operations, Wienerberger is committed to the strict principles of good governance and transparency as well as to the continuous further development of an efficient system of corporate control. Some of the most essential aspects regarding compliance and the prevention of corruption are described in the following sections. For the complete Wienerberger Corporate Governance Report, please refer to pages 48 to 69 of the 2017 Annual Report and to the Wienerberger website.

### Compliance

Commitment to compliance with all national and international legal standards is a central principle of the Wienerberger Group. To ensure full compliance, Wienerberger adopted various guidelines and programs containing clear definitions of competences and responsibilities, such as:



- **Compliance Guideline:** It serves to prevent insider trading and the illegal disclosure of inside information and implements the provisions of European and Austrian stock exchange law. A compliance officer, supported by a deputy, has been appointed to monitor compliance. Training sessions on issuer compliance are held regularly at the Vienna headquarters for the top management of Wienerberger Holding and each of the Business Units.
- **Anti-trust Compliance Program:** The program provides concrete orientation regarding delicate issues that may arise in the field of anti-trust law, such as contacts with competitors, which are subject to strict rules in respect of market activities, information exchange, pricing and delivery terms. Within the framework of the anti-trust compliance program, all local companies of the Wienerberger Group are obliged to hold regular training sessions. As a rule, anti-trust training events take place at least once every two years and are conducted by a national anti-trust expert or our in-house legal counsel.

On account of the market position held by the Wienerberger Group in certain markets, the price policies of our subsidiaries are followed attentively by the anti-trust authorities. In 2017, 23 companies were audited by Wienerberger's Internal Audit unit with a special focus on organization, purchasing, materials management, sales, human resources management, corruption and anti-trust legislation, as well as compliance with the Group-wide safety and health standards. There were no negative findings by the authorities in charge in 2017. This confirms the effectiveness of our compliance regime. Price agreements are not part of Wienerberger's business practices and are explicitly prohibited by our internal guidelines, which provide for severe sanctions in the event of violations.

### ***Prevention of corruption***

Wienerberger is committed to the principle of free and fair competition, which includes a firm stance against any form of corruption. We have always pursued the target of zero incidents of corruption and expect all our employees to act accordingly. In 2017, no charges were brought against Wienerberger for suspected corruption and no penalty payments were due.

### **Human resources management at Wienerberger**

Our values provide the basis for our entrepreneurial activities. The values of responsibility, integrity and respect also apply, in particular, to Wienerberger's relationship with its employees.

Human resources management is based on the following principles, which apply throughout the Group:

- Ensuring safe and healthy workplaces
- Equal opportunities, regardless of age, gender, culture, religion, origin or other diversity features
- Advancement and development of each employee
- Willingness to pursue demanding targets and assume personal responsibility
- Entrepreneurial thinking and acting

With the signing of the Social Charter in 2001, Wienerberger committed itself to creating Group-wide employment and working conditions that meet national legal provisions or collective bargaining agreements as a minimum standard. Thus, Wienerberger complies with the recommendations of the International Labor Organization (ILO, a specialized agency of the United Nations). At Wienerberger it goes without saying that child labor and discrimination are not tolerated. We pay special attention to occupational safety and health. The Wienerberger Safety Initiative contains obligatory requirements in respect of safety standards and activities aimed at ensuring the highest possible level of occupational safety in all plants of the Wienerberger Group. For details on these activities and additional initiatives taken by the Business Units, please refer to the chapter "Employees" on page 32.



### Quality and environmental management

Quality management systems (QMS) have been installed at all our plants, and most of them are certified according to ISO 9001. Environmentally relevant aspects have also been integrated into these quality management systems. Where appropriate, production sites have also been certified according to ISO 14001 (environmental management systems). All Steinzeug-Keramo production sites and Pipelife's production site in Germany have already been certified according to the energy management standard DIN EN ISO 50001:2011.

### Stakeholder management

As a responsible member of society, Wienerberger also takes the concerns of its stakeholders into account in its corporate strategy. We place great emphasis on open, continuous and target-group-oriented dialogue, as it fosters mutual understanding of one another's interests, expectations and targets. In 2014, we therefore performed a materiality analysis that involved both internal and external stakeholders. The results were laid down as binding targets in the Wienerberger Sustainability Roadmap 2020 and form an integral part of our corporate strategy.

Our stakeholders include our employees, customers and business partners, investors, analysts and banks, local residents and local authorities, suppliers, politicians, regulators, organized interest groups, research institutions and universities, media and NGOs. These different stakeholder groups are 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. For an extensive description of our stakeholder-specific communication instruments, please refer to pages 19 to 21 of the 2016 Sustainability Report.

### 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, the Austrian UN Global Compact Network. Thus, Wienerberger is committed to the ten principles of the UN Global Compact on human rights, labor standards, environmental protection, including the precautionary principle, and the fight against corruption. The most recent Communication on Progress (CoP) for 2017 is reproduced in this report, starting on page 90, and can also be found on the Wienerberger website.

### Sustainability management

The foremost goal of our entrepreneurial activities is to sustainably increase our enterprise value in accordance with ecological, social and economic principles. Our voluntary commitment to sustainability covers all stages of the value chain of the Wienerberger Group. To ensure a uniform approach and the efficient implementation of the measures and targets defined, we have introduced clear structures and responsibilities for the Group's sustainability management. For a detailed description, please refer to page 21 of the 2016 Sustainability Report.

The Sustainability Report of the Wienerberger Group represents our binding commitment to sustainable development. All Wienerberger sustainability reports meet the requirements of the Global Reporting Initiative (GRI). The primary focus of the reports is on the ecological and social aspects of our activities and on future measures relating to our employees, production, products and our social and societal commitment. In combination with the sustainability program (Sustainability Roadmap 2020), the sustainability report is an important management instrument for Wienerberger to achieve its long-term goals. This Sustainability Update was prepared in accordance with the requirements of the "core" option of the GRI G4 Reporting Guidelines.





## ***Our 2014 Materiality Analysis***

### **The value chains of the Wienerberger Group**

In order to learn more about which additional issues our stakeholders consider to be of material importance for Wienerberger and the company's impact on society, we analyzed the value chains of our four major product groups in 2014. Based on a comprehensive survey conducted among internal and external stakeholders, specific materiality analyses were performed along the respective value chains:

- Bricks: Clay blocks, facing bricks, roof tiles and clay pavers (Clay Building Materials Europe, General Shale within the North America Division)
- Concrete pavers and concrete facade elements (Semmelrock, Arriscraft within the North America Division)
- Ceramic pipes (Steinzeug-Keramo)
- Plastic pipes (Pipelife)

The diagram on page 20/21 provides an overview of the entire value creation process of Wienerberger. A more detailed presentation of the individual value chains, an extensive description of the processes underlying our materiality analysis, such as the identification of topics and aspects, the involvement of internal as well as external stakeholders in the process, and the selection of relevant aspects are contained in the 2014 and 2016 Sustainability Reports (<https://sustainabilityreport14.wienerberger.com/> and <http://sustainabilityreport16.wienerberger.com/>). The materiality analysis was performed in 2014 in accordance with the requirements of GRI G4, "core" option. Here is a brief summary.

### **The materiality matrix of the Wienerberger Group**

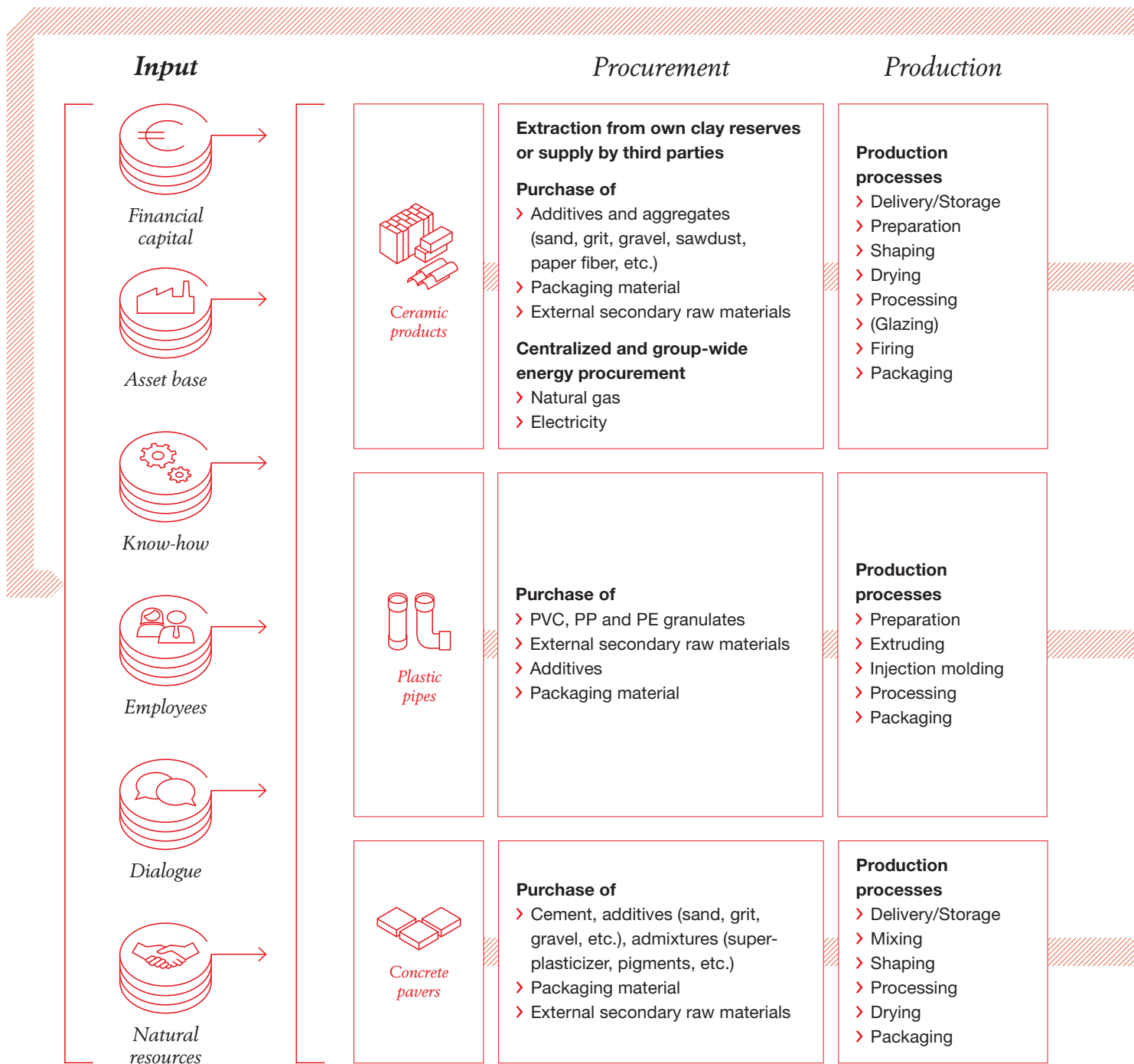
We took a close look at the entire value chain of each of the four major product groups, including raw material extraction, the entire supply chain, the production and use of products, and finally the product's transformation into waste at the end of its useful life. Potential ecological, social, ethical, regional and macro-economic issues, as well as issues relating to the security of supply, were allocated to the individual steps in the value chains. These issues provided the basis for our stakeholder survey. We invited close to 500 stakeholders to participate in the survey – about 80% of them external stakeholders. Based on the stakeholders' responses, the material aspects for the four product groups along their respective value chains were determined by our partner. The significance (medium to high) of individual aspects, as perceived by internal and external stakeholders, was entered into a matrix.

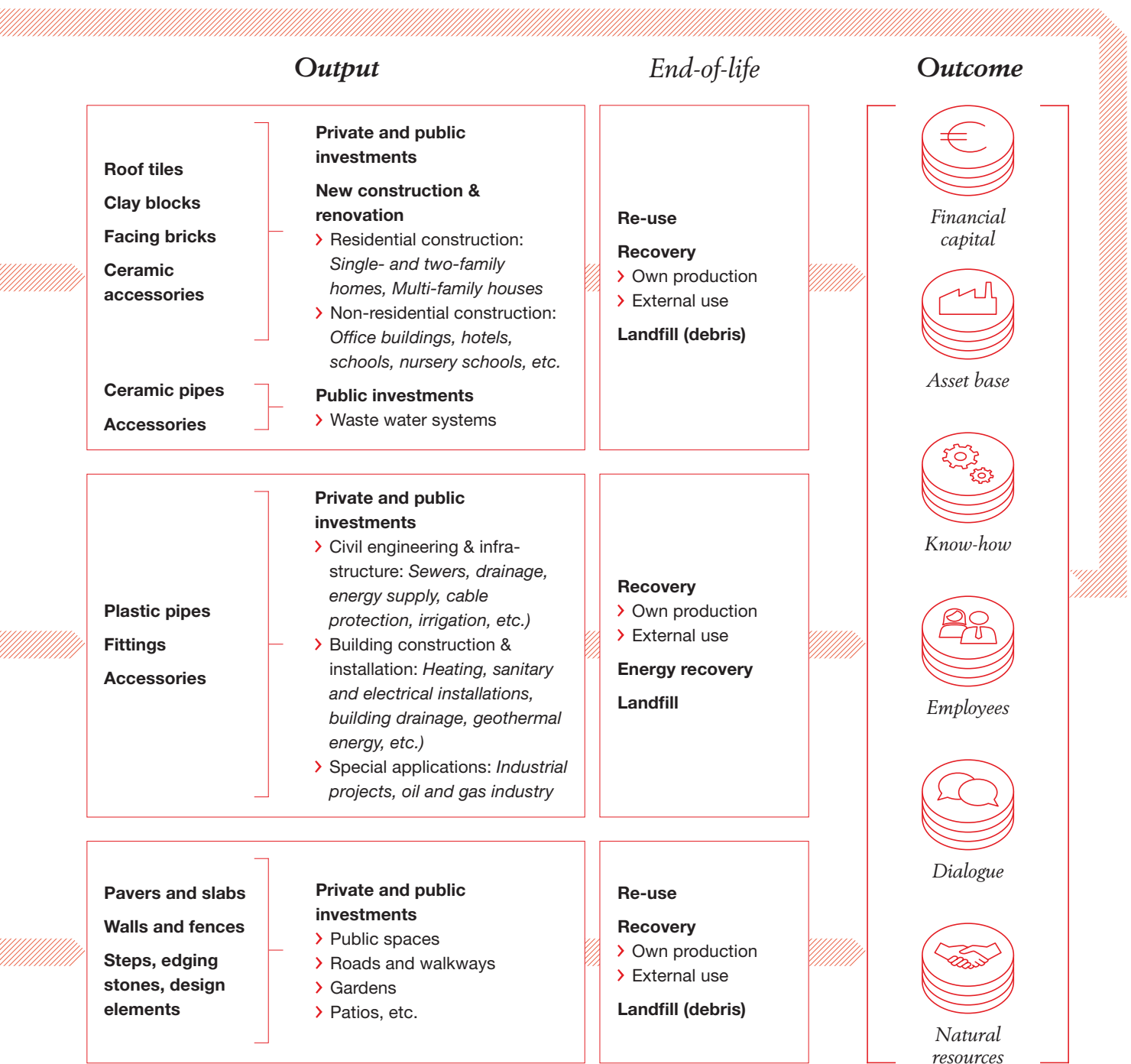
It turned out that the stakeholders perceived certain aspects as being of similarly high significance across all product groups. Additionally, the aspects identified as material for the individual product groups were aggregated at Group level. The result – our materiality matrix (see diagram on pages 30 and 31 of the 2016 Sustainability Report) – shows which aspects are equally relevant for the entire Wienerberger Group along the value chains of all product groups. It served as input for the further development of our sustainability strategy and the determination of targets and measures for our Sustainability Roadmap 2020 (see pages 23 to 29). The diagram on page 22 illustrates all indicators identified in the materiality analysis as highly relevant, which constitute the basis for the Wienerberger Sustainability Roadmap 2020. The table on page 32 of the 2016 Sustainability Report shows which aspects and/or challenges were identified by the stakeholders as being of material importance for the Wienerberger Group and how they have been incorporated into the Sustainability Roadmap 2020.





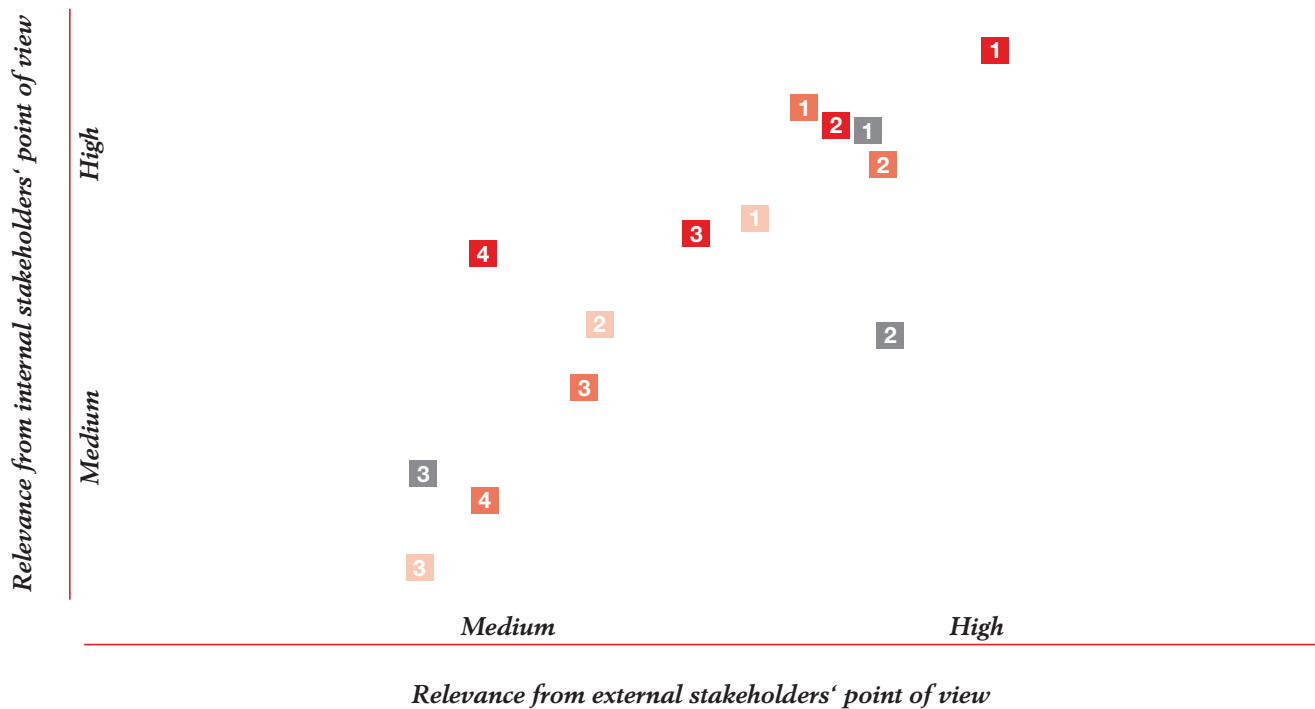
## Value Creation of the Wienerberger Group







## The Indicators with Highest Relevance as a Basis for the Sustainability Roadmap 2020



### Caption

#### Sustainability in the supply chain

1	Availability of raw materials
2	Avoidance of hazardous substances
3	Protection of local residents and employees, nature conservation, re-use of depleted extraction sites

#### Sustainable products

1	Innovative and durable products
2	Recyclability, recycling and re-use of products
3	Product-group-specific properties

#### Environmental aspects in production

1	Energy efficiency
2	Climate protection
3	Resource efficiency and waste management
4	Sparing use of water

#### Social aspects in production

1	Health and safety of employees
2	Business ethics and compliance
3	Employee satisfaction and training
4	Communication with and involvement of employees

## The Wienerberger Sustainability Roadmap 2020

The Wienerberger Sustainability Roadmap 2020 describes the sustainability targets pursued by the Wienerberger Group up to 2020. These targets are based on the results of the 2014 materiality analysis. The Roadmap represents a deliberate, self-imposed

commitment to continuously improving Wienerberger's ecological, social, societal and economic performance. The measures taken and the targets achieved in 2017, as well as the steps to be taken by the Business Units within the framework of the Sustainability Roadmap 2020, are outlined in detail in our Sustainability Reports.



## Wienerberger Sustainability Roadmap 2020 – Implementation Overview 2017

Material issues	Holding		CBME		North America <sup>1)</sup>		Pipelife <sup>1)</sup>		Semmelrock		Steinzeug-Keramo	
QT ... Quantified targets M ... Measures	QT	M <sup>2)</sup>	QT	M <sup>2)</sup>	QT	M <sup>2)</sup>	QT	M <sup>2)</sup>	QT	M <sup>2)</sup>	QT	M <sup>2)</sup>
<b>Sustainability in the supply chain</b>												
Availability of raw materials			☉ ⚡ →	👍	☉ ⚡ →	👍	☉ ⚡ →	👍	☉ ⚡ →	👍	☉ ⚡ →	👍
Use of recycled material				👍		👍	☉ →	👍		👍	☉ ⚡ →	👍
Avoidance of hazardous substances				👍		👍		👍		👍		👍
Protection of local residents and employees; nature conservation and re-use of depleted clay pits				👍		👍		👍		👍		👍
<b>Environmental aspects in production</b>												
Energy efficiency			☉ →	👍	☉ ◐	◐	☉ →	◐		👍	×	👍
Climate action			☉ →	👍	☉ ✓	👍	☉ →	◐		👍	☉ →	👍
Resource efficiency and waste management				👍		👍		👍	☉ ◐	◐		
Sparing use of water							☉ →	◐		👍		
<b>Social aspects in production</b>												
Safety of our employees	☉ W →	👍	☉ W →	👍	☉ W →	👍	☉ W →	👍	☉ W →	👍	☉ W →	👍
Health of our employees	2015 attained *	👍	2015 attained *	👍	2015 attained *	👍				+ 👍	2015 attained *	👍
Business ethics and compliance	☉ W ✓	W 👍	☉ W ✓	W 👍	☉ W ✓	W 👍	☉ W ✓	W 👍	☉ W ✓	W 👍	☉ W ✓	W 👍
Employee satisfaction		W 👍		W 👍		W 👍		W 👍		W 👍		W 👍
<b>Sustainable products</b>												
Innovative and durable products			☉ ✓	👍	☉ ✓	👍	☉ ◐	◐	☉ ✓	👍	☉ ✓	👍
Recyclability, recycling and re-use of products				👍		👍	☉ →	👍		👍		👍
Sustainability in construction and demolition										👍		
Ease of installation				👍								
Renewable energy for buildings								👍				
Contribution to energy efficiency of buildings				👍		👍		👍				

1) Excl. Pipelife production site in North America

2) Measures: including measures relating to non-quantifiable targets

\* Target definition exclusively for ceramic production

W Group-wide

☉ Quantitative target

✓ Realized

→ Ongoing Realization

⚡ Definition of internal benchmark

👍 Measure(s) implemented

+ Newly added

◐ Partially realized

— Focus on indicator revised

×

Definition not specified



## Wienerberger Sustainability Roadmap 2020 – Overview 2018 to 2020

Material issues	Milestones	Holding		CBME		North America <sup>1)</sup>		Pipelife <sup>1)</sup>		Semmelrock		Steinzeug-Keramo	
QT ... Quantified targets M ... Measures		QT	M <sup>2)</sup>	QT	M <sup>2)</sup>	QT	M <sup>2)</sup>	QT	M <sup>2)</sup>	QT	M <sup>2)</sup>	QT	M <sup>2)</sup>
<b>Sustainability in the supply chain</b>													
Availability of raw materials	2018			⊙ →	○	⊙ →	○	⊙ →	○	⊙ →	○	⊙ →	○
	2020				○		○		○		○		○
Use of recycled materials	2018						○	⊙ →	○		○	⊙ →	○
	2020				○			⊙	○				
Avoidance of hazardous substances	2018				○						○		○
	2020				○								
Protection of local residents and employees; nature conservation and re-use of depleted clay pits	2018				○				○		○		○
	2020												
<b>Environmental aspects in production</b>													
Energy efficiency	2018			⊙ →	○	⊙ →	○	⊙ →	○		○	×	○
	2020			⊙	○			⊙	○				
Climate action	2018			⊙ →	○		○	⊙ →	○		○	⊙ →	○
	2020			⊙	○			⊙	○				
Resource efficiency and waste management	2018				○		○			⊙ ☆	○		
	2020												
Sparing use of water	2018							⊙ →	○		○		
	2020												

1) Excl. Pipelife production site in North America

2) Measures: including measures relating to non-quantifiable targets

W Group-wide

⊙ Quantitative target

→ Ongoing Realization

⊕ Newly added

— Focus on indicator revised

× Definition not specified

☆ Quantitative target being defined

○ Qualitative targets and measures planned

⌘ Internal definition of benchmark





Material issues	Milestones	Holding		CBME		North America <sup>1)</sup>		Pipelife		Semmelrock		Steinzeug-Keramo	
QT ... Quantified targets M ... Measures		QT	M <sup>2)</sup>	QT	M <sup>2)</sup>	QT	M <sup>2)</sup>	QT	M <sup>2)</sup>	QT	M <sup>2)</sup>	QT	M <sup>2)</sup>
Social aspects in production													
Safety of our employees	2018	⊙ W →	○	⊙ W →	○	⊙ W →	○	⊙ W →	○	⊙ W →	○	⊙ W →	○
	2020	⊙ W →	○	⊙ W →	○	⊙ W →	○	⊙ W →	○	⊙ W →	○	⊙ W →	○
Health of our employees	2018	⊙ W →	○	⊙ W →	○	⊙ W →	○				○	⊙ W →	○
	2020	⊙ W →	○	⊙ W →	○	⊙ W →	○					⊙ W →	○
Business ethics and compliance	2018	⊙ W →	○ W	⊙ W →	○ W	⊙ W →	○ W	⊙ W →	○ W	⊙ W →	○ W	⊙ W →	○ W
	2020	⊙ W →	○ W	⊙ W →	○ W	⊙ W →	○ W	⊙ W →	○ W	⊙ W →	○ W	⊙ W →	○ W
Employee satisfaction	2018		○ W		○ W		○ W		○ W		○ W		○ W
	2020		○ W		○ W		○ W		○ W		○ W		○ W
Sustainable products													
Innovative and durable products	2018			⊙ →	○	⊙ →	○	⊙ →	○	⊙ →	○	⊙ →	○
	2020			⊙ →	○	⊙ →	○	⊙ →	○	⊙ →	○	⊙ →	○
Recyclability, recycling and re-use of products	2018				○		○	⊙ →	○		○	⊙ →	○
	2020							⊙ →	○				○
Sustainability in construction and demolition	2018										○		
	2020												
Ease of installation	2018				○						○		
	2020				○								
Renewable energy for buildings	2018								○				
	2020												
Contribution to energy efficiency of buildings	2018				○		○		○				
	2020				○								



## Quantitative Targets of the Wienerberger Sustainability Roadmap 2020

Target definitions	Deadlines	Performance		
Employees		2015	2016	2017 <sup>1)</sup>
<b>Safety of our employees</b>				
Group level: Zero accidents	Every year	8*	7*	5*
<b>Health of our employees</b>				
Group level: Percentage of ceramic production sites reporting core indicators on protection against exposure to respirable crystalline silica > 95%	2020	98%	No data collected	98%
<b>Production</b>				
<b>Energy efficiency</b>				
North America <sup>2)</sup> : Reduction of natural gas consumption at selected production sites by 5% per site as compared to 2015	2017	Reference year	4%	4%
Clay Building Materials Europe: Reduction of specific energy consumption by 20% as compared to 2010	2020	8%	10%	12%
Pipeline <sup>3)</sup> : Reduction of specific energy consumption in production by 20% as compared to 2010	2020	5%	2%	-5%
<b>Climate action</b>				
North America <sup>2)</sup> : Conversion of all main production sites from coal to natural gas	2017	50%	80%	100%
Steinzeug-Keramo: Compensation of 5% of the annual CO <sub>2</sub> emissions generated in the respective plant through climate protection projects	2018	>5%	>5%	>5%
Clay Building Materials Europe: Reduction of specific CO <sub>2</sub> emissions from primary energy sources by 20% as compared to 2010	2020	0%	2%	4%
Pipeline <sup>3)</sup> : Reduction of specific indirect CO <sub>2</sub> emissions from electricity in production by 20% as compared to 2010	2020	17%	17%	16%
<b>Water</b>				
Pipeline <sup>3)</sup> : Reduction of water consumption from public networks to 0.55 m <sup>3</sup> per ton of products produced	2020	0.66 m <sup>3</sup> /ton	0.81 m <sup>3</sup> /ton	0.95 m <sup>3</sup> /ton
<b>Resource efficiency and waste management</b>				
Semmelrock: Reduction of scrap rate by 50% as compared to 2014	2017	19.1%	34.0%	45.3%

1) Since 2017, strategic decisions regarding sustainability management at the Pipeline production site in North America have no longer been taken by the Pipeline Business Unit, but by the North America Division. In the reporting period, however, the production site is neither part of Pipeline's nor of North America's Sustainability Roadmap 2020. This change has an impact on the indicators relating to Pipeline's and North America's quantitative targets, but it does not influence the production-related indicators, which are presented by product group. The integration of the production site into the Sustainability Roadmap 2020 is being prepared.



Status	Notes
<p>In 2017 accident frequency was significantly reduced throughout the Group and in each Division, in some of them by over 18% and 22% as compared to the previous year. At the same time, accident frequency increased in individual operating segments of certain Divisions. To our great regret, two fatal occupational accidents happened in the reporting year. We thoroughly analyze the causes of these developments and consistently pursue the zero accident target.</p>	<p>* Accident frequency as a reporting unit defined as: Number of occupational accidents / number of hours worked x 1,000,000; including temporary and agency workers as well as employees under term contracts.</p>
<p>The target was again met in 2017, including all ceramic production sites newly acquired since 2015. Measures to protect our employees against respirable crystalline silica will be continued and detailed reports will be presented voluntarily every two years.</p>	<p>The strategy aimed at protecting employees against respirable crystalline silica was evaluated in 2016 and it was decided not to continue annual data collection. Based on the new and more specific definitions of the indicators specified in the NEPSI social partnership agreement, we adjusted the definition of our protection targets accordingly.</p>
<p>At one main production site the consumption of natural gas was reduced by 4% compared to 2015. It was due to the conversion of selected production sites from high-emission energy sources to natural gas that the defined target of reducing the absolute consumption of natural gas was not fully reached in 2017.</p>	<p>The North America Division has set itself a new target for 2018, which relates energy consumption to the volume of production. The new target defines the reduction of specific energy consumption (fuel and electricity) at all main production sites.</p>
<p>Owing to further successful reduction measures taken in 2017, specific energy consumption in production was 11.7% lower than in 2010.</p>	<p>The change in specific energy consumption is communicated as an index in % based on kWh/ton (2010 = 100%).</p>
<p>In 2017, specific energy consumption in production was 5% above the reference value of 2010. The negative value indicates an increase of the specific energy consumption. The steep increase in specific energy consumption is due to the further development in the product mix.</p>	<p>The change in specific energy consumption is communicated as an index in % based on kWh/ton (2010 = 100%). As the target is to reduce specific energy consumption, a negative value does not indicate a reduction, but an increase. From 2017 onward, data are reported excluding the Pipeline site in North America. Pipeline is evaluating a new target definition which takes the developments of recent years into account, such as the trend toward lighter products.</p>
<p>The North America Division succeeded in converting all remaining active coal-fueled production sites to natural gas in 2017. Thus, the target set for the Division was reached.</p>	<p>Further possibilities of reducing CO<sub>2</sub> emissions are being studied.</p>
<p>Within the framework of Cradle to Cradle® re-certification in 2017, at least 5% of the annual CO<sub>2</sub> emissions generated in the respective plant were compensated.</p>	<p>This value is guaranteed through the measures taken to meet the requirements of regular Cradle to Cradle® re-certification.</p>
<p>In 2017, specific CO<sub>2</sub> emission from primary energy sources in production amounted to 96% of the value reported in 2013 and were further reduced from the level reported in 2016.</p>	<p>The change in specific CO<sub>2</sub> emissions is communicated as an index in % based on kg CO<sub>2</sub>/ton (2013 = 100%). Since the transition to the third EU emissions trading period in 2013, CO<sub>2</sub> emissions in 2013 have been used as the new reference value for future developments.</p>
<p>In 2017, indirect specific CO<sub>2</sub> emissions from electricity were 1% above the previous year's value. Among other factors, this development was influenced by changes in the product mix.</p>	<p>The change in specific CO<sub>2</sub> emissions is communicated as an index. For comparison's sake, the national conversion factors for indirect CO<sub>2</sub> emissions from 2015 were applied. From 2017 onward, data are being reported excluding the Pipeline site in North America.</p>
<p>Water consumption from public networks per ton of products produced increased significantly from the previous year's level. This development was influenced by technological aspects and changes in the product mix. Technological optimization measures are being taken. The defined target is maintained.</p>	<p>The reference value in 2014 was 0.62 m<sup>3</sup> per ton of products produced.</p>
<p>The target set for 2017 was almost attained. Based on improved technologies, tools and processes, as well as awareness building for resource efficiency among our employees, efforts are being made to further reduce the scrap rate.</p>	<p>The scrap rate in 2014 was 4.7% (baseline). The target for 2017 therefore is approximately 2.4%. In 2017 the scrap rate was 2.6%.</p>

2) North America: excl. Pipeline production site // 3) Pipeline: up to 2016 incl. production site in North America // 4) Restatement: After publication of the 2016 Sustainability Report, Pipeline reported a higher share of recycled material used in 2016 and the indicator was restated accordingly. // \* Accident frequency as a reporting unit defined as: Number of occupational accidents / number of hours worked x 1,000,000; including temporary and agency workers as well as employees under term contracts.



Target definitions	Deadlines	Performance		
Products		2015	2016	2017 <sup>1)</sup>
<b>Innovative products</b>				
Clay Building Materials Europe: Share of innovative products in revenues constant at 25%	Every year	27%	26%	31%
North America <sup>2)</sup> : 50% share of innovative products in total revenues	2017 and 2018	46%	49%	51%
Pipelife <sup>3)</sup> : Share of innovative products in revenues constant at 20%	Every year	21%	20%	19%
Semmelrock: Share of innovative products in revenues constant at 30%	Every year	39%	37%	38%
Steinzeug-Keramo: Share of innovative products in revenues constant at 35%	Every year	41%	39%	42%
<b>Recyclability, recycling and re-use</b>				
Pipelife <sup>3) 4)</sup> : Increase of the share of recycled material per ton of products produced to 70 kg	2020	64.6 kg/ton	65.4 kg/ton	67.2 kg/ton
<b>Social responsibility</b>				
<b>Business ethics &amp; compliance</b>				
Group level: Zero incidents of corruption	Every year	0	0	0

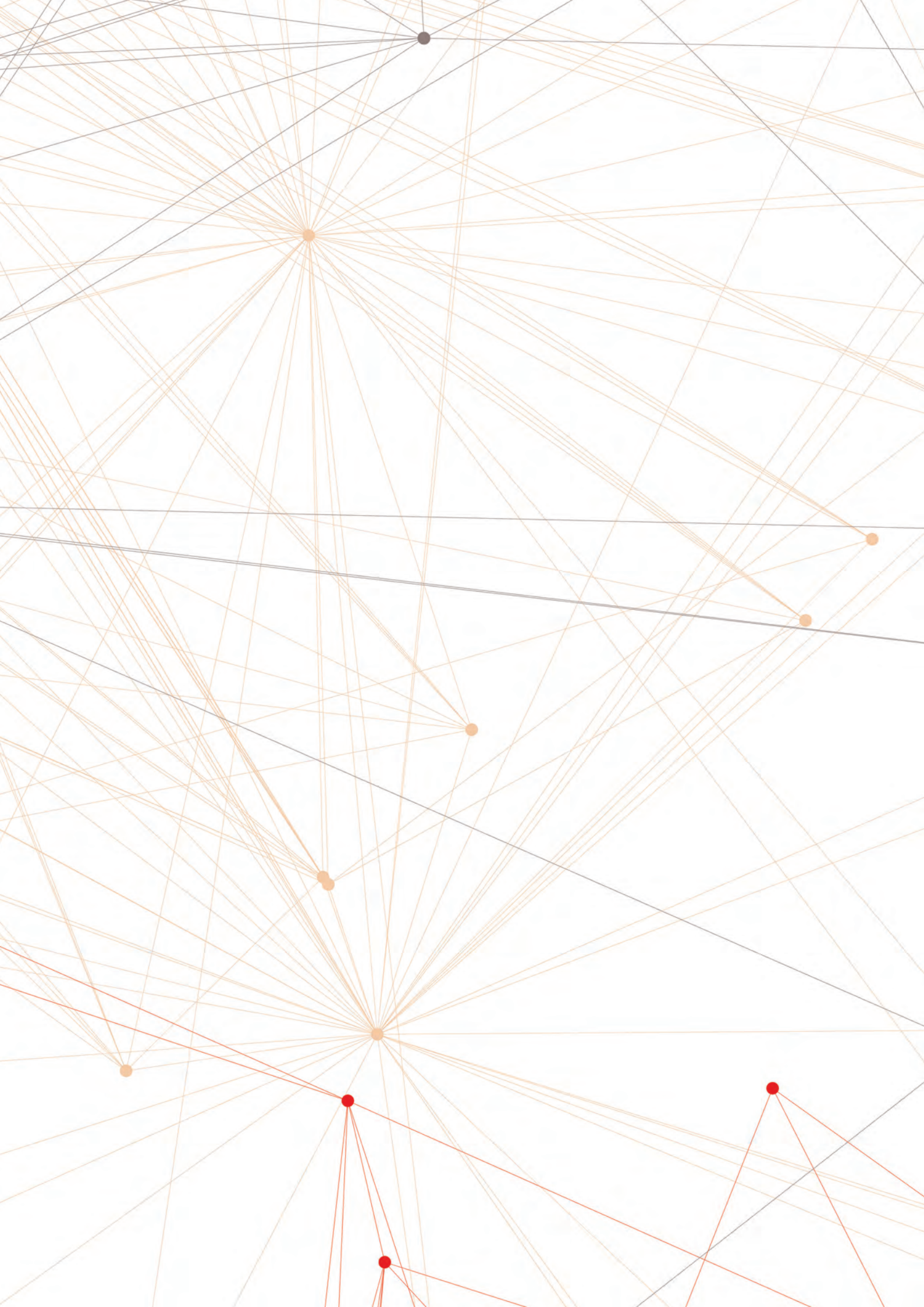
1) Since 2017, strategic decisions regarding sustainability management at the Pipelife production site in North America have no longer been taken by the Pipelife Business Unit, but by the North America Division. In the reporting period, however, the production site is neither part of Pipelife's nor of North America's Sustainability Roadmap 2020. This change has an impact on the indicators relating to Pipelife's and North America's quantitative targets, but it does not influence the production-related indicators, which are presented by product group. The integration of the production site into the Sustainability Roadmap 2020 is being prepared.



Notes	
Status	
The quantitative target set for the Business Unit in 2017 was reached.	These innovations include new products and system solutions that are durable and cost-efficient, contribute to the energy efficiency of buildings and to climate protection, or ensure safety and health for users of the buildings.
The quantitative target set for the Business Unit in 2017 was reached.	The definition agreed upon in 2016 includes products and system solutions that facilitate compliance with the new energy standards (International Energy Conservation Code, IECC) or offer a higher level of energy efficiency.
The quantitative target set for the Business Unit in 2017 was missed by a narrow margin, as some of the criteria of the definition no longer applied to individual products. A further increase in the share of innovative products in revenues is expected for 2018.	The definition agreed upon in 2015 includes product innovations that represent a significant improvement of an existing product as regards the production process, cost-efficiency, technical properties or ecological advantages. From 2017 onward, data will be reported excluding the Pipelife site in North America.
The quantitative target set for the Business Unit in 2017 was reached.	The definition includes product innovations that offer an added value for customers on account of their cost-efficiency, their technical properties or their ecological advantages, such as water-permeable pavers for unsealed surfaces.
The quantitative target set for the Business Unit in 2017 was reached.	The definition includes recently introduced products (e.g. Keraport shafts), products for particularly innovative applications (e.g. jacking pipes for trenchless installation), particularly sustainable efficient products in terms of energy efficiency and climate protection (e.g. pipes produced climate-neutrally).
Compared with the previous year, the share of recycled material per ton of products produced increased by 1.8 kg/ton.	The baseline in 2014 was 58.9 kg per ton of products produced. From 2017 onward, data are reported excluding the Pipelife site in North America.
As in previous years, no charges were brought against Wienerberger for suspected corruption nor had any penalties to be paid in 2017.	In 2017, 23 companies were audited by Internal Audit with a special focus on corruption and compliance with anti-trust law.

2) North America: excl. Pipelife production site // 3) Pipelife: up to 2016 incl. production site in North America // 4) Restatement: After publication of the 2016 Sustainability Report, Pipelife reported a higher share of recycled material used in 2016 and the indicator was restated accordingly. // \* Accident frequency as a reporting unit defined as: Number of occupational accidents / number of hours worked x 1,000,000; including temporary and agency workers as well as employees under term contracts.









# Employees



# Employees

## *Principles, Processes and Instruments*

Our employees are the basis of our success and a key factor for the successful development of our company. It is our task to create the necessary basis and the best possible conditions for the safety, health and satisfaction of our employees. To this end, we are making every effort to achieve continuous improvements in the fields of occupational health and safety, diversity and equal opportunities, and initial and further training. A culture of open communication in our company, the consistent involvement of our employees, and a motivating working environment are essential in this context. Our values provide the basis for our entrepreneurial actions. In particular, responsibility, integrity and respect govern Wienerberger's relationship with its employees.

## *Results of our 2014 Materiality Analysis*

The results of our materiality analysis on social aspects relating to our employees are described on page 40 of our 2016 Sustainability Report.

The results of our materiality analyses provide the basis for our five-year plan of action, the Wienerberger Sustainability Roadmap 2020. The employee-related targets and measures within the framework of the Wienerberger Sustainability Roadmap 2020 are summarized at the end of this chapter under "Targets and Measures Relating to Employees".

## *Collection of Indicators*

Temporary and agency workers: In previous reports, temporary and agency workers were included only after three months of uninterrupted work at Wienerberger. As of 2017, in the interest of even higher transparency, all temporary workers, as well as full-time equivalents, are included in the calculation of accident indicators from their first hour of work at Wienerberger. All indicators concerned by this change of definition are marked accordingly.

Percentage of women by functional area: Up to 2016, the percentage of women was indicated as a percentage of the company's total headcount, including temporary and agency workers (having worked at Wienerberger for more than three months without interruption). From 2017 onwards, this indicator excludes temporary and agency worker. The indicators in previous Sustainability Reports did not correspond to the scope of the reporting system applied.

Since 2017, strategic decisions regarding the sustainability management of the Pipelife production site in North America have no longer been taken by the Pipelife Business Unit, but by the North America Division. In the reporting period, however, the production site is no longer part of Pipelife's and not yet part of North America's Sustainability Roadmap 2020. This change has no influence on the employee-related indicators, which have always been presented by Division and by operating segment since the inception of sustainability reporting. The integration of the production site into the Sustainability Roadmap 2020 is being prepared.

All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

## *Employment Trends*

### **Number of employees**

In 2017, Wienerberger employed a workforce of 16,297 people (full-time equivalents), i.e. 1.9% more (306 FTEs) than in 2016. The highest increase (in FTEs) was reported by Clay Building Materials Europe (+239), followed by Pipes & Pavers Europe (+47), North America (+17) and Holding & Others (+5). In the latter, the increase in percentage terms is highest (+2.5%) on account of the low number of employees.



#### Ø Employees by operating segment <sup>1)</sup> full-time equivalents

	2015	2016	2017	Chg. in %
Clay Building Materials Western Europe	6,035	5,983	6,121	+2.3
Clay Building Materials Eastern Europe	4,184	4,350	4,451	+2.3
Clay Building Materials Europe	10,219	10,333	10,572	+2.3
Pipes & Pavers Western Europe	1,757	1,841	1,884	+2.3
Pipes & Pavers Eastern Europe	2,368	2,322	2,326	+0.2
Pipes & Pavers Europe	4,125	4,163	4,210	+1.1
North America	1,272	1,289	1,305	+1.3
Holding & Others	197	205	210	+2.5
<b>Wienerberger Group</b>	<b>15,813</b>	<b>15,990</b>	<b>16,297</b>	<b>+1.9</b>

1) All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences. // Temporary and agency workers are included as of their first hour of work at Wienerberger.

The number of employees increased the most in production (+184 full-time equivalents), followed by

sales (+78) and administration (+45). In percentage terms, the increase was highest in administration (+3.1%).

#### Ø Employees by functional area <sup>1)</sup> full-time equivalents

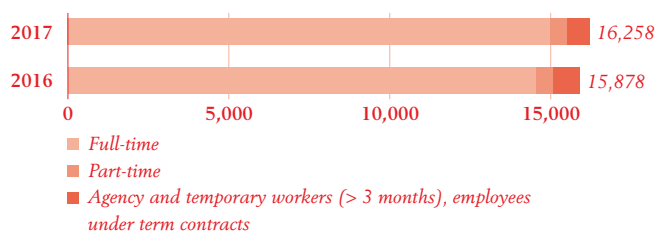
	2015	2016	2017	Chg. in %
Production	10,696	10,778	10,962	+1.7
Administration	1,404	1,462	1,507	+3.1
Sales (including marketing and inventories)	3,713	3,750	3,828	+2.1
<b>Total</b>	<b>15,813</b>	<b>15,990</b>	<b>16,297</b>	<b>+1.9</b>

1) All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences. // Temporary and agency workers are included as of their first hour of work at Wienerberger.

As at 31/12/2017, 92% of the total workforce (headcount) employed by the Wienerberger Group worked full-time and 3% part-time. Temporary and agency workers (regardless of the duration of their employment at Wienerberger) as well as employees under term contracts accounted for the remaining 5%. A very small part of the work at Wienerberger is performed by staff legally defined as self-employed. Altogether, the breakdown of employees by type of employment contract has remained almost unchanged since 2016.

#### Employees by employment relationship <sup>1)</sup>

based on headcount



1) Temporary and agency workers (having worked at Wienerberger for more than 3 months without interruption) included until 2016. From 2017 onwards excluding agency workers, who are not directly employed by Wienerberger.



## Employee turnover

Compared with the previous year, the rate of employee turnover (defined in note 1 in the following table) in the Wienerberger Group increased from 9.0% in 2016 to 9.2% in 2017. The only exception was the Pipes & Pavers Europe Division, which reported a slight

decrease in employee turnover from 11.2% to 11.1%. As in previous years, the figures of the North America Division are not fully comparable due to specific local legal provisions and are therefore again reported separately.

### Employee turnover by operating segment <sup>1)</sup> in %

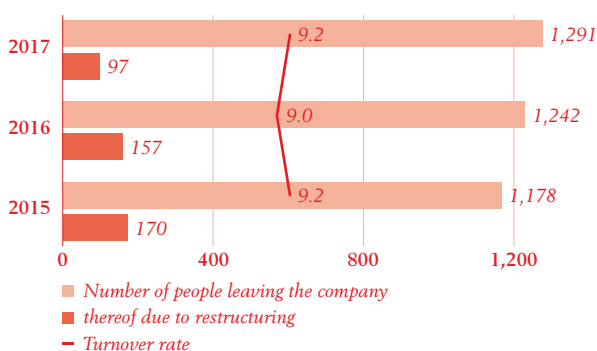
	2015	2016	2017
Clay Building Materials Western Europe	7.9	7.6	7.0
Clay Building Materials Eastern Europe	11.3	9.3	10.5
Clay Building Materials Europe	9.1	8.3	8.5
Pipes & Pavers Western Europe	6.8	7.8	9.5
Pipes & Pavers Eastern Europe	11.5	14.0	12.5
Pipes & Pavers Europe	9.4	11.2	11.1
Holding & Others	9.3	5.4	8.6
<b>Gesamt ohne North America</b>	<b>9.2</b>	<b>9.0</b>	<b>9.2</b>
North America <sup>2)</sup>	24.7	28.4	30.0

1) Ratio of persons leaving the Wienerberger Group (termination by employee or employer as well as mutually agreed termination) to average number of employees (headcount) in permanent employment during the 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. // All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences. // 2) Figures not fully comparable with those of other Divisions due to special local legislation.

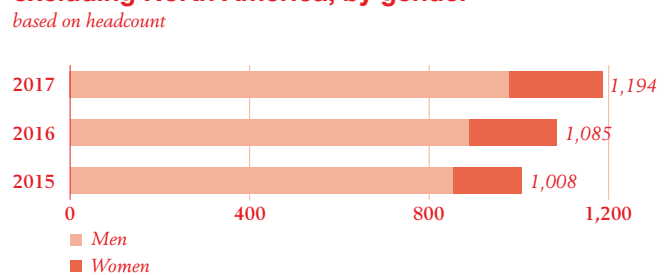
A total of 1,291 employees left the company in the reporting year (headcount; excl. North America Division, which is not fully comparable with other Divisions due to specific local legislation). Restructuring measures led to the elimination of 97 jobs. 1,194 employees – 212 women

and 982 men – left the Wienerberger Group for other reasons. 662 of these employees were between 30 and 49 years of age; 261 were under 30 and another 271 were over 50 years of age.

### Employee turnover excluding North America <sup>1)</sup> based on headcount



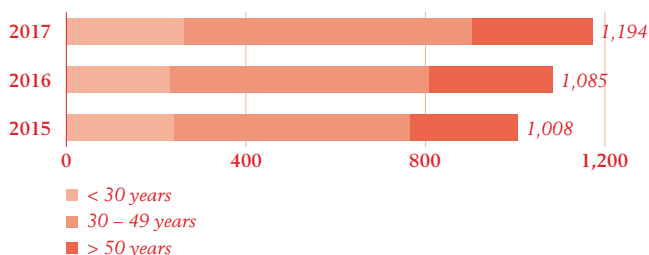
### Employees leaving, excluding restructuring, excluding North America, by gender <sup>1)</sup> based on headcount





### Employees leaving, excluding restructuring, excluding North America, by age <sup>1)</sup>

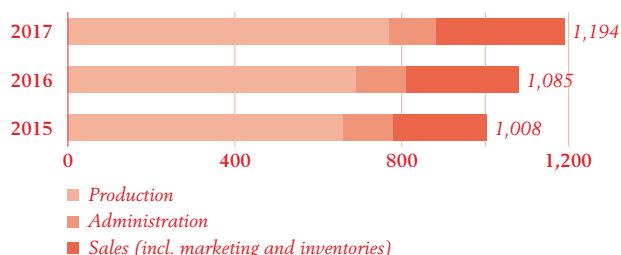
based on headcount



1) Employees in permanent employment

### Employees leaving, excluding restructuring, excluding North America, by functional area <sup>1)</sup>

based on headcount



1) Employees in permanent employment

Broken down by functional area, employee turnover declined in administration (-5%), contrasting with the Group-wide trend, which shows that employee turnover is highest in production and sales. The differentiated presentation of employee turnover, broken down by functional area, age and sex, supports our efforts to counteract employee turnover through targeted measures.

The average length of service with the company remains high at 13 years. We regard this as a strong vote of confidence in the Wienerberger Group by our employees.

### Employee satisfaction

The Wienerberger employee survey launched at holding company level in 2015 in cooperation with a competent partner was rolled out to another 25 organizations in 17 countries in 2017. The degree of satisfaction of our employees at these locations was established on the basis of a set of criteria. About 3,200 employees took part in the anonymous survey. The results, broken down by department cluster, were communicated to all employees at the locations concerned and further steps were initiated. By 2018, the employee survey will be completed in all country organizations of the Wienerberger Group and used as a basis for targeted measures to further improve employee satisfaction.

### Occupational Safety and Health

Wienerberger takes its responsibility for providing safe and healthy working conditions for its employees very seriously. This focus was confirmed by the materiality analysis performed in 2014 as an aspect of special relevance in our value chain. All normal capex and standard maintenance activities are carried out with the health and safety needs of our employees in mind. The Wienerberger Safety Initiative, launched in 2010, implemented Group-wide safety standards aimed at reducing the frequency and severity of occupational accidents. In 2014, the existing standards were up-graded for the entire Wienerberger Group and activities undertaken within the framework of the safety initiative were again stepped up. Moreover, each Business Unit implements its specific internal programs. Our indicators of the frequency and severity of accidents at Group level confirm the success of these activities. The safety measures taken by the individual Business Units are described at the end of this chapter under "Targets and Measures Relating to Employees".





### Accident frequency

Within the framework of Safety, Health and Education (SHE) reporting by the Wienerberger Group, all accidents that lead to a loss of at least one working day for the person concerned are recorded. In 2017, the frequency of accidents continued to decrease in almost all operating segments. At Group level, accident frequency was reduced by almost 17%. The Pipes & Pavers Europe Division even succeeded in reducing its accident frequency by 22%, followed by North America with 18% and Clay Building Materials Europe with 14% reductions. We are particularly proud of the steep reduction in accident frequency by 51% reported by the Pipes & Pavers Western Europe segment, which confirms the excellent success achieved through the consistent implementation of Steinzeug-Keramo's program of safety measures. To our regret,

however, accident frequency more than doubled in the Pipes & Pavers Eastern Europe segment due to the particularly steep increase in the number of accidents at Semmelrock. The circumstances of the accidents were thoroughly analyzed and comparable patterns identified. Since that time, specific measures have been implemented and targeted training sessions have been organized, the objective being to ensure a constantly high level of attention among our employees and, at the same time, reduce risk-taking behavior. We continue to cooperate intensively with our employees across all management levels. Our main focus is on drawing employees' attention to potential sources of danger and on driving home the binding nature of safety rules and the use of personal protective equipment. We continue to work toward our zero accidents target for the entire Group.

Accident frequency by operating segment <sup>1)</sup>	2015	2016	2017	Chg in %
Clay Building Materials Western Europe	10.7	8.3	6.0	-27.8
Clay Building Materials Eastern Europe	6.6	5.1	5.8	+15.4
Clay Building Materials Europe	8.9	6.9	5.9	-14.0
Pipes & Pavers Western Europe	15.5	15.1	7.4	-51.0
Pipes & Pavers Eastern Europe	3.2	2.2	4.8	>100
Pipes & Pavers Europe	8.3	7.6	5.9	-22.0
North America	1.9	1.9	1.5	-18.3
Holding & Others	0.0	0.0	0.0	-
<b>Wienerberger Group</b>	<b>8.0</b>	<b>6.5</b>	<b>5.4</b>	<b>-16.8</b>

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) as well as employees under term contracts. // All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences. // 2) The indicator for 2015 published in the 2016 Sustainability Report was restated, as the data base was updated.

### Accident severity

The severity of accidents, measured as the number of accident-related sick-leave days per million hours worked, also declined throughout the Group in a year-on-year comparison from 177 to 173 (-2.1%). Although fewer accidents were reported in the Clay Building Materials Europe Division (see paragraph on accident frequency), these led to more accident-related sick-leave days. We

reacted to this development by fine-tuning our program of occupational safety measures in the Division. We note with satisfaction that the intensive occupational safety program implemented at Steinzeug-Keramo had a highly positive impact on the segment's accident severity indicators, which decreased by 46.4%. The steep increase in accident severity in the Pipes & Pavers Eastern Europe segment is due to the relatively high number of

occupational accidents with longer sick-leave periods at Semmelrock. Pipelife succeeded in continuously reducing the level of accident severity in recent years, but a single accident resulting in a longer sick-leave period had a negative impact on the indicator for 2017. The operating

segments react to this development with clearly targeted measures. In North America, accident severity dropped by almost 30%, as an employee returned to work after a long period of accident-related sick leave.

Accident severity by operating segment <sup>1)</sup>	2015	2016	2017	Chg. in %
Clay Building Materials Western Europe	339	218	216	-0.9
Clay Building Materials Eastern Europe	201	165	174	+5.4
Clay Building Materials Europe	279	195	198	+1.6
Pipes & Pavers Western Europe	185	328	175	-46.4
Pipes & Pavers Eastern Europe	71	71	162	>100
Pipes & Pavers Europe	119	179	168	-6.1
North America	25	71	50	-29.5
Holding & Others	0	0	0	-
<b>Wienerberger Group</b>	<b>209</b>	<b>177</b>	<b>173</b>	<b>-2.1</b>

1) Number of occupational accidents / number of hours worked x 1,000,000; // incl. agency and temporary workers (from their first hour of work at Wienerberger) and employees under term contracts. // All non-financial indicators were calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

It saddens us to report that in 2017 again two fatal accidents occurred in the Clay Building Materials Europe segment of the Wienerberger Group. The victims were production workers, one in France and one in Romania. Wienerberger deeply regrets these accidents. We studied the circumstances of the accidents in great depth and consistently pursued our measures aimed at increasing safety at work for our employees.

Going beyond the Group-wide safety standard, each Business Unit has implemented its own safety programs, which are described in detail on page 45 of the 2016 Sustainability Report

### Sick-leave days not due to occupational accidents

The average number of sick-leave days not due to occupational accidents per employee of the Wienerberger Group (excl. the North America Division) increased from 9.6 in 2016 to 10.2 in 2017. This development is due to

more long-term sick-leave periods in almost all operating segments, especially in Clay Building Materials Eastern Europe and Pipes & Pavers Western Europe. Due to specific local legislation, the numbers and percentages of sick-leave days in North America are not comparable with the figures for the rest of the Wienerberger Group.

Prevention is an important health-promoting factor, especially in view of the increasing frequency of long-term sick-leave periods. Besides regular health screenings, company physicians are available for consultation by employees; workplaces are analyzed for their ergonomic characteristics, and employees are encouraged to participate in programs promoting fitness and health.

In North America, all full-time employees are covered by supplementary health insurance, the scope of which exceeds that of the Affordable Care Act (ACA) in some respects.



**Sick-leave days not due to occupational accidents  
per employee by operating segment <sup>1)</sup>**

	2015	2016	2017	Chg. in %
Clay Building Materials Western Europe	10.4	11.3	<b>11.4</b>	+1.4
Clay Building Materials Eastern Europe	7.6	7.8	<b>8.8</b>	+13.3
Clay Building Materials Europe	9.3	9.8	<b>10.3</b>	+5.5
Pipes & Pavers Western Europe	9.8	10.5	<b>12.1</b>	+15.0
Pipes & Pavers Eastern Europe	8.0	8.4	<b>8.7</b>	+4.0
Pipes & Pavers Europe	8.8	9.3	<b>10.3</b>	+9.8
Holding & Others	4.3	4.1	<b>3.6</b>	-11.2
<b>Total excl. North America</b>	<b>9.1</b>	<b>9.6</b>	<b>10.2</b>	<b>+6.5</b>
North America <sup>2)</sup>	2.9	3.4	<b>2.9</b>	-15.3

1) Agency and temporary workers (having worked at Wienerberger for more than 3 months without interruption) and employees under term contracts included until 2016. From 2017 onwards excluding agency workers, who are not directly employed by Wienerberger. // All non-financial indicators were calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences. // 2) Figures not fully comparable with those of other Divisions due to special local legislation (regarding sick leave of employees) and therefore reported separately. separat ausgewiesen.

### Protection against respirable crystalline silica

Since 2008, companies from numerous industries have reported on measures taken to protect employees against respirable crystalline silica on a voluntary basis. The survey is conducted every two years within the framework of the NEPSI social partnership agreement between employees and employers (Negotiation Platform on Silica, [www.nepsi.eu/en/nepsi](http://www.nepsi.eu/en/nepsi)). 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 production lines concerned.

Within the framework of the 2017 survey, Wienerberger for the first time reports additional indicators for which comparative values from prior years are not available. Moreover, the definitions of certain indicators were clarified and are therefore no longer fully comparable with those of previous years. In its 2017 survey, Wienerberger applied the NEPSI system limits and collected indicators exclusively at ceramic production sites. At the same time, however, we extended the geographic scope of the NEPSI system in order to obtain a clear picture of all ceramic production sites of the Wienerberger Group. Details on the geographic scope are contained in the footnotes of the following table.


**Core indicators on respirable crystalline silica CBME <sup>1)</sup>**  
 in %

	2013 <sup>2)</sup>	2015	2017
<b>Percentage of production sites concerned:</b>			
Number of production sites reporting	97.7	97.7	<b>96.9</b>
Production sites with technical measures to reduce the generation / dispersion of respirable crystalline silica	98.4	92.9	<b>98.4</b>
Production sites with organizational measures to reduce the generation of respirable crystalline silica	100.0	92.1	<b>100.0</b>
Production sites where personal protective equipment is distributed to and used by the employees	100.0	99.2	<b>100.0</b>
<b>Percentage of employees at the production sites concerned:</b>			
Employees potentially exposed to respirable crystalline silica	80.2	87.4	<b>84.9</b>
of which employees potentially exposed to respirable crystalline silica subject to hazard assessment <sup>3)</sup>	n.a.	n.a.	<b>100.0</b>
of which employees potentially exposed to respirable crystalline silica subject to dust monitoring <sup>4)</sup>	91.2	96.7	<b>80.7</b>
of which employees potentially exposed to respirable crystalline silica subject to general health monitoring	96.4	98.5	<b>97.7</b>
of which employees potentially exposed to respirable crystalline silica who have received training	93.0	90.6	<b>94.5</b>
of which employees potentially exposed to respirable crystalline silica requiring medical screening for silicosis <sup>3)</sup>	n.a.	n.a.	<b>36.1</b>
of which employees potentially exposed to respirable crystalline for whom a silicosis screening file was created <sup>3)</sup>	n.a.	27.3	<b>48.4</b>

1) CBME: Clay Building Materials Europe Business Unit (including Russia and India). // All non-financial indicators were calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences. // 2) Data for Norway and Switzerland not included in 2013. // 3) n.a.: No information available, as data were not collected or not included at the time of the survey. // 4) In 2017 the term “monitoring” was specified and differentiated into “hazard assessment” and “dust measurement”. Therefore, the indicator “of which employees potentially exposed to respirable crystalline silica and subject to dust monitoring” is not directly comparable with previous years.

The percentage of reporting production sites was lower in 2017 than in 2015, as the internal definition applied in 2017 was fine-tuned and non-ceramic production sites were excluded in accordance with the NEPSI system limits. In 2015, non-ceramic production sites were included in North America, which has an influence on the following table.

Wienerberger included the indicator “employees potentially exposed to respirable crystalline silica subject to hazard assessment” for the first time in the 2017 survey. It permits a clearer differentiation between hazard assessment and dust monitoring, which has a direct influence on the indicator “employees potentially exposed to respirable crystalline silica subject to dust monitoring”. Starting in 2017, only on-site measurements qualify as dust monitoring for this indicator, which results in a reduction of the value reported for 2017 compared to 2015.



“Employees potentially exposed to respirable crystalline silica requiring medical screening for silicosis” is a new indicator introduced in 2017. The indicator shows how many employees have to undergo medical screening for silicosis, e.g. as required by the labor inspectorate and/or by national legislation.

The percentage of “employees potentially exposed to respirable crystalline silica for whom a silicosis health check file was created” was reported for the first time in 2015. The indicator shows how many employees potentially exposed to respirable crystalline silica underwent a specific medical check for respirable crystalline silica and for whom a silicosis health check file was created.

**Core indicators on respirable crystalline silica at Group level <sup>1)</sup>**  
in %

	2013 <sup>2)</sup>	2015	2017
<b>Percentage of production sites concerned:</b>			
Production sites reporting	97.9	98.0	<b>97.8</b>
Production sites with technical measures to reduce the generation / dispersion of respirable crystalline silica	98.4	93.8	<b>98.5</b>
Production sites with organizational measures to reduce the generation of respirable crystalline silica	100.0	88.3	<b>100.0</b>
Production sites where personal protective equipment is distributed to and used by the employees	100.0	99.3	<b>100.0</b>
<b>Percentage of employees at the production sites concerned:</b>			
Employees potentially exposed to respirable crystalline silica	75.5	84.3	<b>85.4</b>
of which employees potentially exposed to respirable crystalline silica subject to hazard assessment <sup>3)</sup>	n.a.	n.a.	<b>99.0</b>
of which employees potentially exposed to respirable crystalline silica subject to dust monitoring <sup>4)</sup>	89.4	95.2	<b>79.3</b>
of which employees potentially exposed to respirable crystalline silica subject to general health monitoring	92.6	95.9	<b>96.2</b>
of which employees potentially exposed to respirable crystalline silica who have received training	89.8	90.6	<b>92.2</b>
of which employees potentially exposed to respirable crystalline silica requiring medical screening for silicosis <sup>3)</sup>	n.a.	n.a.	<b>34.4</b>
of which employees potentially exposed to respirable crystalline for whom a silicosis screening file was created <sup>3)</sup>	n.a.	26.1	<b>47.7</b>

1) CBME (including Russia and India), North America, Steinzeug-Keramo. // All non-financial indicators were calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences. // 2) Data for Norway and Switzerland not included in 2013. // 3) n.a.: No information available, as data were not collected or not included at the time of the survey. // 4) In 2017 the term “monitoring” was specified and differentiated into “hazard assessment” and “dust measurement”. Therefore, the indicator “of which employees potentially exposed to respirable crystalline silica and subject to dust monitoring” is not directly comparable with previous years.

## Health, safety and human rights at our own extraction sites

When we examined the supply chain within the framework of our materiality analysis, we first took a closer look at our own clay pits. Compliance with all rules on occupational safety and protection against health

hazards is an absolute must at Wienerberger. This also applies to our clay extraction sites. Protecting workers from exposure to dust and noise as well as avoiding occupational accidents at our own extraction sites are our top priorities.





### ***Communication and Employee Involvement***

It is our goal to further strengthen the values of our corporate culture through continuous communication measures and translate them into practice throughout the Group. We use a variety of communication channels and platforms to inform our employees about corporate targets and strategies as well as about current developments relating to our shared values: competence, passion, integrity and respect, customer orientation, entrepreneurship, quality and responsibility.

Examples of communication measures at Group level aimed at fostering employee involvement are described on page 47 of the 2016 Sustainability Report.

### **Industrial Relations**

The Wienerberger Social Charter, which confirms the company's commitment to compliance with the relevant conventions and recommendations of the International Labor Organization (ILO), was signed in 2001 by the Managing Board of Wienerberger AG and the chairman of the European Forum, a social partnership body, in Strasbourg. Through this charter, Wienerberger demonstrates its global commitment to the respect of 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. In 2017, about 72% of all Wienerberger employees were covered by collective bargaining agreements.

The European Works Council was established in 2011 as the successor to the European Forum. The goals of the European Works Council are to engage in constructive social dialogue and to facilitate networking among local bodies representing employee interests. Other important objectives of the European Works Council are to improve workplace conditions (protection of employees against hazards and implementation of safety standards) and to protect employees' health. The European Works Council also strives to ensure fair and

just remuneration. Currently, eleven countries are represented by 34 delegates. The steering committee of the European Works Council includes five elected delegates from Austria, the Netherlands, Germany and Poland. The European Works Council meets twice a year; the steering committee also holds at least two meetings a year. Several employee representatives are members of the Supervisory Board of Wienerberger and, as such, closely involved in the strategic development of the Wienerberger Group.

### ***Initial and Further Training and Human Resources Development***

At Wienerberger, we believe in advancing and supporting our employees in a targeted fashion and in facilitating the cross-border exchange of knowledge. The training program offered includes internal as well as external initial and further training measures. The average number of hours per employee spent in training increased from 12.7 in 2016 to 13.6 in 2017 (+7.1%). Efforts in the field of safety training were stepped up as well. In particular, training within the framework of our safety programs enjoys a high priority and is being thoroughly and consistently implemented.

The following table, broken down by operating segment, does not include international training events and on-the-job-training. International training measures include Group-wide programs, such as Ready4Excellence or the Leadership Journey, which are organized centrally and financed by the holding company. In contrast to the local initiatives, the number of hours per employee spent in international training decreased by 23% from the previous year's level. This development was due to high demand for international training programs with contents tailor-made to specific local needs. Therefore, some of the international training programs were reported as local training activities. Including international training events and on-the-job training, the number of hours per Wienerberger employee spent in training amounted to 14.1 in 2017, up by 6% from 13.3 hours in 2016.



Training hours per employee/year by operating segment <sup>1)</sup>	2015	2016	2017	Chg. in %
Clay Building Materials Western Europe	15.2	14.6	13.7	-5.7
Clay Building Materials Eastern Europe	15.6	10.6	15.2	+42.7
Clay Building Materials Europe	15.3	12.9	14.3	+11.1
Pipes & Pavers Western Europe	10.7	13.8	13.3	-4.0
Pipes & Pavers Eastern Europe	16.7	7.5	10.9	+45.5
Pipes & Pavers Europe	14.0	10.4	12.0	+15.7
North America	22.7	12.8	10.5	-18.0
Holding & Others	13.9	50.5	28.4	-43.8
<b>Wienerberger Group</b>	<b>15.5</b>	<b>12.7</b>	<b>13.6</b>	<b>+7.1</b>

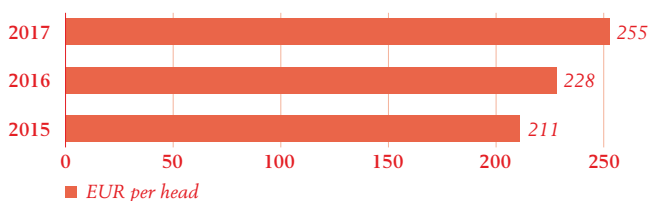
1) Internal and external initial and further training measures; number of hours per employee. International training events and on-the-job training not included in this table. Agency and temporary workers (having worked at Wienerberger for more than 3 months without interruption) and employees under term contracts included until 2016. From 2017 onwards excluding agency workers, who are not directly employed by Wienerberger. // All non-financial indicators were calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

We are convinced that investments in the development of our employees generate added value for Wienerberger. The average training expenses per employee in 2017, including international training programs, amounted to € 255, which corresponds to an increase of € 27 per employee over the previous year's value.

All Wienerberger training programs are designed to promote networking and facilitate international knowledge transfer. They are aimed at providing training that is tailored to the employees' specific areas of work and foster long-term succession management. Examples of individual training programs are presented on page 49 of the 2016 Sustainability Report.

### Average training expenses per employee <sup>1)</sup>

based on headcount



1) Internal and external initial and further training measures; number of hours per employee. International training events and on-the-job training not included in this table. Agency and temporary workers (having worked at Wienerberger for more than 3 months without interruption) and employees under term contracts included until 2016. From 2017 onwards excluding agency workers, who are not directly employed by Wienerberger.

### Diversity and Equal Opportunities

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. Since the beginning of data collection on possible cases of discrimination, no such incidents have been reported.

For further information on Wienerberger's fundamental principles and activities in the field of diversity and equal opportunities, please refer to page 49 of the 2016 Sustainability Report. The Wienerberger diversity policy is introduced on page 54 of the 2017 Annual Report.

## Gender

As at 31/12/2017, the total percentage of women employed by the Wienerberger Group was 13.8%, i.e.

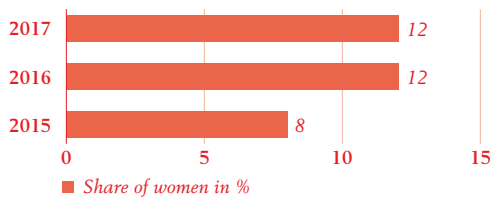
slightly above the previous year's value (13.6%). The percentages of women in the individual functional areas remained almost unchanged.

Percentage of women by functional area <sup>1)</sup>		31/12/2015	31/12/2016	31/12/2017
Percentage of women	<i>in headcount</i>	2,115	2,155	<b>2,248</b>
Production	<i>in %</i>	4.1	4.2	<b>4.3</b>
Administration	<i>in %</i>	48.1	48.1	<b>47.3</b>
Sales (incl. marketing and inventories)	<i>in %</i>	24.3	24.1	<b>25.1</b>
<b>Total</b>	<i>in %</i>	<b>13.5</b>	<b>13.6</b>	<b>13.8</b>

1) Agency and temporary workers (having worked at Wienerberger for more than 3 months without interruption) and employees under term contracts included until 2016. From 2017 onwards excluding agency workers, who are not directly employed by Wienerberger. // All non-financial indicators were calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

## Share of women in senior management

*based on headcount*



In 2017, 12% of senior management positions were held by women, unchanged from the previous year. We continue to adhere to our policy of giving preference to women for new appointments to senior management and

executive positions, provided the candidates' qualifications are equal. One specific measure to increase the number of women in senior management and executive positions at Wienerberger is to enable women to embark on suitable career paths at an early point in time.

We collect data not only on the percentage of women in the functional areas, but also on the number and share of newly recruited women and men and on employees working part-time. On the basis of these indicators, we can take a more differentiated approach in human resources management in order to position ourselves as a family-friendly company and to define appropriate quantitative targets for the future.

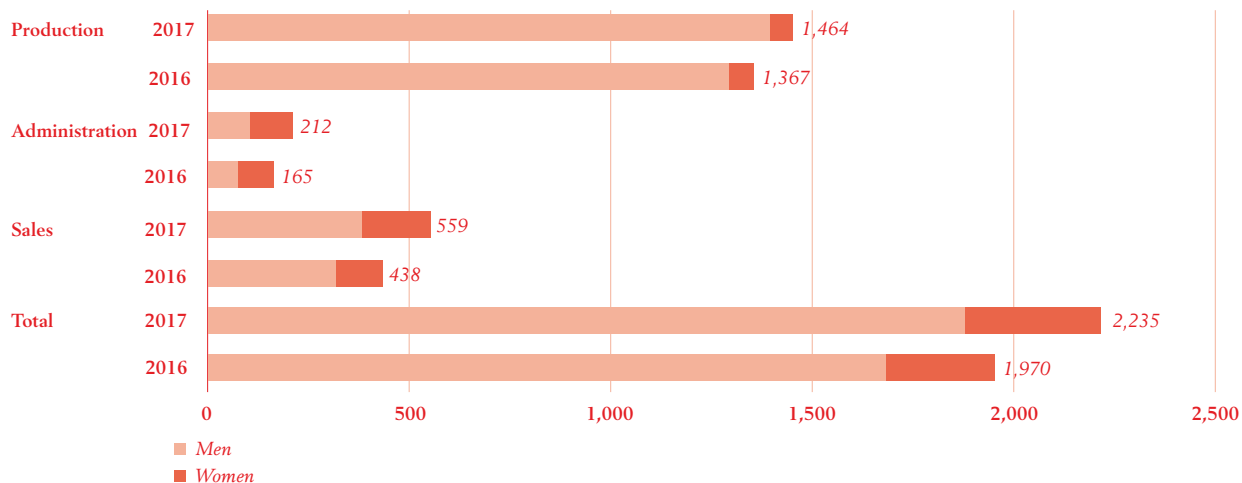
Number of newly recruited employees by gender and functional area <sup>1)</sup> <i>Headcount as at 31/12/2017</i>	Women	Women in %	Men	Men in %
Production	58	4.0	1,406	96.0
Administration	109	51.4	103	48.6
Sales (incl. marketing and inventories)	175	31.3	384	68.7
<b>Total</b>	<b>342</b>	<b>15.3</b>	<b>1,893</b>	<b>84.7</b>

1) Agency and temporary workers (having worked at Wienerberger for more than 3 months without interruption) and employees under term contracts included until 2016. From 2017 onwards excluding agency workers, who are not directly employed by Wienerberger. // All non-financial indicators were calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.



### Number of newly recruited employees by gender and functional area 2016/2017 <sup>1)</sup>

based on headcount



1) Agency and temporary workers (having worked at Wienerberger for more than 3 months without interruption) and employees under term contracts included until 2016. From 2017 onwards excluding agency workers, who are not directly employed by Wienerberger.

In 2017, the number of new entrants was 2,235, i.e. 265 more than in 2016. The number of women among the new entrants rose from 274 to 342 in 2017, the number of men from 1,696 to 1,893. The percentage of women among the new entrants increased from 13.9% to 15.3%, while the percentage of men declined from 86.1% to 84.7%.

The reconciliation of work and family life is an issue of special concern to Wienerberger. We therefore offer our employees the possibility of working part-time. This offer is being taken up by a growing number of female as well as male employees.

### Number of women and men working part-time <sup>1)</sup>

Headcount as at 31/12/2017

	Total	of which part-time	Part-time in %
Women	2,134	344	16.1
Men	13,397	208	1.6
<b>Total</b>	<b>15,531</b>	<b>552</b>	<b>3.6</b>

1) Employees in permanent employment. // All non-financial indicators were calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

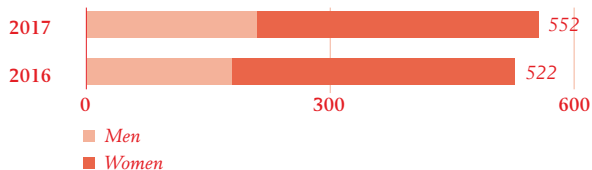
The percentage of Wienerberger employees working part-time increased slightly to 3.6% in 2017 (+0.1 percentage points). The percentage of women in part-time employment amounted to 16.1% in 2017 and

was slightly lower than in the previous year (-0.7 percentage points), while the percentage of men working part-time increased slightly to 1.6% in 2017 (+0.2 percentage points).



### Number of women and men working part-time 2016/2017 <sup>1)</sup>

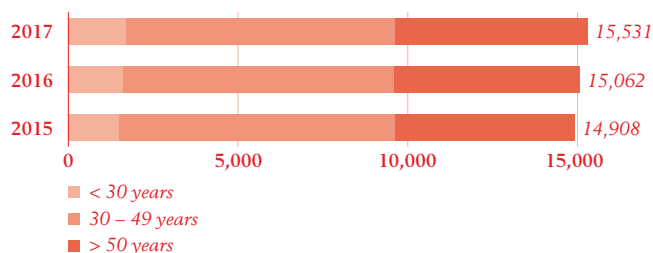
based on headcount



1) Share of employees in permanent employment

### Employees by age <sup>1)</sup>

based on headcount



1) Share of employees in permanent employment

### Age

As in previous years, the long average length of service of 13 years with the company was reflected in the age structure of the workforce with permanent contracts in 2017, which hardly changed in comparison with 2016. In 2017, 52% (-1 percentage point) of our employees were between 30 and 49 years of age. As in the previous year, 11% were younger than 30 and 37% were older than 50.

Information on Group-wide training and development measures for young employees as well as on succession management and continuity in positions that are critical for Wienerberger's success is contained on page 51 of the 2016 Sustainability Report.

### Targets and Measures Relating to our Employees

The targets and measures described in the following were defined by the Managing Board of Wienerberger AG and the management of the respective Wienerberger Business Units on the basis of the materiality matrix elaborated in 2014. They are part of the Wienerberger Sustainability Roadmap 2020.

The data for North America and/or Pipelife based on the Sustainability Roadmap 2020 do not include the Pipelife site in North America. Nevertheless, the targets and measures defined for the entire Wienerberger Group also apply to this production site.





## Safety of our employees

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### At Group level

#### Quantitative target

- › The long-term target is zero accidents within the Wienerberger Group.
- 

### Clay Building Materials Europe

#### 2017

- › The Health & Safety Standard with specific minimum requirements to be met by the Division and the measures and instruments provided for were rolled out to the country organizations; implementation was audited on site.
- › The activities of the Safety Roadmap were implemented. The Safety Roadmap is a binding plan of action to improve occupational safety within the Division.
- › Online training programs on occupational safety were implemented.
- › The Safety Alert and the Safety Award programs were continued; occupational safety was addressed within the framework of the Health & Safety Conference.

#### 2018

- › Further measures of the Health & Safety Standard as well as the instruments provided for are being implemented by the country organizations.
  - › Implementation of the Health & Safety Standard by the country organizations is being audited.
  - › The activities along the Safety Roadmap continue to be implemented.
- 

### North America

#### 2017

- › Accident severity was reduced by 29.5% through a joint focus on communication, training and the analysis of causes of accidents.
- › The monthly meetings on current safety issues and accident indicators between the top management and the local management were continued.
- › Accident reports were sent to the top management and the local management on a monthly basis.
- › Annual safety targets and corresponding measures were defined for each production site (instead of targets for the coming two years).

#### 2018

- › The processes described above are being continued.
  - › New criteria for success will be introduced to foster more active involvement of employees in matters of occupational safety.
- 

### Pipelife

#### 2017

- › The safety app was upgraded: The software for the documentation of potential safety risks is easier to use, responsibilities are clearly assigned, and an overview of the measures implemented is instantly available.
  - › All occupational safety programs and measures were consistently continued: the Safety Call, incl. accident reports and accident analyses, safety audits, 5 S (a method to keep workplaces and their environment safe, clean and tidy), the Zero Accident Club, and programs aimed at observing employee behavior, such as the Behavior Observation Program (BOP) and Lock-out/Tag-out (LOTO).
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## Safety of our employees

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### *Pipelife*

#### 2017

- The “Take Care” campaign was continued: All Pipelife production sites were provided with a uniform set of material: brochures, warning signs and stickers for machinery and equipment in the local language, containing safety instructions for employees and visitors touring the plant.
- The Pipelife Safety Portal, a centralized online platform for exchanges on safety issues within the Pipelife Group, remained operational. All guidelines on the Group's minimum safety standards as well as information on current measures and programs can be accessed via this platform. It also includes a compilation of all written accident reports, complete with detailed analyses and recommendations for accident prevention for other organizations.
- Within the framework of the Zero Accident Club, the organization reporting the longest accident-free period was honored with the Pipelife Safety Award for the year 2016.

#### 2018

- The processes outlined above are being continued.
- 

### *Semmelrock*

#### 2017

- The “Safety Book” was translated into all local languages of the Semmelrock production sites and the rollout of its contents was completed through workshops and training programs.
- The “Safety@Semmelrock” program was continued; production processes were optimized and plant safety was enhanced through technical safety measures.
- The “Accident Investigation Report Semmelrock” (AIRS) system, with an improved method of accident analysis and a focus on the cause(s) of accidents, as well as an internal communication platform remained in use.
- A “safety improvement plan” was drawn up for each plant; measures to enhance safety are documented, prioritized and implemented over a period of three years, depending on the availability of resources.

#### 2018

- The “Safety@Semmelrock” program and the use of the AIRS system will be continued.
  - Implementation of the “safety improvement plan” will be audited in order to verify if the safety-related measures provided for have been implemented.
  - Training programs for shift leaders with a special focus on “cleaning, repair and maintenance” will be organized in order to raise awareness for potential hazards.
  - A new safety app will be introduced.
- 

### *Steinzeug-Keramo*

#### 2017

- DuPont™ STOP® (safety training observation program) was continued at all three production sites.
- External audits were performed by DuPont™.
- Risk analyses were performed at production workplaces.

#### 2018

- The activities outlined above are being continued.
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## Health of our employees

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### *At Group level*

#### **Quantitative target**

- › At least 95% of all ceramic production sites reporting on measures to protect employees against respirable crystalline silica.

#### **2017**

- › All relevant data on exposure to respirable crystalline silica and the protection of employees against exposure were collected at the ceramic production sites across the Group. This survey was performed via NEPSI, (Negotiation Platform on Silica, [www.nepsi.eu/de/nepsi](http://www.nepsi.eu/de/nepsi)), a shared online platform.

#### **2018**

- › The measures to protect our employees against exposure to respirable crystalline silica are being continued.
- 

### *Clay Building Materials Europe*

#### **2017**

- › The issue of protection against respirable crystalline silica was addressed within the framework of the health & safety program.
- › The local standards of protection against exposure to respirable crystalline silica were redefined.
- › Based on the new NEPSI indicators, the necessary measures were implemented at the production sites.
- › Best practice examples of how to avoid exposure of employees to respirable crystalline silica were documented.
- › Technological improvements were implemented.

#### **2018**

- › Work on the protection of employees against exposure to respirable crystalline silica is being continued within the framework of the health & safety program.
  - › The document listing best practice examples of how to avoid exposure of employees to respirable crystalline silica will be completed.
  - › Additional technological improvements are being implemented.
- 

### *North America*

#### **2017**

- › Ongoing programs providing for protective measures for employees potentially exposed to respirable crystalline silica were continued according to previously defined standards.
- › Supplementary health insurance coverage was provided for all full-time employees of North America, the scope of which goes beyond the provisions of the Affordable Care Act (ACA) in some respects.

#### **2018**

- › The aforementioned initiatives regarding the measurement of respirable crystalline silica and protection against exposure to respirable crystalline silica are being continued.
  - › An external expert will perform measurements of respirable crystalline silica at all relevant production sites.
-



## Health of our employees

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### *North America*

#### 2018

- › Supplementary health insurance coverage will again be provided for all full-time employees of North America, the scope of which goes beyond the provisions of the Affordable Care Act (ACA) in some respects.

### *Semmelrock*

#### 2017

- › The measures aimed at ensuring healthy workplace conditions were implemented within the framework of the “Safey@Semmelrock” program.
- › Best practices aimed at reducing stress factors at the workplace (e.g. noise, dust, suboptimal lighting) as well as measures taken to reduce excessive burdens of physical labor were exchanged between production sites.
- › Within the framework of two projects, working conditions at selected production sites were evaluated and improved.

#### 2018

- › The measures described above are being continued.

### *Steinzeug-Keramo*

#### 2017

- › All fields of work were analyzed for potential exposure to respirable crystalline silica.
- › Technical equipment for the reduction of respirable crystalline silica was further optimized.

#### 2018

- › The measures aimed at protecting employees from respirable crystalline silica are being continued.

## Communication and employee involvement

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### *At Group level*

#### 2017

- › The rollout of the new Intranet (iComm) to all business units and their local companies, aimed at improving employee communication and interaction, was completed.

#### 2018

- › The user-friendliness of the Intranet (iComm) is being increased and Group-wide access via mobile devices will be possible.

## Employee satisfaction

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### *At Group level*

#### 2017

- › Corporate Human Resources rolled out the employee survey aimed at evaluating employee satisfaction to another 25 organizations in 17 countries and developed a set of measures on the basis of the results obtained. The employee survey, which was conducted by external partners, was started at the Wienerberger holding company in 2015.

#### 2018

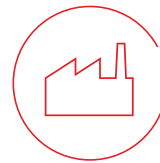
- › The employee survey will be completed across the entire Wienerberger Group.
-





# Production

The background of the image is a light blue gradient. Overlaid on this are numerous thin, intersecting lines in shades of grey, orange, and red. Scattered throughout the composition are small, solid-colored dots in red, orange, and grey, some of which appear to be connected by the lines, creating a network-like or abstract geometric pattern.



# Production

## *Principles, Processes and Instruments*

Production in harmony with the environment is a matter of great importance for Wienerberger. For us, the conservation of resources is a key aspect in production. In particular, we focus on the responsible use of raw materials, energy and water. We constantly work on contributing to the fight against climate change through greater energy efficiency and the reduction of our CO<sub>2</sub> emissions. At the same time, we strive to increase the amount of recycled material used in all business units, provided this is technically and economically feasible.

Research and development (R&D) are among the priorities of Wienerberger's strategic planning. One of the core activities of R&D is to optimize production processes and to develop innovative products and services (see chapter "Products" from page 74). R&D expenditure in 2017 amounted to € 11 million, which corresponds to 0.4% of the Group's revenues.

Environmentally relevant aspects have also been integrated into the company's quality management systems (QMS), which are certified according to ISO 9001 at almost all our production sites. Where appropriate, some production sites have also been certified according to ISO 14001 (Environmental Management Systems). Moreover, all Steinzeug-Keramo production sites and the Pipelife site in Germany have already been certified according to DIN EN ISO 50001:2011 (Energy Management Systems).

Technical controlling systems have been installed in all production areas of the Wienerberger Group. These systems record all production-related data required for the management of the company and permit the internal benchmarking of production sites against one another.

## *Results of our 2014 Materiality Analysis*

The results of our materiality analysis on environmental aspects in production and on our supply chains are outlined on page 58 of our 2016 Sustainability Report.

The results of our materiality analysis provide the basis for our five-year plan of action, the Wienerberger Sustainability Roadmap 2020. The production-related targets and measures of the Wienerberger Sustainability Roadmap 2020 are summarized at the end of this chapter under "Targets and Measures Relating to Production".

## *Collection of Indicators, Restatements*

The data contained in this chapter, unless otherwise indicated, exclusively refer to our production sites. In the course of the further development of data collection throughout the Wienerberger Group, the indicators concerned were adjusted accordingly. In the interest of transparency and comparability, the previous year's figures were restated. All adjustments and restatements made are explained in the following and, in addition, referred to in footnotes to the tables.

Since 2017, strategic decisions regarding sustainability management at the Pipelife production site in North America have no longer been taken by the Pipelife Business Unit, but by the North America Division. In the reporting period, however, the production site is no longer part of Pipelife's and not yet part of North America's Sustainability Roadmap 2020. This change has an impact on the indicators relating to Pipelife's and North America's quantitative targets, but it does not influence the production-related indicators, which are presented by product group. The integration of the production site into the Sustainability Roadmap 2020 is being prepared.

All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

## Restatements

**Waste quantity at Semmelrock:** Following an update of the data base, the waste quantities reported by Semmelrock for 2016 were corrected and the indicators of the Wienerberger Group were restated for 2016. The waste quantity indicators for other reporting years are not concerned by this adjustment.

**Percentage of recycled material at Pipelife:** Following an update of the data base, the indicator regarding the percentage of recycled material used per ton of products produced reported by Pipelife in the 2016 Sustainability Report was restated. The corresponding indicators for other reporting years are not concerned by this adjustment.

**Net addition to inventories in m<sup>2</sup> at Clay Building Materials Europe (CBME):** Following an update of the data base, the net addition to inventories in m<sup>2</sup> in the roof product group reported by CBME in the 2016 Sustainability Report for the reporting year 2016 was restated. The corresponding indicators for other reporting years are not concerned by this adjustment.

**Index of specific energy consumption at CBME:** Following an update of the data base, the indices in % based on kWh/ton (2010 = 100%) reported by CBME in the 2016 Sustainability Report for 2015 and 2016 were restated.

**Index of specific energy consumption in ceramic pipe production:** Following an update of the data base, the index of specific energy consumption in ceramic pipe production reported by Steinzeug-Keramo in the 2016 Sustainability Report for the reporting year 2016 was restated. The adjustment has no influence on the indicator published for the Wienerberger Group's entire ceramic production. The indicators regarding the index of specific energy consumption in ceramic pipe production for other reporting years are not concerned by this adjustment.

## Volumes Sold by Product Group

The following diagram illustrates the total volumes of products supplied by the Wienerberger Group for building construction and infrastructure solutions in 2017.



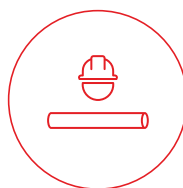
**167,000**

*houses built*



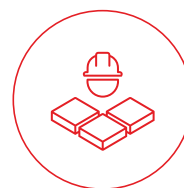
**293,000**

*roofs covered*



**648,000**

*km pipes laid*



**12,000,000**

*m<sup>2</sup> surface paved*



### Environmental Aspects in Production: Energy Efficiency

The following indicators on energy consumption refer to the entire Wienerberger Group. Compared with the previous year, the Group's total energy consumption increased by 3.9% in 2017. The main reason for the increase is the higher volume of brick and plastic pipe production as well as the increase in concrete paver

production at some production sites. Changes in the product mix in plastic pipe and concrete paver production also led to an increase in energy consumption in absolute terms in 2017. The share of renewable energy sources in the consumption of electricity, based on kWh per ton, increased significantly to 37% in 2017, up by 19.4 percentage points from the previous year.

#### Energy consumption <sup>1)</sup> in GWh

	2015	2016	2017	Chg. in %
Natural gas	6,302	6,331	6,665	+5.3
Coal	191	114	50	-56.2
Fuel oil	11	7	7	-1.0
Liquefied natural gas	48	60	55	-8.7
Electricity	1,076	1,078	1,112	+3.2
<b>Wienerberger Group</b>	<b>7,628</b>	<b>7,591</b>	<b>7,889</b>	<b>+3.9</b>
Share of renewable energy in the consumption of electric energy	27%	31%	37%	+19.4

1) Total energy consumption includes energy consumed in production, but excludes administration, except for countries where separate accounting is not possible. // All non-financial indicators are calculated on the basis of non-rounded values. Electronic data processing may result in rounding differences.

Continuous efforts are being made by Wienerberger to convert its production processes to low-emission energy sources. As in previous years, the substitution of coal, liquefied natural gas and fuel oil by other sources of energy is clearly reflected in the figures for 2017. The North America Division succeeded in converting all its main production sites completely from coal to natural gas in 2017. The Group-wide consumption of coal was reduced by more than half in 2017 compared to the previous year's level (-56.2%).

#### Specific energy consumption

The specific energy consumption (calculated as an index in % based on kWh/ton) reflects the development of the individual product groups over time, with the values reported for a specific reference year serving as the basis for index calculation. Up to 2016, the figures from 2010 were used as a basis. However, given recent changes

in the methods of data collection and the integration of new product groups in 2016 (see 2016 Sustainability Report, pages 58 and 59, collection of indicators, restatements), 2010 can no longer be used as the reference year for certain product groups, as the data are no longer comparable. This concerns data on ceramic pipes as well as concrete products in North America. Since 2016, we have therefore used the indicators of 2013 as the new reference value for the index of specific energy consumption (based on kWh/ton) for the entire Wienerberger Group.

In 2017, specific energy consumption dropped by 0.8% from the previous year's level in the Wienerberger Group as a whole and by 1.7% in ceramic production. Compared to the baseline year 2013, the reduction amounted to 0.9% for the Wienerberger Group and 2.4% for ceramic production.


**Index of specific energy consumption <sup>1)</sup>**  
*in % based on kWh/ton (2013 = 100%)*

	2015 <sup>2)</sup>	2016	2017	Chg. against 2016 in %	Chg. against 2013 in %
Clay blocks	94.4	93.4	<b>91.2</b>	-2.3	-8.8
Roof tiles	89.1	87.9	<b>87.8</b>	-0.1	-12.2
Facing bricks	99.7	101.7	<b>101.1</b>	-0.6	+1.1
Ceramic pipes <sup>3)</sup>	103.1	111.8	<b>122.0</b>	+9.1	+22.0
<b>Ceramic production</b>	<b>101.7</b>	<b>99.3</b>	<b>97.6</b>	<b>-1.7</b>	<b>-2.4</b>
Plastic pipes	97.1	100.8	<b>101.5</b>	+0.7	+1.5
Concrete and calcium silicate products North America	108.2	102.7	<b>100.3</b>	-2.4	+0.3
Concrete pavers	93.7	98.1	<b>100.1</b>	+2.0	+0.1
<b>Wienerberger Group</b>	<b>101.3</b>	<b>100.0</b>	<b>99.1</b>	<b>-0.8</b>	<b>-0.9</b>

1) Total energy consumption includes energy consumed in production, but excludes administration, except for countries where separate accounting is not possible. // 2) Tondach Gleinstätten included from 2015. // 3) The indicators for 2016 were restated on account of an update of the data base and the index based thereon was recalculated for 2016.

In 2017, Wienerberger's continuous efforts to reduce specific energy consumption were particularly successful in the Clay Building Materials Europe (CBME) Division. The higher volume of production and the associated optimal utilization of capacities at the CBME production sites made an additional contribution to the reduction of specific energy consumption. In particular, specific energy consumption decreased by 2.3% in clay block production. Throughout 2017, CBME continued the rollout of the "Plant Improvement Program". Details on the current program and CBME's ongoing activities aimed at enhancing energy efficiency are described on page 61 of the 2016 Sustainability Report.

The rise in specific energy consumption in the production of ceramic and plastic pipes as well as concrete pavers in 2017, as compared to the previous year's values, was again due partly to further developments in the product mix toward products requiring more energy in production, and partly to lower capacity utilization in ceramic pipe production and at some concrete paver production sites.

The Clay Building Materials Europe Division has developed new roof tile and facing brick products, one of the objectives being to increase resource efficiency and to further improve the product properties. Therefore, the index of specific energy consumption for these two product groups is also shown per square meter of product surface.

**Index of specific energy consumption CBME <sup>1)</sup>**  
*in % based on kWh/m<sup>2</sup> (2013 = 100%)*

	2015 <sup>2)</sup>	2016	2017	Chg. against 2016 in %	Chg. against 2013 in %
Roof tiles <sup>3)</sup>	88.0	84.4	<b>83.6</b>	-1.0	-16.4
Facing bricks	93.5	95.6	<b>95.2</b>	-0.5	-4.8

1) Clay Building Materials Europe: total energy consumption includes energy consumed in production, but excludes administration, except for countries where separate accounting is not possible. // 2) Tondach Gleinstätten included from 2015. // 3) Following an update of the data base, net additions to inventories in m<sup>2</sup> reported for 2016 were restated and the index based thereon was recalculated for 2016.





For Clay Building Materials Europe (bricks) and Pipelife (plastic pipes), we refer to the figures from 2010 as the reference value for the quantitative energy efficiency targets to be reached by 2020. Therefore, the index of specific energy consumption for most product groups can also be shown relative to 2010 as the reference year (excluding concrete and calcium silicate products in

North America and ceramic pipes). The target of minus 20% in clay block production was attained in 2016 and even exceeded in 2017 (-22.5%). In roof tile production, we are on track (-14.3%) to reach the target in the near future. In the other product groups, we will continue to step up our efforts in order to reach our self-imposed targets in 2020.

<b>Index of specific energy consumption <sup>1)</sup></b> <i>in % based on kWh/ton (2010 = 100%)</i>	<b>2015 <sup>2)</sup></b>	<b>2016</b>	<b>2017</b>	<b>Chg. against 2016 in %</b>	<b>Chg. against 2010 in %</b>
Clay blocks	80.2	79.3	<b>77.5</b>	-2.3	-22.5
Roof tiles	87.0	85.8	<b>85.7</b>	-0.1	-14.3
Facing bricks, CBME only	96.7	98.4	<b>98.0</b>	-0.4	-2.0
Facing bricks incl. North America	102.2	104.3	<b>103.6</b>	-0.6	+3.6
Plastic pipes	94.6	98.2	<b>98.9</b>	+0.7	-1.1
Concrete pavers	88.9	93.1	<b>95.0</b>	+2.0	-5.0
CBME total <sup>3)</sup>	92.0	89.9	<b>88.3</b>	-1.7	-11.7

1) Total energy consumption includes energy consumed in production, but excludes administration, except for countries where separate accounting is not possible. //

2) Tondach Gleinstätten included from 2015. // 3) Following an update of the data base, the indices reported by CBME for 2015 and 2016 were restated.

### **Environmental Aspects in Production: Climate Protection and CO<sub>2</sub> Emissions**

For the collection of CO<sub>2</sub> emission data, we apply the method of the European Union Emissions Trading Scheme (ETS system), which only records direct CO<sub>2</sub> emissions resulting from production processes, excluding indirect CO<sub>2</sub> emissions resulting from the use of electricity. Accordingly, the only relevant data are CO<sub>2</sub> emissions from our ceramic production (bricks and ceramic pipes; Scope 1).

CO<sub>2</sub> emissions from primary energy sources vary in line with energy consumption, whereas so-called process emissions result from the raw material and, in clay block production, from the use of poreforming agents. The increase in CO<sub>2</sub> emissions in absolute terms within the ETS system results partly from further developments in the product mix in some product groups and partly from the higher volume of production due to more incoming orders in Clay Building Materials Europe. Electric energy is used in the production of plastic pipes and concrete pavers, with the related CO<sub>2</sub> emissions being attributed to the electric power producer.



<b>CO<sub>2</sub> emissions</b> <i>in kilotons per year</i>	2015	2016	2017	Chg. in %
From primary energy sources	1,080	1,074	<b>1,126</b>	+4.8
From processes	718	720	<b>800</b>	+11.2
<b>Total - covered by ETS <sup>1)</sup></b>	<b>1,798</b>	<b>1,793</b>	<b>1,926</b>	<b>+7.4</b>
Plants not covered by ETS <sup>2)</sup>	266	253	<b>245</b>	-3.0
From biogenic materials <sup>3)</sup>	240	249	<b>268</b>	+7.7

1) Source: Community Independent Transaction Log (CITL) // 2) Calculation in accordance with national rules (Switzerland) or EU standard emission factors. For plants in the USA, CO<sub>2</sub> process emissions are also reported. // 3) Quantities derived from Wienerberger's CO<sub>2</sub> monitoring in accordance with national rules.

### Specific CO<sub>2</sub> emissions

Within the framework of the materiality analysis performed in 2014, our stakeholders only ranked fuel-related CO<sub>2</sub> emissions, which can be directly influenced by Wienerberger, as a material aspect in the fight against climate change. This is also reflected in the target definition of the Clay Building Materials Europe Division for the reduction of specific CO<sub>2</sub> emissions from primary energy sources by 20%, as compared with 2010.

Changes in specific energy consumption provide an approximate basis for the assessment of target attainment, as the volume of CO<sub>2</sub> emissions correlates with the quantity and composition of primary energy sources used. Reductions can be achieved through efficiency enhance-

ment in production (i.e. lower energy consumption per ton of products produced), on the one hand, and the replacement of CO<sub>2</sub>-intensive fuels (coal, fuel oil) by less CO<sub>2</sub>-intensive or renewable energy sources, on the other hand. Thus, the ongoing conversion to natural gas as a fuel also contributes to the reduction of specific CO<sub>2</sub> emissions.

On account of the transition to the third trading period of the European Union Emissions Trading System, emission data collected in 2013 are used as the new reference base for the calculation of specific CO<sub>2</sub> emissions from primary energy sources (in % based on kg CO<sub>2</sub>/ton).

<b>Index of specific CO<sub>2</sub> emissions <sup>1)</sup></b> <i>in % based on kg CO<sub>2</sub>/ton (2013 = 100%)</i>	2015 <sup>2)</sup>	2016	2017	Chg. against 2016 in %	Chg. against 2013 in %
Clay blocks		92.1	<b>89.6</b>	-2.8	-10.4
Roof tiles		87.1	<b>87.4</b>	+0.3	-12.6
Facing bricks		95.0	<b>93.0</b>	-2.0	-7.0
Ceramic pipes		111.9	<b>123.8</b>	+10.7	+23.8
<b>Ceramic production</b>	<b>99.4</b>	<b>96.1</b>	<b>93.9</b>	<b>-2.3</b>	<b>-6.1</b>

1) Specific CO<sub>2</sub> emissions exclusively refer to fuel emissions. // 2) Tondach Gleinstätten included from 2015.



In ceramic production, the index of specific CO<sub>2</sub> emissions from primary energy sources in kg CO<sub>2</sub> per ton of products produced was reduced by a satisfactory 2.3%, as compared to the previous year (see page 57). The reduction in specific CO<sub>2</sub> emissions were most pronounced in the production of clay blocks (-2.8%) and facing bricks (-2.0%). Specific CO<sub>2</sub> emissions in roof tile production increased slightly in 2017 (+0.3%), although specific energy consumption declined (-0.1%). This is due to the slight increase in specific thermal energy consumption in roof tile production, while the specific consumption of electric energy dropped significantly. The following table (index of specific CO<sub>2</sub> emissions in % based on kg CO<sub>2</sub>/m<sup>2</sup>) shows that specific CO<sub>2</sub> emissions per m<sup>2</sup> of roof tiles produced were reduced in 2017. The main factors accounting for the 10.7% increase over the previous year's value in the production of ceramic pipes are further developments in the product mix and the lower level of capacity utilization at some production lines.

Specific CO<sub>2</sub> emissions from primary energy sources in ceramic production dropped more strongly (-2.3% as compared to 2016) than specific energy consumption (-1.7%). This is due to the consistent substitution of CO<sub>2</sub>-intensive energy sources, such as coal and fuel oil, by natural gas.

The Clay Building Materials Europe Division developed new roof tile and facing brick products, one of the objectives being to increase resource efficiency and to further improve the product properties. To reflect this development more clearly, the index of specific CO<sub>2</sub> emissions from primary energy sources for these two product groups is also shown per square meter of product surface. Based on this indicator as well, emission volumes were found to develop in parallel with the reduction of thermal energy consumption.

**Index of specific CO<sub>2</sub> emissions CBME <sup>1)</sup>**  
in % based on kg CO<sub>2</sub>/m<sup>2</sup> (2013 = 100%)

	2015 <sup>2)</sup>	2016	2017	Chg. against 2016 in %	Chg. against 2013 in %
Roof tiles <sup>3)</sup>	86.9	83.7	<b>83.2</b>	-0.6	-16.8
Facing bricks	91.7	93.6	<b>93.2</b>	-0.4	-6.8

1) Specific CO<sub>2</sub> emissions exclusively refer to fuel emissions. // 2) Tondach Gleinstätten included from 2015. // 3) Following an update of the data base, net additions to inventories in m<sup>2</sup> reported for 2016 were restated and the index based thereon was recalculated for 2016.

Information on the carbon footprint generated upstream of concrete paver production (Scope 2) and specific indirect CO<sub>2</sub> emissions from electricity used in plastic pipe production is contained on page 64 of the 2016 Sustainability Report.

### **Environmental Aspects in Production: Resource Efficiency and Waste Management**

Wienerberger is making a continuous effort to increase resource efficiency in production and, at the same time, further improve the properties of its products. Our particular focus is on reducing raw material consumption

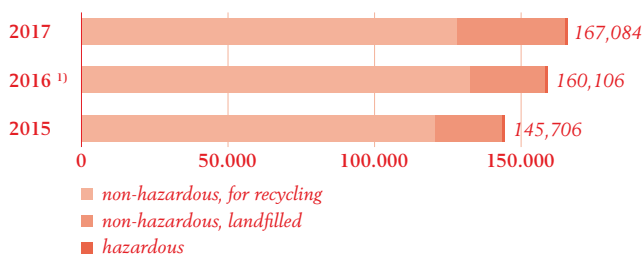
and using secondary raw materials in those areas of production where it is economically and technically feasible. We are also working on a continuous reduction of scrap rates and the recycling of production waste and residual substances into production. Figures on the total amount of raw materials used in the Wienerberger Group cannot be disclosed for reasons of data protection and industrial secrecy.

A total of 167,084 tons of waste was generated by Wienerberger in 2017, 1% of which was hazardous waste. As in previous years, almost all the waste generated by the



## Waste

in tons



*1) Following an update of the data base, the quantities of waste reported for 2016 in the 2016 Sustainability Report were corrected for concrete paver production (Semmelrock), and the indicators of the Wienerberger Group were restated for 2016. The indicators of waste quantities from other reporting years are not concerned by this restatement.*

Wienerberger Group is non-hazardous waste, which was collected and recycled in 2017 at a rate of 77%.

## Our supply chain

Within the framework of our business relations, we also pay attention to the observance of ecological and social standards by our suppliers. All business areas in

Europe specify their minimum standards in specific “supplier codes of conduct”, which must be signed by the suppliers upon signature of the contract and have to be strictly observed. Wienerberger is working on a Group-wide “Supplier Code of Conduct” and a system of supplier management, which takes social and ecological criteria into account. In line with the Group’s supplier management strategy, the North America Division intends to elaborate a supplier guideline aimed at promoting the re-use and/or recycling of packaging material. For other relevant aspects of our supply chain, please refer to page 65 of the 2016 Sustainability Report.

## Environmental Aspects in Production: Sparing Use of Water

We are making every effort to use water sparingly, for instance by running it in closed circuits and drawing primarily on our own wells. Due to the significant increase of production volumes in some areas, the Wienerberger Group’s total consumption of water in 2017 was 0.7% higher than in 2016. The percentage drawn from public networks remained almost unchanged, although highly diverging developments were observed in the individual Business Units.

Water consumption		2015	2016	2017	Chg. in %
Wienerberger Group	in million m <sup>3</sup>	4.0	4.2	4.2	+0.7
of which withdrawal from public networks	in %	34.3	33.5	33.7	-



### Specific water consumption

In 2017, total specific water consumption, based on net additions to inventories, was reduced in all product groups. Besides the Wienerberger Group's

commitment to a sparing use of water, if possible in closed circuits, changes in the product mix and lower production volumes in some areas also contributed to the reduction in specific water consumption in 2017.

#### Specific water consumption in m<sup>3</sup>/ton

	2015	2016	2017	Chg. in %
Brick products	0.154	0.154	<b>0.148</b>	-3.8
Ceramic pipes	0.228	0.263	<b>0.242</b>	-7.8
Plastic pipes	4.700	5.110	<b>5.036</b>	-1.5
Concrete pavers	0.051	0.055	<b>0.050</b>	-8.5
Concrete and calcium silicate products North America	0.389	0.401	<b>0.329</b>	-18.1

### Targets and Measures Relating to Production

The following targets and measures were defined by the Managing Board of Wienerberger AG and the management of the individual Wienerberger Business Units on the basis of the materiality matrix developed in 2014. They are part of the Wienerberger Sustainability Roadmap 2020.

The data on North America and Pipelife do not include the Pipelife production site in North America. This influences the development of indicators relative to the quantitative target definitions for North America and Pipelife as compared to previous years.



## Aspects of our production

### Energy efficiency

#### Clay Building

#### Materials Europe

#### Quantitative target

- › Specific energy consumption in production is to be reduced by 20% by 2020, as compared to 2010.

#### 2017

- › Specific energy consumption in production was 11.7% below the value of 2010 (calculated as an index in % based on kWh/ton; 2010 = 100%).
- › CBME further pursued the strategy of its R&D roadmap to reduce energy consumption.
- › Benchmarks were set and best practices exchanged.
- › The Energy Award was again given out as an incentive for the local companies.
- › Plans for the conversion of a pilot plant equipped with new technology for a significant reduction in specific energy consumption were finalized and work on the project was begun.

#### 2018

- › The conversion of the pilot plant referred to above, originally planned for the end of 2017, is being implemented in the first half of 2018. The project had to be postponed on account of high capacity utilization and strong customer demand.
- › The findings obtained at the pilot plant will be rolled out.
- › Benchmark setting and the exchange of best practices are being continued.
- › Energy Awards will again be given out as an incentive for the local companies.
- › Specific investments are being made in order to further reduce energy consumption.

#### North America

#### Quantitative target

- › By 2017, the consumption of natural gas at selected production sites is to be reduced by 5% each, as compared to 2015.

#### 2017

- › The consumption of natural gas at only one main production site was reduced by 4%, as compared to 2015. As a result of the conversion of selected production sites from high-emission energy sources to natural gas, the 5% target set for the reduction of natural gas consumption was not fully attained in 2017.
- › Electricity consumption at other selected production sites was further optimized.

#### 2018

- › The North America Division will reduce its specific energy consumption (fuel and electricity) at all main production sites by another 2% compared to 2017 (calculated as an index in % based on kWh/ton).
- › Appropriate measures to reduce energy consumption are being implemented and monitored.





## Energy efficiency

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### *Pipelife*

#### **Quantitative target**

- By 2020, specific energy consumption in production is to be reduced by 20%, as compared to 2010.

#### **2017**

- Specific energy consumption in production was 5% above the comparable value of 2010.
- The increase in specific energy consumption was analyzed and the main factors of influence were identified. The increase is primarily due to further developments in the product mix.
- Projects aimed at reducing energy consumption in production were carried out at various production sites within the framework of "Energy Treasure Hunts".
- Local electricity saving initiatives were implemented.
- The results of these local initiatives were analyzed and communicated internally via an interactive tool.
- The performance of the individual local companies was compared.
- Best practice examples were exchanged and benchmarks were set.

#### **2018**

- The targets set for the reduction of specific energy consumption are being evaluated on the basis of the results of the analysis performed in 2017.
- The processes described above are being continued.
- The results are updated, analyzed and communicated internally via an interactive tool.
- The performance of the individual local companies is compared.
- Best practice examples are exchanged and benchmarks set.

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### *Semmelrock*

#### **2017**

- Findings resulting from measures to enhance energy efficiency taken at a new production plant in Austria were rolled out to other country organizations.
- A plan of action was elaborated for Semmelrock's other production plants.

#### **2018**

- The measures referred to above are being continued.

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### *Steinzeug-Keramo*

#### **2017**

- Energy efficiency monitoring was continued at the production sites.
- Internal quantitative targets were defined for individual production lines.
- The working group set up in cooperation with CBME in the previous year continued its activities and regular exchanges of scientific data with Clay Building Materials Europe took place.
- Projects aimed at a continuous increase in energy efficiency were implemented.

#### **2018**

- The processes described above are being continued.
  - As in the previous year, best practice examples are exchanged and benchmarks set.
-



## Climate action

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### *Clay Building Materials Europe*

#### **Quantitative target**

- › By 2020, specific CO<sub>2</sub> emissions from primary energy sources in production are to be reduced by 20% from their 2010 level.

#### **2017**

- › Specific CO<sub>2</sub> emissions from primary energy sources in production amounted to 96% of the value reported in 2013 (calculated as an index in % based on kg CO<sub>2</sub>/ton; 2013=100%. Following the transition to the third EU emissions trading period in 2013, the level of CO<sub>2</sub> emissions in 2013 is now referred to as the new baseline for future developments).
- › CBME further pursued the strategy of its R&D Roadmap to reduce energy consumption and, consequently, specific CO<sub>2</sub> emissions from primary energy sources.
- › The Energy Award was again given out as an incentive for local companies.
- › Specific investments were made to reduce the volume of specific CO<sub>2</sub> emissions from primary energy sources.
- › Plans for the conversion of a pilot plant equipped with new technology for a significant reduction in specific energy consumption and the related specific CO<sub>2</sub> emissions were finalized and work on the project was begun.

#### **2018**

- › The conversion of the pilot plant referred to above, originally scheduled for the end of 2017, is being implemented in the first half of 2018. The project was postponed due to high capacity utilization and strong customer demand.
- › The essential findings from the pilot plant will be rolled out.
- › Benchmark setting and the exchange of best practices is being continued.
- › Energy Awards will again be given out as an incentive for the local companies to step up their efforts.
- › CBME will further pursue the strategy of its R&D Roadmap to reduce specific CO<sub>2</sub> emissions from primary energy sources.

---

### *North America*

#### **Quantitative target**

- › Conversion of all main production sites from coal to natural gas by 2017.

#### **2017**

- › The target of converting 100% of the production lines at all main production sites from coal to natural gas was surpassed. All the Division's active production lines were converted from high-emission coal to low-emission natural gas.

#### **2018**

- › Additional measures aimed at reducing emissions are being evaluated.
-



## Climate action

---

### *Pipelife*

#### **Quantitative target**

- By 2020, specific indirect CO<sub>2</sub> emissions (from electricity in production) are to be reduced by 20%, as compared to 2010.

#### **2017**

- Indirect CO<sub>2</sub> emissions (from electricity in production) were 16% below the reference value of 2010 and slightly above the previous year's value as a result of further developments in the product mix.
- Projects aimed at reducing specific CO<sub>2</sub> emissions were carried out at various production sites within the framework of "Energy Treasure Hunts".
- Local initiatives to reduce emissions were implemented.
- The results of the projects and initiatives aimed at reducing specific indirect CO<sub>2</sub> emissions from electricity in production were analyzed and communicated via an interactive tool.

#### **2018**

- The processes described above are being continued.
  - The performance of the individual local companies is compared.
  - Best practice examples are being exchanged and benchmarks set.
- 

### *Semmelrock*

#### **2017**

- Mix optimization, minimized use of cement and/or use of a binder with a lower percentage of cement clinker were evaluated.
- Optimized formulations were rolled out.

#### **2018**

- Further possibilities of minimizing the use of cement and/or using a binder with a lower percentage of cement clinker are being studied in cooperation with external partners.
- 

### *Steinzeug-Keramo*

#### **2017**

- 100% of the electricity consumed came from renewable sources.
- Within the framework of re-certification in accordance with Cradle to Cradle®, 5% of the annual CO<sub>2</sub> emissions generated at the company's production sites were offset through climate protection projects.
- Internal quantitative targets were defined for individual production lines.
- A working group organized regular exchanges of scientific data with Clay Building Materials Europe.

#### **2018**

- 100% of the electricity consumed comes from renewable sources.
  - Within the framework of environmental certification, 5% of the annual CO<sub>2</sub> emissions generated at the company's production sites will again be offset through climate protection projects.
-



## Resource efficiency and waste management

---

### *Clay Building*

#### *Materials Europe*

#### 2017

- › The measures recommended on the basis of a study on the use of secondary raw materials, resource efficiency and waste management in brick production completed in 2016 were implemented.
- › A guideline for the use of additives was adopted and a new format of annual raw material reporting was introduced.

#### 2018

- › The internally defined priority projects and initiatives will be implemented.
- 

### *North America*

#### 2017

- › The closed resource cycle was further optimized.
- › New possibilities of using secondary materials as additives were tested.
- › An internal initiative was launched to identify sources of waste and reduce the volume of waste generated.
- › The recycling of packaging materials was extended.
- › The sale of products in “bulk bags” (stable, re-usable containers) instead of paper bags was implemented.

#### 2018

- › The measures described above are being continued.
- 

### *Semmelrock*

#### Quantitative target

- › The scrap rate in production is to be reduced by 50% by 2017. In 2014 (reference value) the scrap rate was 4.7%.

#### 2017

- › The scrap rate in production was reduced by 45.3% from the value reported in 2014 and the target set for 2017 was almost attained. The scrap rate in 2017 was 2.6%, while the target for 2017 had been set at 2.4%.
  - › The central laboratory monitored the scrap rate in production on a monthly basis, taking into account previous findings and changes in the product portfolio.
  - › The scrap rate data were analyzed, individual production lines were classified according to the data obtained, and targeted optimization measures were taken.
-



## Resource efficiency and waste management

---

### *Semmelrock*

#### **2018**

- › A new target for the reduction of the scrap rate in production is defined.
- › The scrap rate is to be further reduced through the optimization of technologies, tools and processes as well as by raising our employees' awareness for resource efficiency in the plants.
- › The best practice measures implemented are being analyzed and further optimization measures will be derived from the results obtained.
- › Studies on a closed resource cycle in production are performed.
- › Future possibilities of concrete recycling, with a special focus on the re-use of dry scrap, are being evaluated.

## Water

---

### *Pipelife*

#### **Quantitative target**

- › The consumption of water from public networks is to be reduced to 0.55 m<sup>3</sup> per ton of products produced by 2020.

#### **2017**

- › The consumption of water from public networks increased significantly over the previous year's level from 0.81 m<sup>3</sup>/ton in 2016 to 0.95 m<sup>3</sup>/ton in 2017, the main reason being the further development in the product mix.
- › The results of local initiatives were analyzed and communicated internally via an interactive tool.

#### **2018**

- › Further initiatives will be launched on the basis of the findings obtained.

### *Semmelrock*

#### **2017**

- › The well-established practice of process water recycling was rolled out to two additional paver plants.
- › Work on a new technology for optimized water recycling in slab production was continued.

#### **2018**

- › A new technology for optimized water recycling in slab production will be introduced at a new production line.
-



## Aspects along our supply chain

### Availability of raw materials

<i>Clay Building</i> <i>Materials Europe</i>	<p><b>2017</b></p> <ul style="list-style-type: none"> <li>› All relevant clay pits and their characteristics were monitored and measures were taken to ensure the availability of raw materials.</li> <li>› A raw material availability benchmark was defined.</li> </ul> <p><b>2018</b></p> <ul style="list-style-type: none"> <li>› The measures described above are being implemented and rolled out to newly acquired sites.</li> </ul>
<i>North America</i>	<p><b>2017</b></p> <ul style="list-style-type: none"> <li>› Continuous monitoring of raw material availability from own clay pits for at least ten years of operation on the basis of the “raw material availability map” was performed.</li> </ul> <p><b>2018</b></p> <ul style="list-style-type: none"> <li>› The measures described above are being implemented consistently.</li> </ul>
<i>Pipelife</i>	<p><b>2017</b></p> <ul style="list-style-type: none"> <li>› A strategy for the avoidance of supply shortages was implemented on the basis of a list of the main product groups and their suppliers.</li> </ul> <p><b>2018</b></p> <ul style="list-style-type: none"> <li>› The strategy for the avoidance of supply shortages is being continued.</li> </ul>
<i>Semmelrock</i>	<p><b>2017</b></p> <ul style="list-style-type: none"> <li>› The raw material procurement strategy was adapted step by step for application at country and plant level.</li> </ul> <p><b>2018</b></p> <ul style="list-style-type: none"> <li>› The measures described above are being continued.</li> </ul>
<i>Steinzeug-Keramo</i>	<p><b>2017</b></p> <ul style="list-style-type: none"> <li>› All relevant sources of supply were monitored against the internal benchmark and measures to ensure the availability of raw materials were taken.</li> <li>› Clay suppliers were audited with a view to the availability of clay from their sources.</li> <li>› An analysis of suppliers of selected raw materials was performed and appropriate measures were implemented.</li> </ul> <p><b>2018</b></p> <ul style="list-style-type: none"> <li>› Measures to ensure the availability of raw materials are being continued.</li> <li>› Supplier management activities are being continued.</li> </ul>





## Use of secondary raw materials

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### *Clay Building Materials Europe*

#### 2017

- › A research and development project on the use of secondary raw materials in brick production was completed.
- › Based on the analysis of the use of secondary raw materials in brick production, appropriate measures were taken.

#### 2018

- › The internally defined priority projects and initiatives are being implemented.
- 

### *North America*

#### 2017

- › The closed resource cycle in production was continuously monitored with a view to possible improvements.
- › Further possibilities of using selected secondary materials in production are being continuously evaluated.

#### 2018

- › The measures described above are being continued.
- 

### *Pipelife*

#### Quantitative target

- › By 2020, the amount of recycled material per ton of products produced is to be increased to 70 kg.

#### 2017

- › The amount of recycled material reached 67.2 kg/ton.
- › Research projects aimed at optimizing the ratio of primary and secondary raw materials in Pipelife products were continued.
- › The technical feasibility of the use of recycled materials was further studied and production sites suited for implementation of such projects were identified.
- › The results were analyzed and applied at additional production sites.

#### 2018

- › The research projects are being continued and the most promising results are applied at additional production sites.
-



### Use of secondary raw materials

---

#### *Semmelrock*

##### **2017**

- › A project on recycled concrete was launched in order to define an optimal technology for efficient concrete recycling and the amount of recycled concrete to be used.

##### **2018**

- › Based on the analyses performed, the project will be redefined.
- 

#### *Steinzeug-Keramo*

##### **2017**

- › All the measures required within the framework of Cradle to Cradle® certification in 2016 were implemented to obtain Cradle to Cradle® re-certification in 2018.
- › The percentages of internal and external secondary raw materials used in production were evaluated in detail for all production lines. Currently, the average percentage of secondary raw materials is 40%. This percentage is continuously re-evaluated in light of ecological, technological and economic considerations.

##### **2018**

- › Possibilities of further improving the technical properties of materials with the highest possible recycling ratio are being studied.
- › All the necessary measures required for the scheduled Cradle to Cradle® re-certification were taken.

### Avoidance and/or substitution of hazardous substances

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#### *At Group level and at Business Unit level*

It goes without saying that Wienerberger meets all European, national and regional legal requirements regarding the avoidance and substitution of hazardous substances. Compliance with all legal provisions is continuously monitored and the necessary measures are taken without delay, whenever need rises.

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#### *Clay Building Materials Europe*

##### **2017**

- › The revised internal guideline on the avoidance of hazardous substances was finalized and implemented throughout the Business Unit. The revised guideline provides for even stricter classification of inputs and contains clear, binding instructions for the production sites.
- › An annual raw material report with new disclosure requirements was drafted.

##### **2018**

- › The measures are being implemented according to the new guideline.
  - › On the basis of the new requirements laid down in the raw material report, compliance with the revised guideline will be monitored in cooperation with Internal Audit.
-




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**Protection of local residents, nature conservation and re-use of clay pits**


---

**Clay Building**  
**Materials Europe**
**2017**

- The supplier code of conduct was made available to all local companies as a binding instrument. It demands that suppliers respect human rights and the principles of environmental protection.
- Documents signed by suppliers are being administered centrally.
- A new supplier management structure was elaborated for certain areas.

**2018**

- The new supplier management structure is being implemented in selected areas.
- 

**North America**
**2017**

- The regular annual checks for dust emissions and water quality were performed at all production sites.
- Open and transparent communication with local residents and local authorities was continued.

**2018**

- The aforementioned measures are being continued.
- 

**Pipelife**
**2017**

- The “Pipelife Supplier Code of Conduct” for a responsible way of dealing with people and the natural environment continued to apply.

**2018**

- The “Pipelife Supplier Code of Conduct” continues to apply.
-



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**Protection of local residents, nature conservation and re-use of clay pits**

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***Semmelrock*****2017**

- › The supplier code of conduct was made available to all country organizations.
- › A solution for the central administration of supplier documents was developed.

**2018**

- › The supplier code of conduct will be applied in negotiations with suppliers by all country organizations as a binding instrument.
- › The supplier code of conduct will be published by all country organizations on their websites.

---

***Steinzeug-Keramo*****2017**

- › Measures relating to nature conservation and the meaningful re-use of clay pits were implemented in accordance with the company's own standards.
- › A supplier audit was performed.

**2018**

- › The measures described above will be continued.
-



# Products

The background features a complex network of thin lines in orange, red, and grey. Several small dots in these colors are scattered across the page, with a notable cluster of orange dots in the upper right quadrant and a few red and grey dots in the lower half. The lines intersect to form various geometric shapes, creating a sense of depth and connectivity.





# Products

## *Principles, Processes and Instruments*

A central principle of product development at Wienerberger is the creation of lasting value for our customers by supplying them with durable and innovative building material and infrastructure solutions. Wienerberger brick products are an integral part of sustainable building concepts. They guarantee a high quality of life and make an active contribution to the fight against climate change, not least on account of their heat storage capacity. In the field of pipes and pavers, we offer system solutions for all present-day challenges, including the demands on water management resulting from climate change and increasing urbanization. Durability and innovative strength are quality criteria which we regard as particularly important across all product groups.

In view of what users and developers expect of a modern building, and considering the numerous regulatory requirements to be met, such as the Energy Performance of Buildings Directive (EPBD), a system based approach to building construction is getting more and more important. Integrated system solutions enable us to combine the outstanding properties of individual products of the Wienerberger product portfolio with products supplied by our partners in the field of building services and facilities in order to obtain the best possible results.

Wienerberger aims to secure and further strengthen its market positions through cost and technology leadership and product innovations. Therefore, research and development (R&D) are among the priorities of Wienerberger's strategic planning.

For many years, Wienerberger has been working intensively on the voluntary preparation of eco-balances and environmental product declarations (EPDs) for its entire product range. For several years, all ceramic pipes and fittings produced by Steinzeug-Keramo as well as selected Semmelrock product lines have been certified according to the Cradle to Cradle® concept.

## *Results of our 2014 Materiality Analysis*

The results of our materiality analysis in respect of our products, from raw material procurement to their useful life and their end-of-life disposal, are outlined on page 80 of our 2016 Sustainability Report.

The results of our materiality analysis provide the basis for our five-year plan of action, the Wienerberger Sustainability Roadmap 2020. The product-related targets and measures provided for within the framework of the Wienerberger Sustainability Roadmap 2020 are outlined at the end of this chapter under "Targets and Measures relating to Products".

## *Innovative Products*

Products, system solutions or processes that represent an improvement over earlier versions or add to the diversity of the product range qualify as innovative. In 2017, innovative products and system solutions accounted for almost 30% of the Group's total revenues, which represents a further increase over the previous year's level (almost 27%). For further information on the innovation criteria of the individual products and system solutions, please refer to the following table and to pages 80/81 of the 2016 Sustainability Report.

The specific quantitative targets of the individual Business Units regarding the contribution of innovative products and system solutions to revenues, as well as the results achieved in 2016 and 2017, are shown in the following overview.



Targets for the contribution of innovative products to revenues	2016 in %	2017 in %	Comments
Clay Building Materials Europe: 25%	26	31	New products and system solutions that are durable and cost-efficient, contribute to the energy efficiency of buildings and to climate protection, ensure safety and health for users of the buildings, facilitate correct planning, are easy to use and well-suited for an interesting architectural design qualify as innovative.
North America: 50%	49	51	The definition includes product innovations and system solutions that facilitate compliance with the new energy standards (International Energy Conservation Code, IECC), offer a higher level of energy efficiency and are well-suited for the construction of tornado-proof houses.
Pipelife: 20%	20	19	The definition includes product innovations that represent either a completely new development or a significant improvement of an existing product as regards the production process, cost-efficiency, technical properties or ecological advantages. Individual criteria no longer applied to certain products in 2017, which led to a slight decrease in the percentage of revenues. A renewed increase is expected for 2018.
Semmelrock: 30%	37	38	The definition includes product innovations that offer an added value for customers on account of their cost-efficiency, their technical properties and their ecological advantages, such as water-permeable paving system for unsealed surfaces.
Steinzeug-Keramo: 35%	39	42	The definition includes recently introduced products (e.g. shafts with individually designed, site-specific system solutions), products for particularly innovative applications (e.g. jacking pipes for trenchless installation) or products offering special advantages in terms of energy efficiency and climate protection (e.g. climate-neutral pipes).

The targets of the individual Business Units and the measures relating to innovative products are presented in the following section, with a special focus on product properties identified as essential.

### **Targets and Measures Relating to Products**

The following targets and measures were defined by the Managing Board of Wienerberger AG and the management of the individual Wienerberger Business

Units on the basis of the materiality matrix developed in 2014. They are part of the Wienerberger Sustainability Roadmap 2020.

The data on North America and/or Pipelife do not include the North American production site of Pipelife. This has an influence on the development of indicators relative to the target definitions for North America and Pipelife as compared to previous years.



## Innovative and durable products

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### *Clay Building Materials Europe*

#### **Quantitative target**

- › The percentage of innovative products is to be maintained at 25% of the Business Unit's total revenues through continuous product development and market launches.

#### **2017**

- › Innovative products accounted for 31% of the Business Unit's revenues.
- › The ongoing processes of product optimization and innovation management were continued. As in previous years, customers were involved and life cycle analyses were performed. The processes applied included strategic reviews, innovation workshops, activity reports and project documentation.

#### **2018**

- › The product improvement and innovation management processes will be further advanced.
- 

### *North America*

#### **Quantitative target**

- › In 2017 and 2018, the percentage of innovative products is to reach 50% of the Business Unit's revenues through continuous product development and market launches.

#### **2017**

- › Innovative products accounted for 51% of the Business Unit's revenues, surpassing the target set for the year.
- › Potential local partners for cooperation on a further lighthouse project near Nashville were evaluated.

#### **2018**

- › Product optimization and other innovation management measures are being implemented.
- 

### *Pipelife*

#### **Quantitative target**

- › The percentage of innovative products is to be maintained at no less than 20% of the Business Unit's revenues through continuous product development and market launches.

#### **2017**

- › Individual criteria for certain products no longer applied in 2017, which led to a slight decline in the percentage in total revenues. Innovative products accounted for 19% of the Business Unit's revenues, falling slightly short of the target set.
-



## Innovative and durable products

---

### *Pipelife*

#### 2017

- › Research and development projects aimed at product optimization as well as further innovation management measures were continued in accordance with the most recent findings.

#### 2018

- › The activities described above are being continued in order to make up for the shortfall of the previous year and again achieve the target set for innovative products as a percentage of total revenues.

### *Semmelrock*

#### Quantitative target

- › The percentage of innovative products is to be maintained at no less than 30% of the Business Unit's revenues through continuous product development and market launches.

#### 2017

- › Innovative products accounted for 38% of the Business Unit's revenues.
- › The further development of water-permeable paver systems for unsealed surfaces was actively pursued. Examples include ecological paver systems with wide water-permeable joints that allow water to seep easily into the ground.
- › Various joint materials were tested in order to obtain optimal seepage properties.
- › A newly developed coating system, combined with an optimized application technology, was rolled out to the country organizations.

#### 2018

- › Product solutions for water-permeable surfaces are to be rolled out, the first step being the market launch of the product system ASTI Breite Fuge in Hungary, which was originally scheduled for 2017.

### *Steinzeug-Keramo*

#### Quantitative target

- › The percentage of innovative products is to be maintained at 35% of the Business Unit's revenues through continuous product development and market launches.

#### 2017

- › Innovative products accounted for 42% of the Business Unit's revenues.
- › A new innovation process was applied in cooperation with an external partner.

#### 2018

- › Work on the innovation process is being continued.
-



## Recyclability, recycling and re-use

---

### *Clay Building Materials Europe*

#### 2017

- › The pilot project carried out in cooperation with the Vienna University of Natural Resources and Life Sciences (BOKU) to evaluate various possibilities of using recycled brick material was completed.
- › Further projects were defined on the basis of the results of the research and development project referred to.

#### 2018

- › The projects aimed at investigating various possibilities of using recycled materials were launched.
- 

### *North America*

#### 2017

- › Work on the optimization of the closed resource cycle was continued and implementation of the results was evaluated at plant level and by the regional management.
- › The issues of packaging efficiency and the recycling of packaging material were investigated in cooperation with suppliers of packaging material.
- › An internal initiative was launched to identify causes of waste and to reduce the volume of waste.
- › The sale of products in “bulk bags” (stable, re-usable containers) instead of paper bags was continued.

#### 2018

- › The measures described above are being continued.
  - › In accordance with the Group-wide supplier management strategy, a supplier guideline is being elaborated to promote the re-use and/or recycling of packaging material.
- 

### *Pipelife*

#### Quantitative target

- › By 2020, the amount of recycled material per ton of products produced is to be increased to 70 kg.

#### 2017

- › The amount of recycled material per ton of products produced was 67.2 kg.
- › Research projects aimed at establishing the optimum percentages of primary and secondary plastic materials to be used in Pipelife products were continued.
- › The results of the research projects were applied at selected production sites.
- › Studies on the technical feasibility of using recycling material and the identification of production sites suited for implementation were continued.

#### 2018

- › The research projects are being continued and the results will be put into practice at additional production sites.
-



## Recyclability, recycling and re-use

---

### *Semmelrock*

#### 2017

- › Studies on the possibilities of substituting secondary raw materials for primary raw materials without compromising quality were continued.
- › The substitution of recycled material for primary raw materials, e.g. in road construction, was further optimized.
- › The re-certification of ARTE interlocking pavers according to the Cradle to Cradle® concept was prepared. The ARTE product family comprises a selection of pavers in various formats, 8 and 10 cm high, with an integrated interlocking system designed especially for surfaces under high traffic load that prevents shifting and deformation.

#### 2018

- › Studies on the possibilities of substituting primary by secondary raw materials without compromising quality are being continued.
- › Measures required for the roll-out of Cradle to Cradle® certification are being taken.

### *Steinzeug-Keramo*

#### 2017

- › All the measures required within the framework of Cradle to Cradle® certification in 2016 were taken in order to obtain Cradle to Cradle® re-certification in 2018.
- › The percentages of internal and external secondary raw materials used in production were evaluated in detail for all production lines. Currently, the average percentage of secondary raw materials used is 40%. This value is subject to continuous re-evaluation on the basis of ecological, technological and economic criteria.

#### 2018

- › All the necessary steps are being taken to obtain Cradle to Cradle® re-certification in 2018.
- › Further possibilities of improving material properties while increasing the recycling rate as much as possible are being evaluated.

## Ease of installation

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### *Clay Building Materials Europe*

#### 2017

- › The development of new products and/or system solutions to speed up and facilitate masonry work and to minimize the risk of mistakes made at the construction site was continued.
- › Special analog and digital planning tools as well as personal support services were continued to be provided to familiarize architects and designers with the best possible way of using brick products.

#### 2018

- › The solutions available for the applications described above are being further improved and upgraded.
-





## Ease of installation

---

### *Semmelrock*

#### **2017**

- › Additional visualization tools were developed for optimum application of the products supplied. The safe use of products for their respective applications was supported by a CAD design service for private, commercial and public projects; the design of tailor-made public spaces was facilitated by these means.
- › Slabs and pavers in large formats were further developed and products requiring a high level of application know-how were optimized.
- › The process of setting pavers at the construction site was facilitated through product optimization.

#### **2018**

- › Work on the measures described above is being continued.

## Renewable energy for buildings

---

### *Pipelife*

Renewable energy for buildings is an important topic for Pipelife.

#### **2017**

- › The range of geothermal products was broadened, including Pipelife's portfolio of distribution chambers.

#### **2018**

- › The available range of such products is being extended continuously.
-



## Contribution to the energy efficiency of buildings

---

### *Clay Building Materials Europe*

The continuous development of product solutions that contribute to the energy efficiency of buildings is a high priority for Clay Building Materials Europe. Some of the measures pursued in 2017 are described below:

#### **2017**

- › The development of clay blocks filled with insulating material was advanced, especially for use in multi-story residential buildings.
- › High thermal insulation clay blocks without infill material but with a special hole geometry were further developed, both for use in single-family homes and for non-load-bearing infill masonry.
- › New facing brick formats for multi-layer exterior walls were introduced to permit the use of more efficient and thicker insulating material without increasing the wall thickness.
- › Special solutions for upon-rafter insulation of pitched roofs were included in the delivery program.

#### **2018**

- › The solutions available for the applications described above are being further optimized and upgraded.

---

### *North America*

#### **2017 and 2018**

- › North America is working continuously on the development of new products and system solutions that facilitate compliance with the new energy standards (International Energy Conservation Code, IECC) and offer a higher degree of energy efficiency.

---

### *Pipelife*

#### **2017**

- › Pipelife continuously optimized and enlarged the range of planning tools that can be used to measure the heat loss and the heat requirements of individual residential units and entire buildings as a basis for the design of more efficient heating systems.

#### **2018**

- › The range of products available for these applications is being further enlarged.
-



# **Social and Societal Commitment**

The background of the slide is a light blue-grey color. It features a complex network of thin, intersecting lines in three colors: orange, grey, and red. Small dots of the same colors are placed at various points where the lines intersect or end, creating a sense of a global or digital network. The lines and dots are scattered across the entire slide, with a higher density in the lower half.



# Social and Societal Commitment

## *Principles*

Wienerberger views the economy as an integral part of society that has the obligation to serve people and create value for all. Wienerberger takes its role as a responsible member of society very seriously. For us, this responsibility encompasses the observance of ethical principles in all our actions, honest communication, active involvement in the creation of a transparent economic environment, personal accountability for what we do, and acting as a reliable and useful member of society.

## *Results of our 2014 Materiality Analysis*

In the course of a differentiated analysis of the impact of our various fields of production on society, business ethics and compliance were identified as aspects of material importance that are equally relevant to all operating segments. Details relating to these issues are contained in the chapter “Management Approach”, which also outlines our quantitative targets and the corresponding measures.

## *Social Commitment and Donation Activities*

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, i.e. through the provision of solutions in the fields of building materials and infrastructure and the transfer of sustainable building know-how. We therefore focus primarily on supporting people in need in a targeted manner through product donations. In 2017, the Wienerberger donations guideline was revised in order to introduce an even clearer differentiation between social commitment and cooperation with local initiatives.

Affordable housing is a fundamental human right and should be recognized as such. In 2012, Wienerberger therefore began to cooperate with Habitat for Humanity, an international non-profit organization (NPO) focusing on the provision of housing for people in need. In 2015, Wienerberger and Habitat for Humanity concluded a new

cooperation agreement to prolong their cooperation until 2018. The scope of cooperation has been extended in both geographic and material terms, with activities now covering five countries (Romania, Bulgaria, Hungary, Poland and the USA).

Since the beginning of the second phase of cooperation in 2015, 684 people, including 50 families, have been supported. In 2017 alone, housing and social facilities were provided for twelve families and another 422 people. As in the previous year, so-called “housing forums” were co-organized with Habitat for Humanity in 2017, the objective being to make politicians as well as public authorities aware of the importance of social housing. Moreover, another cooperative volunteering campaign was organized, with Wienerberger employees helping on site and providing hands-on assistance in the construction of houses. This form of cooperation is to be continued in the future.

In Romania, Wienerberger supports the Elijah Association (<http://www.elijah.ro>) run by Father Georg Sporschill SJ and Ruth Zenkert, which is making every effort to build a better future from families and their children. In 2017, for instance, ten residential buildings and a social center were set up for about 15 Roma families in the local community. Wienerberger donated clay blocks and roof tiles for the new buildings.

We also carry out joint projects in cooperation with Caritas, a humanitarian organization, and contribute to the creation of housing for groups of people in need in various countries. Since 2010, our colleagues in Ukraine have been cooperating with Caritas to provide housing for poor people. In the course of the reporting year, several families already moved into two residential buildings erected within the framework of this partnership with roof tiles donated by Wienerberger.

Our commitment to social causes will remain strong in the years to come, and we will be making every effort to live up to our claim to be a valuable member of society and to create value for the people.



# Reporting Profile

Wienerberger reports once a year on the Group's sustainable development indicators. In accordance with past practice, a full Sustainability Report is published every two years, which alternates with a concise update presenting the most essential facts and figures for the year between. The last full Sustainability Report for 2016 was published in June 2017. The 2018 Sustainability Report will be published according to schedule in June 2019.

This Sustainability Update covers Wienerberger's activities in 2017. The indicators shown also refer to the years 2015 and 2016 and thus reflect a three-year trend. The report focuses on the ecological, social and societal aspects of Wienerberger's activities and their impact on society. For more detailed information on Wienerberger's economic performance, its organizational profile and its corporate governance structure, please refer to the 2017 Annual Report, which is available online at ([www.annualreportwb.com/en/](http://www.annualreportwb.com/en/)).

This report covers the fully consolidated subsidiaries of the Group with operations in the wall, roof, facade, ceramic pipe, plastic pipe and concrete paver product groups. A list of all companies covered by the consolidated financial statements is contained in the 2017 Annual Report of Wienerberger. Sustainability reporting follows the scope of consolidation of the Wienerberger Group. For details on the scope of consolidation and the segmentation of the Wienerberger Group, please refer to Wienerberger's 2017 Annual Report.

The data presented in the chapter "Production" only refer to our production sites, whereas all other data include all sites of the Wienerberger Group. Deviations from the reporting scope are indicated in the respective sections.

The topics and key indicators presented in the report are based on the materiality analysis performed in 2014 and were elaborated by subject-specific working groups in cooperation with the Corporate Sustainability Officer. The decision on the selection of topics was taken by the Wienerberger Sustainability Steering Committee (SSC).

The 2017 Sustainability Update was prepared in accordance with the G4 guidelines of the Global Reporting Initiative (GRI), "core" option.

The data presented in this Sustainability Update are based primarily on internal statistics. Important topics were validated by an independent external auditor. In the year under review, the audit focused on facts and figures regarding occupational safety, health, employee turnover, energy consumption and emissions. The audit also covered the underlying sustainability management system and the processes employed to collect data and to implement the sustainability strategy.





# GRI G4 Content Table

## General standard disclosures

	Indicator	Page in Sustainability Update	Part of external assurance	UN Global Compact Principles
<b>Strategy &amp; Analysis</b>				
1	Statement from the most senior decision-maker of the organization	6–8		
<b>Organizational Profile</b>				
3–9	Name, headquarters, scale, legal form, brands and products, locations and markets	9–13, 19, Annual Report 111–112		
10–11	Total number of employees by employment contract, gender, supervised employees, regions and any significant variations in employment numbers	33–35, 43–45		
12	Description of supply chain	19–21		
13	Significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain	no significant changes		
14	Handling of precautionary approach or principle addressed by the organization	16, 93		UNGC 7
15	Externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes	16, 18, 90–94		
16	Memberships of associations (such as industry associations)	18, 84		
<b>Identified Material Aspects and Boundaries</b>				
17	List of all entities included in the organization's consolidated financial statements	85, Annual Report 200		
18–21	Process for defining the report content, material aspects, aspect boundaries inside and outside of the organization	19–22, Website, Materiality Analysis 2014	2014 by PWC	
22–23	Restatements of information provided in previous reports, and the reasons for such restatements	53 and mentioned in the footnotes of respective indicators		
<b>Stakeholder Engagement</b>				
24–27	List of stakeholder groups engaged, basis for identification of stakeholders, organization's approach to stakeholder engagement and topics that came up during the stakeholder process	18–19 Materiality Analysis 2014		
<b>Report Profile</b>				
28–30	Reporting period, date of most recent previous report and reporting cycle	85		
31	Contact point for questions regarding the report or its contents	94		
32	Report of the "in-accordance"-option, GRI-index of the selected option, reference to the external audit report	85		
33	Policies of the organization regarding external audit of the report, scope of audit and relationship to audit company	85, 95–96		
<b>Governance</b>				
34	Governance structure of the organization, including committees responsible for decisions regarding the economic, ecological and social impact	18, Website, Annual Report 48–69	2014 by PWC	
<b>Ethics and Integrity</b>				
56	Organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics	16–17		



## Specific standard disclosures

Indicator		Page in Sustainability Report	Part of external assurance	UN Global Compact Principles
<b>Economic Performance</b>				
<b>Aspect: Economic Performance</b>				
DMA	Disclosure on management approach	9–10		
EC1	Direct economic value generated and distributed	11		
EC3	Coverage of the organization's defined benefit plan obligations	Annual Report 164–167		
<b>Aspect: Indirect Economic Impacts</b>				
EC7	Development and impact of infrastructure investments and services supported	84		
<b>Environment</b>				
<b>Aspect: Materials</b>				
				UNGC 7, 8, 9
DMA	Disclosure on management approach	18, 52, 65–69		
EN2	Percentage of materials used that are recycled input materials	58–59, Website, Materiality Analysis 2014		
<b>Aspect: Energy</b>				
				UNGC 7, 8, 9
DMA	Disclosure on management approach	18, 52–56, 61–62	yes	
EN3	Energy consumption within the organization	54	yes	
EN5	Energy intensity	55–56	yes	
EN6	Reduction of energy consumption	54–56		
<b>Aspect: Water</b>				
				UNGC 7, 8, 9
DMA	Disclosure on management approach	18, 59, 66		
EN8	Total water withdrawal by source	59		
<b>Aspect: Emissions</b>				
				UNGC 7, 8, 9
DMA	Disclosure on management approach	18, 52–53, 56–58, 63–64	yes	
EN15	Direct greenhouse gas (GHG) emissions (Scope 1)	57	yes	
EN18	Greenhouse gas (GHG) emissions intensity	57–58	yes	
EN19	Reduction of greenhouse gas (GHG) emissions	57–58		
<b>Aspect: Products and Services</b>				
				UNGC 9
DMA	Disclosure on management approach	74–81		
EN27	Extent of impact mitigation of environmental impacts of products and services	74–81		
<b>Aspect: Supplier Environmental Assessment</b>				
				UNGC 7, 8
DMA	Disclosure on management approach	8, 22, 59, 67, 70–71, 92–93		
EN33	Significant actual and potential negative environmental impacts in the supply chain and actions taken	8, 22, 59, 67, 70–71, 92–93		



# GRI G4 Content Table

## Specific standard disclosures

Indicator		Page in Sustainability Report	Part of external assurance	UN Global Compact Principles
<b>Labor practices and decent work</b>				
<b>Aspect: Employment</b>				UNGC 3, 4, 5, 6
DMA	Disclosure on management approach	17, 32	yes	
LA1	Total number and rates of new employee hires and employee turnover by age group, gender, and region	33–35, 43–45 Detailed reporting fully in line with GRI requirements is currently not possible. The adaptation of the according reporting is in progress.	yes	
<b>Aspect: Occupational Health and Safety</b>				
DMA	Disclosure on management approach	17, 32, 36–40	yes	
LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	36–38 Detailed reporting fully in line with GRI requirements is currently not possible. The adaptation of the according reporting is being evaluated.	yes	
LA7	Workers with high incidence or high risk of diseases related to their occupation	38–40		
LA8	Health and safety topics covered in formal agreements with trade unions	41		
<b>Aspect: Training and Education</b>				
DMA	Disclosure on management approach	17, 41–42		
LA9	Average hours of training per year per employee by gender, and by employee category	41–42 Detailed reporting fully in line with GRI requirements is currently not possible. The adaptation of the according reporting is being evaluated.		
<b>Aspect: Diversity and Equal Opportunity</b>				UNGC 6
DMA	Disclosure on management approach	17, 42–45		
LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	43–45, Annual Report 53, 54–55		
<b>Human rights</b>				
<b>Aspect: Non-discrimination</b>				UNGC 6
DMA	Disclosure on management approach	17, 42		
HR3	Total number of incidents of discrimination and corrective actions taken	42		



## Specific standard disclosures

Indicator		Page in Sustainability Report	Part of external assurance	UN Global Compact Principles
<b>Human rights</b>				
<b>Aspect: Assessment</b>				UNGC 1, 2
DMA	Disclosure on management approach	Website, Materiality Analysis 2014		
HR9	Total number and percentage of operations that have been subject to human rights reviews or impact assessments	Qualitative information: 8, 16, 18, 41, 90, 94 Reporting fully in line with GRI requirements is currently not possible. The adaptation of the according reporting is being evaluated.		
<b>Society</b>				
<b>Aspect: Local Communities</b>				
DMA	Disclosure on management approach	Website, Materiality Analysis 2014		
SO2	Operations with significant actual or potential negative impacts on local communities	Website, Materiality Analysis 2014		
<b>Aspect: Anti-corruption</b>				UNGC 10
DMA	Disclosure on management approach	16–17		
SO3	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	17		
SO5	Confirmed incidents of corruption and actions taken	17		
<b>Aspect: Anti-competitive Behavior</b>				
DMA	Disclosure on management approach	16–17		
SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	17		
<b>Aspect: Compliance</b>				
DMA	Disclosure on management approach	16–17		
SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	17		
<b>Aspect: Supplier Assessment for Impacts on Society</b>				UNGC 1, 2
DMA	Disclosure on management approach	8, 70–71, 94		
SO10	Significant actual and potential negative impacts on society in the supply chain and actions taken	Qualitative Information: 8, 70–71, 94 Reporting in line with GRI requirements is currently not possible. In all our business areas in Europe, minimum standards have been laid down in "supplier codes of conduct", which have to be signed and complied with by suppliers upon conclusion of a contract.		

**Note:** The Annual Report as well as the Materiality Analysis 2014 can be found on the Wienerberger Website ([www.wienerberger.com](http://www.wienerberger.com))



# UN Global Compact: Communication on Progress 2017

The activities of big industrial companies, such as Wienerberger AG, have a strong impact on society and the environment. Such companies therefore bear a special responsibility and should act in an exemplary manner. The minimum standards to be complied with include, above all, the principles of the UN Global Compact regarding human rights, labor standards, environmental protection and the fight against corruption. Through its accession to the UN Global Compact in 2003, Wienerberger officially committed to the ten principles and undertook to foster their implementation within the framework of the company's possibilities. Once a year, we report on progress achieved in this respect.

The 2017 Communication on Progress in respect of the Global Compact forms part of our 2017 Sustainability Update. In order to ensure maximum transparency and to make it easier for our readers to find the individual examples, we have aggregated the most important statements on the ten principles and, in addition, marked the corresponding indicators in the GRI Index and added references to the pages concerned.

## **Global Compact Principles – Human Rights Principles 1 and 2**

Businesses should support and respect the protection of internationally proclaimed human rights, and make sure that they are not complicit in human rights abuses.

### **Commitment**

Within its sphere of influence, Wienerberger guarantees the protection of basic human rights. By adopting the Wienerberger Social Charter, Wienerberger committed itself to comply with the conventions and recommendations of the International Labor Organization (ILO). This includes providing safe and healthy working conditions. The safety of its employees is a matter of top priority for Wienerberger.

### **Progress in 2017**

The long-term target pursued by the Wienerberger Group is to reduce the number of accidents to zero. In 2014, the Group-wide safety standards implemented in 2010 were upgraded for the entire Wienerberger Group and activities within the framework of the Safety Initiative were stepped up. Additionally, each Business Unit implements its specific internal programs, which are described in detail on pages 45 and 46 of the 2016 Sustainability Report.

As in the previous year, targeted measures were taken by each Business Unit in 2017 in order to further increase the level of safety for our employees. Every occupational accident is analyzed by the Business Unit concerned; core aspects of occupational safety and individual initiatives are evaluated annually. In 2017, we again succeeded in reducing the frequency of accidents within the Wienerberger Group. As compared to the previous year, accident frequency was reduced from 6.5 occupational accidents per million hours worked in 2016 to 5.4 in 2017, which corresponds to a further reduction by almost 17%. Accident severity, expressed in accident-related sick leave days per million hours worked, also dropped from 177 in 2016 to 173 in 2017 (-2.1%). However, it saddens us to report that in 2017 again two fatal accidents occurred in the Wienerberger Group. Wienerberger deeply regrets these accidents. We studied the circumstances of the accidents in great depth and consistently pursued our measures aimed at increasing safety at work for our employees.

Health is a human right. Wienerberger therefore ensures safe and healthy working conditions at all its production sites. In 2017, the average number of non-accident-related sick leave days per employee at Group level (excluding the North America Division) increased to 10.2 from 9.6 in the previous year. This development is due to the higher frequency of long sick leave periods. The North America Division is not included, as its absolute numbers and percentages are not comparable with those of the other Divisions of the Group due to local legal provisions. Prevention plays an important role in health promotion, especially in view of the increased frequency of long sick leave periods. Besides our regular health



screening programs, we ensure that company physicians are available to all employees and offer ergonomic workplace analyses as well as individual health and fitness programs.

In North America, all full-time employees are covered by supplementary health insurance, the scope of which exceeds that of the Affordable Care Act (ACA) in some respects.

Being aware of its responsibility for the health and well-being of its employees, Wienerberger for years has been making every effort to minimize their exposure to potentially hazardous substances. Since 2008, Wienerberger has voluntarily reported on its measures to protect employees from exposure to respirable crystalline silica. The survey is conducted every two years within the framework of the NEPSI social partnership agreement between employees and employers (Negotiation Platform on Silica, [www.nepsi.eu/en/nepsi](http://www.nepsi.eu/en/nepsi)). Within the framework of the 2017 survey, Wienerberger applied the NEPSI system limits and collected indicators exclusively at its ceramic production sites. At the same time, however, we extended the geographic scope of the NEPSI system in order to obtain a clearer picture of all ceramic production sites of the Wienerberger Group. Based on the new, internally fine-tuned definitions of the indicators of the NEPSI social partnership agreement, we adjusted our targets in respect of the protection of our employees against exposure to respirable crystalline silica accordingly. As a Group-wide target, at least 95% of all ceramic production sites are to report on measures taken to protect employees from respirable crystalline silica. With almost 98% of all ceramic plants reporting on their measures, the target was again surpassed in 2017.

### ***Global Compact Principles – Labor Standards*** **Principles 3, 4, 5 and 6**

Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining; the elimination of all forms of forced and compulsory labor; the effective abolition of child labor; and the elimination of discrimination in respect of employment and occupation.

#### **Commitment**

Zero tolerance of child labor and discrimination is an absolute must for Wienerberger. Even before its accession to the UN Global Compact in 2003, Wienerberger committed itself, by signing the 2001 Social Charter, to ensure that employment and working conditions throughout the Group comply with national legislation and/or are based on collective bargaining agreements as a minimum standard. Thus, Wienerberger operates in accordance with the recommendations of the International Labor Organization (ILO). Besides adequate and safe working conditions, fair remuneration and the right of assembly and collective bargaining are high priorities for us.

In our effort to combat discrimination in recruitment and employment, we consider it essential to offer our female employees an attractive working environment and the same opportunities as their male colleagues. At the same time, we want to make sure that our male employees benefit from the same flexible solutions that enable them to reconcile work and family obligations as their female colleagues.

#### **Progress in 2017**

In 2017, 72% of all Wienerberger employees were covered by a collective bargaining agreement, the percentage being almost the same as in 2016.

Companies with a primary focus on the production of building materials traditionally have a high percentage of male employees. In 2017, the number of new entrants was 2,235, i.e. 265 more than in 2016. The number of women among the new entrants continued to rise in 2017 from 274 to 342, the number of men from 1,696 to 1,893. The percentage of women among the new entrants





increased from 13.9% to 15.3%, whereas the percentage of men declined from 86.1% to 84.7%. As at 31/12/2017, the total percentage of women employed by the Wienerberger Group was 13.8%, i.e. slightly above the previous year's value (13.6%). The percentages of women in the individual functional areas remained almost unchanged compared to the previous year.

In 2017, 12% of senior management positions were held by women, unchanged from the previous year. We continued to adhere to our policy of giving preference to women for new appointments to senior management and executive positions, provided the candidates' qualifications were equal. One specific measure to increase the number of women in senior management and executive positions at Wienerberger is to enable women to embark on suitable career paths at an early point in time.

The reconciliation of work and family life is an issue of special concern to Wienerberger. We therefore offer our employees the possibility of working part-time. This offer is being taken up by a growing number of female as well as male employees. The percentage of Wienerberger employees working part-time increased slightly to 3.6% in 2017 (+0.1 percentage points). The percentage of women in part-time employment amounted to 16.1% in 2017, down by 0.7 percentage points from the previous year. At the same time, the percentage of men working part-time increased slightly to 1.6% in 2017 (+0.2 percentage points).

### **Global Compact Principles – Environmental Protection**

#### **Principles 7, 8 and 9**

Businesses should support a precautionary approach to environmental challenges; undertake initiatives to promote greater environmental responsibility; and encourage the development and diffusion of environmentally friendly technologies.

### **Commitment**

Our goal is to minimize the environmental impact of our production processes and our use of raw materials. A responsible way of operating our clay extraction sites, the best possible conservation of resources, and an increase in the percentage of recycled materials used: these are the central principles governing our production activity. We are well aware that industrial production processes always involve the consumption of resources and a certain degree of interference with the natural environment. Therefore, production in harmony with the environment is a matter of great importance to us.

### **Progress in 2017**

Specific energy consumption and specific CO<sub>2</sub> emissions are two of the essential indicators of environmentally friendly production technologies. Wienerberger has set itself the target to reduce these parameters by 20% each in ceramic production by 2020, as compared to 2010. However, the Wienerberger Group's total energy consumption increased by 3.9% in 2017. The main reason for the increase is the higher volume of brick and plastic pipe production as well as the increase in concrete paver production at some production sites. Changes in the product mix in plastic pipe and concrete paver production also led to an increase in energy consumption in absolute terms in 2017.

In 2017, specific energy consumption dropped by 0.8% from the previous year's level in the Wienerberger Group as a whole and by 1.7% in ceramic production.

Continuous efforts are being made by Wienerberger to convert its production processes to low-emission energy sources in order to further reduce our climate-relevant CO<sub>2</sub> emissions. The North America Division is a noteworthy example of the success achieved: All its active production lines were converted from high-emission coal to low-emission natural gas in 2017. The share of renewable energy sources in the consumption of electricity, based on kWh per ton, increased significantly to a satisfactory 37% in 2017, up by 19.4 percentage points from the previous year.



The index of specific CO<sub>2</sub> emissions from primary energy sources in kg CO<sub>2</sub> per ton of ceramic products produced was reduced by 2.3%, as compared to the previous year. The reductions in specific CO<sub>2</sub> emission were most pronounced in the production of clay blocks (-2.8%) and facing bricks (-2.0%). Specific CO<sub>2</sub> emissions from primary energy sources in ceramic production dropped more strongly (-2.3% as compared to 2016) than specific energy consumption (-1.7%). This is due to the ongoing, consistent substitution of CO<sub>2</sub>-intensive energy sources, such as coal and fuel oil, by natural gas.

Pipelife has set itself the target to reduce the volume of specific indirect CO<sub>2</sub> emissions (primarily from the consumption of electricity) in production by 20% from the level reported in 2010. In 2017, Pipelife's indirect CO<sub>2</sub> emissions from electricity were 1% higher than in the previous year, which was due, among other factors, to changes in the product mix.

Specific water consumption is another indicator of the use of environmentally friendly technologies. We are making every effort to use water sparingly, for instance by running it in closed circuits and drawing primarily on our own wells. We are happy to report that in 2017 the total volume of specific water consumption, based on net additions to inventories, was reduced in all product groups. Pipelife's target is to reduce its consumption of water from public networks to 0.55 m<sup>3</sup> per ton of products produced by 2020. In plastic pipe production, however, specific water consumption from public networks amounted to 0.95 m<sup>3</sup> per ton in 2017. This unsatisfactory increase is also due, among other factors, to changes in the product mix.

Wienerberger is making a continuous effort to increase resource efficiency in production and, at the same time, further improve the properties of its products. Our particular focus is on reducing raw material consumption and using secondary raw materials in those areas of production where it is economically and technically feasible. We are also working on a continuous reduction of scrap rates and the recycling of production waste and residual materials into production. Semmelrock's target

for 2017 is to reduce its scrap rate by 50% compared to the reference value from 2014. The target was almost attained at 45.3%. The scrap rate is to be further reduced through the optimization of technologies, tools and processes as well as by raising our employees' awareness for resource efficiency in the plants. Pipelife's target is to increase the amount of recycling material used per ton of products produced to 70 kg (reference value in 2014: 58.9 kg/t). In 2017, the amount of recycling material per ton of products produced increased by 1.8 to 67.2 kg/ton.

As part of its commitment to the precautionary principle in dealing with environmental problems, Wienerberger has for years been working intensively on the voluntary preparation of eco-balances and environmental product declarations (EPDs) for its entire product range. Moreover, all ceramic pipes and fittings produced by Steinzeug-Keramo as well as selected Semmelrock product lines have been successfully certified according to the Cradle to Cradle® concept.

## ***Global Compact Principles – Fight against Corruption***

### **Principle 10**

Businesses should work against corruption in all its forms, including extortion and bribery.

### **Commitment**

Wienerberger is committed to fair and free competition; this implies a firm stance against any form of corruption. We have always pursued the target of zero incidents of corruption and expect all our employees to act accordingly.



### Progress in 2017

Wienerberger expects all employees of the Wienerberger Group to act in full compliance with the law. Any infringement constitutes a breach of duty. Should a suspicion of unlawful behavior be confirmed, the employee concerned will be sanctioned under labor law or civil law, depending on the extent of damage caused.

In 2017, internal audits were performed in 23 companies, with a special focus on organization, purchasing, materials management, sales and human resources, as well as corruption and anti-trust legislation. Another priority was compliance with the Group-wide standards on health and safety. In 2017, no judgment was pronounced against Wienerberger for corruption, nor were any penalty payments due. No negative reports were issued by the authorities in charge.

### *Global Compact Principles – Implementation in the Supply Chain*

To an increasing extent, Wienerberger verifies compliance with the principles of the Global Compact along its supply chain and therefore obliges its suppliers to observe social and ecological minimum standards. Wienerberger demands observance of the ten principles of the UN Global Compact on human rights, occupational health and safety, environmental protection and the fight against corruption along its supply chain. Almost all business areas have laid down their minimum requirements in specific supplier codes of conduct, which suppliers have to sign upon conclusion of a contract and comply with in their transactions. Wienerberger intends to apply a Group-wide “Supplier Code of Conduct”.

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# Courtesy translation of the independent assurance report on selected non-financial performance indicators of the Sustainability Update 2017 of Wienerberger AG \*)

## Introduction

We performed procedures to obtain limited assurance on the non-financial performance indicators G4-EN3 – Energy consumption within the organization, G4-EN5 – Energy intensity, G4-EN15 – Direct greenhouse gas (GHG) emissions (Scope 1), G4-EN18 – Greenhouse gas (GHG) emissions intensity, G4-LA1 – Total number and rates of new employee hires and employee turnover by age group, gender and region, G4-LA6 – Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender in the Sustainability Update 2017 of Wienerberger AG (hereafter: “Report”).

## Management's Responsibility

The preparation of the Report in accordance with the reporting principles as well as the selection of the scope of the engagement is the responsibility of Wienerberger AG's management. The reporting principles include the Sustainability Reporting Guidelines (Version G4) regarding reporting quality issued by the Global Reporting Initiative (GRI).

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 appropriate to the given circumstances. The responsibility of Wienerberger AG's management further includes designing, implementing and maintaining internal controls, which have been determined as necessary for the preparation of the Report that is free from material misstatement, whether due to fraud or error.

## Independent auditor's Responsibility

Our responsibility is to express a limited assurance opinion on the non-financial performance indicators G4-EN3 – Energy consumption within the organization, G4-EN5 – Energy intensity, G4-EN15 – Direct greenhouse gas (GHG) emissions (Scope 1), G4-EN18 – Greenhouse gas (GHG) emissions intensity, G4-LA1 – Total number and rates of new employee hires and employee turnover by age group, gender and region, G4-LA6 – Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender included in the Report based on our review.

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) to enable us to express a conclusion with limited assurance.

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 non-financial performance indicators mentioned above have not, in any material aspect, been prepared in accordance with the reporting criteria of GRI Reporting Guidelines.

An independent assurance engagement with the purpose of expressing a conclusion with limited assurance (“limited assurance engagement”) is reduced in scope compared to an independent assurance engagement with the purpose of expressing a conclusion with reasonable assurance (“reasonable assurance engagement”), thus providing reduced assurance. The procedures selected depend on the auditor's judgement.

\*) The German wording of the signed Independent Assurance Report, which refers to the German Version of the Report, is the only binding one. The English translation is not binding and shall not be used for the interpretation of the English Version of the Report.



We have performed the following procedures within this limited assurance engagement:

- Interviews of the employees named by Wienerberger AG regarding the sustainability strategy, the sustainability principles and the sustainability management
- Interviewing employees to assess the methods of data collection, data processing and internal controls
- Reconciliation of the non-financial performance indicators relevant for the audit, shown in the Report with the calculation documents provided
- Site visit of the production facility in Haiding
- Video conference with the responsible parties for non-financial data at country level in the United Kingdom

### Conclusion

Based on the procedures performed, nothing has come to our attention that causes us to believe that the non-financial performance indicators G4-EN3 – Energy consumption within the organization, G4-EN5 – Energy intensity, G4-EN15 – Direct greenhouse gas (GHG) emissions (Scope 1), G4-EN18 – Greenhouse gas (GHG) emissions intensity, G4-LA1 – Total number and rates of new employee hires and employee turnover by age group, gender and region, G4-LA6 – Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender stated in the Report have not, in all material aspects, been prepared in accordance with the reporting criteria of the Sustainability Reporting Guidelines (Version G4) issued by the Global Reporting Initiative (GRI).

### Terms of engagement

The basis for this engagement is the “General Conditions of Contract for the Public Accounting Professions”, as issued by the Chamber of Public Accountants and Tax Advisors in Austria as amended on February 21<sup>st</sup>, 2011 (“AAB 2011”). In accordance with chapter 8 AAB 2011, 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, June 28, 2018

Deloitte Audit Wirtschaftsprüfungs GmbH

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## *Imprint*

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### ***Scientific advice***

BZL Kommunikation und  
Projektsteuerung GmbH, Oyten (D)

### ***Translation***

Eva Fürthauer

### ***Concept and Design***

Brains, Marken und Design GmbH

### ***Generative Designs***

Process – Studio for Art and Design OG  
[www.process.studio](http://www.process.studio)

### ***Portrait photography***

Kurt Keinrath

### ***Print production***

Lindenau Productions  
Print: Gerin Druck

### ***Remark***

*The Wienerberger Sustainability Update 2017 is available in English and German. Both documents are available online and can be downloaded under [sustainabilityreport17.wienerberger.com](http://sustainabilityreport17.wienerberger.com) and [nachhaltigkeitsbericht17.wienerberger.com](http://nachhaltigkeitsbericht17.wienerberger.com).*





