# wienerberger

# wienerberger provides innovative forward-looking solutions in the area of water and energy management

> Innovative solutions in response to the impact of climate change

- > Largest digital twin in Europe to be implemented in cooperation with Brabant Water N.V in the Netherlands
- > Focus on smart solutions that protect the environment while also enhancing product efficiency and longevity

**Vienna, December 13, 2023** – In times of climate change, weather extremes like dry periods, floods and heat waves are increasing around the world. At the same time, resources like water and energy are tightening and more and more natural land is being sealed with impermeable surfaces, which on the one hand prevents the natural infiltration of rainwater and thus has a negative impact on water supply and on the other hand leads to flooding. All these developments call for urgent action to effectively counter the effects of climate change, such as drought and flooding, and to sustainably use valuable resources and protect the environment.

As a leading international supplier of innovative and ecological solutions for the entire building envelope in new construction and renovation, as well as for infrastructure in water and energy management, wienerberger offers solutions in each of these areas. With its development of sustainable building materials and technologies, wienerberger contributes to reducing the consumption of resources and minimizing environmental impact. As time is particularly pressing for answers to the rapidly increasing effects of climate change, the company is raising its efforts and continuing to drive further expansion in the areas of water and energy management with the development of innovative and intelligent solutions.

"At wienerberger, we offer innovative solutions for construction, renovation and infrastructure that are not only efficient and affordable, but also make a valuable contribution to sustainability, including water and energy solutions in particular. In doing so, we ensure that our solutions meet the highest quality and environmental standards by using state-of-the-art technologies and materials. In this way, we are shaping a better world for the generation of tomorrow," says Heimo Scheuch, wienerberger CEO.

## Efficient water management as a necessity

Due to long dry periods, heat waves and floods combined with inadequate stormwater management systems, not only Europe is confronted with declining groundwater levels, water pollution and avoidable follow-up costs. wienerberger is aware of these issues and therefore offers stormwater management systems that allow rainwater to be collected, stored and infiltrated or reused. Consequently, the water can be used for sanitary purposes or irrigation. With this innovative water management solution, wienerberger is making a valuable contribution to the efficient use of rainwater and the stabilization of the groundwater table.

The importance of efficient water management is not only evident regarding the groundwater table, but also in the agricultural sector - agriculture in particular is strongly affected by the impact of the climate crisis. Here, too, the company has picked up on this development and is driving forward efficient irrigation with water saving solutions. A concrete example of this is the drip irrigation pipe - thanks to this, as little water as possible is used, and after the harvest the irrigation system is removed, cleaned, recycled and reused in the interests of a sustainable circular economy.

### Largest digital twin in Europe

Faced with challenges such as increasingly frequent heatwaves, aging infrastructure, and rising pollution, water utilities and technology providers across Europe as for example Brabant Water N.V., one of the largest water suppliers in the Netherlands, have joined forces with Pipelife, a wienerberger company, to find and implement an innovative digital twin solution. A digital twin is a virtual model of a process, product, or service. To create it, real-time data collected with sensors is processed on the Internet of Things (IoT) using artificial intelligence and software analysis.

A deeper understanding of systems, optimized operations and streamlined maintenance, reduced costs, and an increase in customer satisfaction, are some of the benefits of implementing a Digital Twin for Brabant Water N.V. while taking sustainable and resilient water management to the next level.

Brabant Water N.V. recognized the pivotal role a digital representation of its systems plays in addressing possible water losses from pipe leakages. While significant pipe ruptures resulting from activities like excavation are promptly detected, small cracks in aging pipes can go unnoticed for extended periods. Through continuous monitoring of water pressure across the network, the company would be able to narrow down areas of water loss to identify sections that require replacement or repair. This proactive approach enables timely interventions and enhances the efficiency of water distribution.

The digital twin solution also makes it possible to detect on screen the exact moment when the water temperature in the network, due to climate-related heat waves, threatens to rise above 25°C, which would mean that hygienic drinking water standards are no longer guaranteed, and respond promptly with targeted measures such as water flushing.

#### Successful integration of Wideco Sweden AB bears fruit

Looking to the future, the need for an effective and efficient energy system is increasingly coming to the fore. The increasing demand for energy, also due to the growth of the world's population, requires innovative solutions. wienerberger is therefore actively involved in the development and implementation of sustainable energy technologies and offers a comprehensive portfolio of solutions to meet the needs of its customers. The acquisition of Wideco Sweden 2023 enabled wienerberger to successfully expand its Smart Solutions business in the area of innovative energy applications and strengthened its position in the water industry.

wienerberger's know-how in water solutions is also in high demand in Scandinavia. In the area of district heating, Sweden is a successful model with one of the highest penetrations of district heating networks in the world. A large part of the Swedish population, especially in urban areas, relies on these networks. Major companies such as EON/Navirum are taking ambitious steps to modernize their district heating networks and make them future-proof, with wienerberger subsidiary Wideco at the forefront of this transformative journey: The company's unique IoT platform WISION<sup>®</sup> for sensors in smart buildings, industries and cities is based on high-performance, serverless technology and is equipped with the most suitable communication protocols such as 4G, LoRaWAN and NB-IoT. With their in-house developed hardware, software and platform, the company monitors and protects over 40,000 km of district heating/cooling pipe networks including 6,000 underground manholes. In this way, Wideco is providing support with efficient solutions to make the Swedish district heating sector fit for the future. Innovative technologies help to optimize energy consumption in district heating networks and increase efficiency.

Wienerberger AG Press release

#### wienerberger

wienerberger is a leading international provider of innovative, ecological solutions for the entire building envelope, in the fields of new buildings and renovations, as well as infrastructure in water and energy management. With more than 19,000 employees worldwide, wienerberger's solutions enable energy-efficient, healthy, climate-friendly, and affordable living. wienerberger is the world's largest producer of bricks and the market leader in clay roof tiles in Europe as well as concrete pavers in Eastern Europe. In pipe systems (ceramic and plastic pipes), the company is one of the leading suppliers in Europe. By acquiring Meridian Brick, wienerberger further strengthened its position as a leading supplier of facade products in North America. With its more than 200 production sites, wienerberger generated revenues of approx. € 5.0 billion and EBITDA of € 1 billion in 2022.

#### For further information, please contact:

Claudia Hajdinyak, Head of Corporate Communications Wienerberger AG t+43 664 828 31 83 | claudia.hajdinyak@wienerberger.com

