

VitrA

VitrA Tiles for a sustainable future



Index

CEO's message

Company information

Our certificates

Circular economy

Waste management

Water

Energy

CO₂

Logistics

Packaging

Product life cycle

Tiles as a sustainable solution



Hasan Pehlivan
CEO

“ Vitra Tiles produces modern, durable and high-quality ceramic tiles that respond to the changing needs of customers and business partners with sustainable and systematic solutions and a wide range of products.

To this end, we strive to minimize our use of non-renewable materials and continually reduce the carbon emissions of our manufacturing processes through investments in energy efficient production technologies and processes, new product design, waste recycling, and environment-friendly packaging materials.

All of these efforts reflect our sensitivity to the environment and care for future generations. In this regard, we are delighted that Turkey’s Ministry of Environment, Urbanization and Climate Change has recognized our efforts with its prestigious ZeroWaste Certificate. ”



Founded in 1991, VitrA Tiles has increasingly incorporated sustainability approaches into its business management. That is why we are able to export such a wide range of products to over 75 countries.

Aware of our environmental impact, we are continually evaluating the sustainability performance of our manufacturing processes in order to steadily improve the sustainability credentials of our products.

Our certificates

2008

VitrA Tiles is a subsidiary of Eczacıbaşı Holding, which has been publishing sustainability reports since 2008.

2010-2014

VitrA Tiles production facilities are certified with environmental management systems achieving ISO14001 certification since 2010, for occupational health and safety management systems with ISO45001 (formerly OHSAS18001) since 2012 and for energy management systems with ISO50001 since 2014



2011

VitrA Tiles became the first in Turkey in its industry to receive the EU Eco-Label for a range of tile products.



2013

VitrA Tiles publishes its first Environmental Product Declaration (EPD) providing transparent and independently verified documentation of its products' environmental performance.



VitrA Tiles receives its first Green Guard and Green Guard Gold certificates documenting the low level of volatile and potentially harmful chemicals in its products.



2020

VitrA Tiles becomes the first enterprise in its industry to receive the Turkish Environmental Ecolabel of Approval for selected product groups.



VitrA Tiles receives a Zero Waste Certificate from the Turkish Ministry of Environment, Urbanization and Climate Change for its holistic approach to waste management.



Circular economy



VitrA is constantly researching ways of increasing the ratio of recycled content in its products and contributing to circular economies.

Our ceramic tile manufacturing process begins with natural raw materials, which initially account for **90%** of our tile recipe. To this we add **100%** of the green scrap generated by our manufacturing processes and **100%** of the industrial sludge created by an affiliate company producing VitrA sanitaryware. As a result, our products contain up to **30%** recycled content.

We further contribute to the circular economy by sending **100%** of our fired scrap, which we cannot reuse in our own recipes, to cement factories. This solution, in combination with our reuse of green scrap, fired scrap and waste water sludge, prevents almost **40,000 tons** of landfill annually and contributes to a corresponding reduction in new material use.

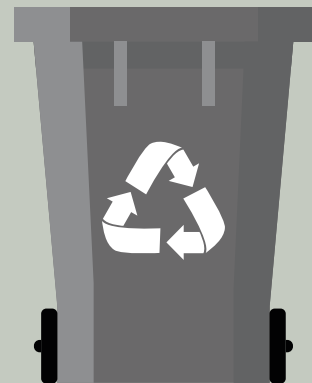
Waste management



We manage our waste with a holistic approach, aware that the first principle of waste management is not creating waste in the first place.

We sort our waste according to category and manage it accordingly.

We have a Zero Waste Certificate from Turkey's Ministry of Environment, Urbanization and Climate Change.



Water



Today we are faced with the many consequences of climate change, one of which is drought.

In order to adapt to climate change and use resources more efficiently, we reuse 100% of the waste water in our production processes.

Process optimization and improvement in water equipments have enabled us to reduce water consumption per ton production by 7.2% over the past 5 years.

HOW DO WE ACHIEVE THIS?

First, we focused on how to reduce our fresh water consumption and reviewed our processes accordingly.

We sought out and employed best practices to achieve these reductions.

Process optimization and improvement efforts include spray dryer water recycling systems, dry rectification lines. In addition the replacement of all manual faucets in the plant with photocell-controlled ones.

Energy



Between 2015 and 2020, we decreased our per-ton energy consumption by **16%** through a combination of techniques and new technologies.

We reused waste heat from kilns in pre-dryers, **installed** kiln collector systems, **switched to** materials with low heat transmission coefficients, **adopted** new types of burner systems, **reused** compressor waste heat, replaced the shrink hoods in our natural gas burners with stretch hoods, **transformed** our lighting with LED conversion and roof panels to maximize use of daylight, **invested** in IE4 motors, **optimized** compressor pressure, and **adopted** inverters in kiln and spray dryers.

Thanks to our waste heat recovery systems, we prevented **3,000 tons** of CO2 emissions per annum and reduced our natural gas consumption.



Energy



Renewable Energy

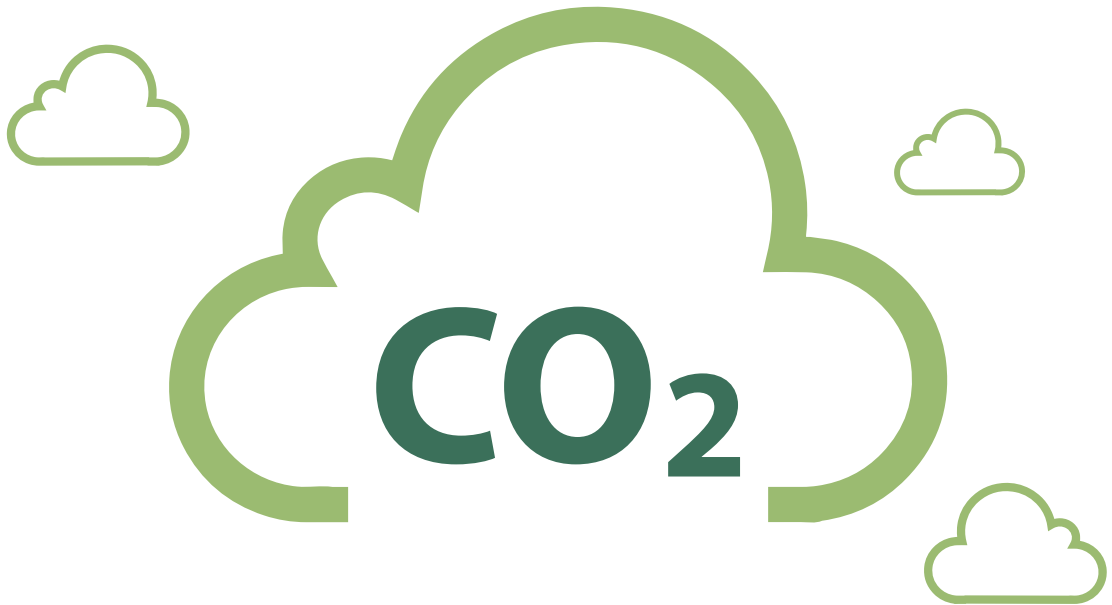
Solar Panels

We have commissioned a pilot **50 kW** solar panel trial installation at our factory. After site tests are completed, we plan to make a major investment in solar power for our own production processes.

Green Hydrogen

At the same time, we are studying the feasibility of blending hydrogen with natural gas for powering the high-temperature kilns in the ceramic tile manufacturing process.





While production quantity increased by 2.9% between 2015 and 2020,

Energy improvement projects and process improvements enabled us to achieve a,



23.01%
absolute
reduction in our
Scope 1
emissions,

9.6%
absolute
reduction in our
Scope 2
emissions,

**SCOPE 1
SCOPE 2
DEFINITION:**

Scope 1 emissions:
Fuel consumption (natural gas, LPG/
LNG) and calcination related CO2
emissions.

Scope 2 emissions:
Electricity consumption related CO2
emissions.

Logistics





We are looking for ways to decrease the carbon footprint of raw material and finished product transportation.



By sourcing as much as **90%** of our raw material amount locally, we are able to minimize the greenhouse gas emissions originating from logistics.



Now, we are studying ways to locally source the remaining raw materials.



We also ensure pallet alignment optimization and try to avoid CO₂-intensive road transport in favor of trains and ships. We also strive to increase railway transportation of our products as a greener logistics option where possible. In **2020** alone our logistical improvement projects prevented **100 tons** of CO₂ emissions.

Packaging



With our pallet optimization projects, we have increased the quantity of products shipped on pallets and containers and reduced the use of packaging materials per m² and the carbon emissions from transportation.

We are trying to increase our use of recycled packaging in order to minimize our plastic, cardboard and wood consumption. The cardboard we use to pack our products consists of **100%** recycled corrugated paper and is **100%** recyclable after being used.



Product life cycle



Aware of the importance of minimizing resource consumption throughout our products' lifecycle, we develop innovative surfaces that require less water and less chemicals to keep clean.





Tiles as a sustainable solution



Ceramic tile products are fired at 1100-1200°C and do not contain volatile organic compounds. Green Guard has certified that ceramic tiles are preferable to other coating materials such as vinyl and laminate because they do not contain materials that are harmful to indoor air quality. Ceramic tiles contribute to hygiene and are easy to clean.

They are also affordable, hard-wearing, and require little or no maintenance. Durable and resource-efficient, ceramic tiles do not burn and do not create environmentally harmful waste at the end of their useful life.









VitrA