

Şişecam Flat Glass

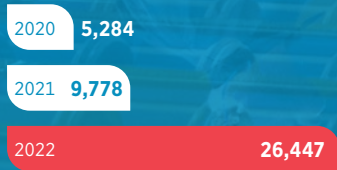
High-capacity capabilities in international markets

ŞİŞECAM FLAT GLASS NET SALES REVENUES

TRY **26.5**
Billion

Europe's 2nd and
World's 5th Largest
Flat Glass Manufacturer

Şişecam Flat Glass Net Sales Revenue (TRY million)



Şişecam Flat Glass recorded net sales revenue of TRY 26,447 million as of year-end 2022.

AN OVERVIEW OF 2022

Industrial production of construction materials, which increased by 4.4% in the first quarter of 2022 and by 2.1% in the second quarter, in the construction sector, one of the main sectors in which flat glass is consumed in Türkiye, continually decreased in the third quarter by 3.3%. Production continued to decline in the last quarter of 2022 as well.

In Europe, there was a 3% increase in the first quarter, followed by a 1% contraction in the second and third quarters, and a stagnant trend in the last quarter.

Building construction activities in Russia in 2022 were similar to the previous year. In India, the sector grew by 9.7% compared to 2021, driven by urbanization projects across the country.

The global market for small and large household appliances in the white goods sector, one of the important sectors of the Turkish economy, showed a moderate performance in the second half of 2022 as it did in the first half. The results of the Covid-19 pandemic are still being felt, with new impacts from the war in Ukraine and inflation. For example, sales of large home appliances in Southeast Asia rose 18% while they fell 8% in China. In Western Europe, there is a consumer purchase restriction. Türkiye, on the other hand, has become the world's second largest production base with 7% of the world's white goods production. In addition, the Turkish white goods sector, with a production capacity of 25 million units, has become an important production hub in the last decade. Türkiye has become the number one country in Europe in the white goods sector. While the Turkish market sold 6.5 million units in domestic sales in 2012, it set a record in the last decade, reaching 24 million units by the end of 2022. White goods companies operating in Türkiye have been making significant investments in R&D. Over the past decade, the increase in energy efficiency of products has reached 65%.



Global brand that adds value to people and the environment

Şişecam undertakes efforts to achieve customer satisfaction, quickly respond to market needs, boost its service level, and implement brand building initiatives on digital platforms.

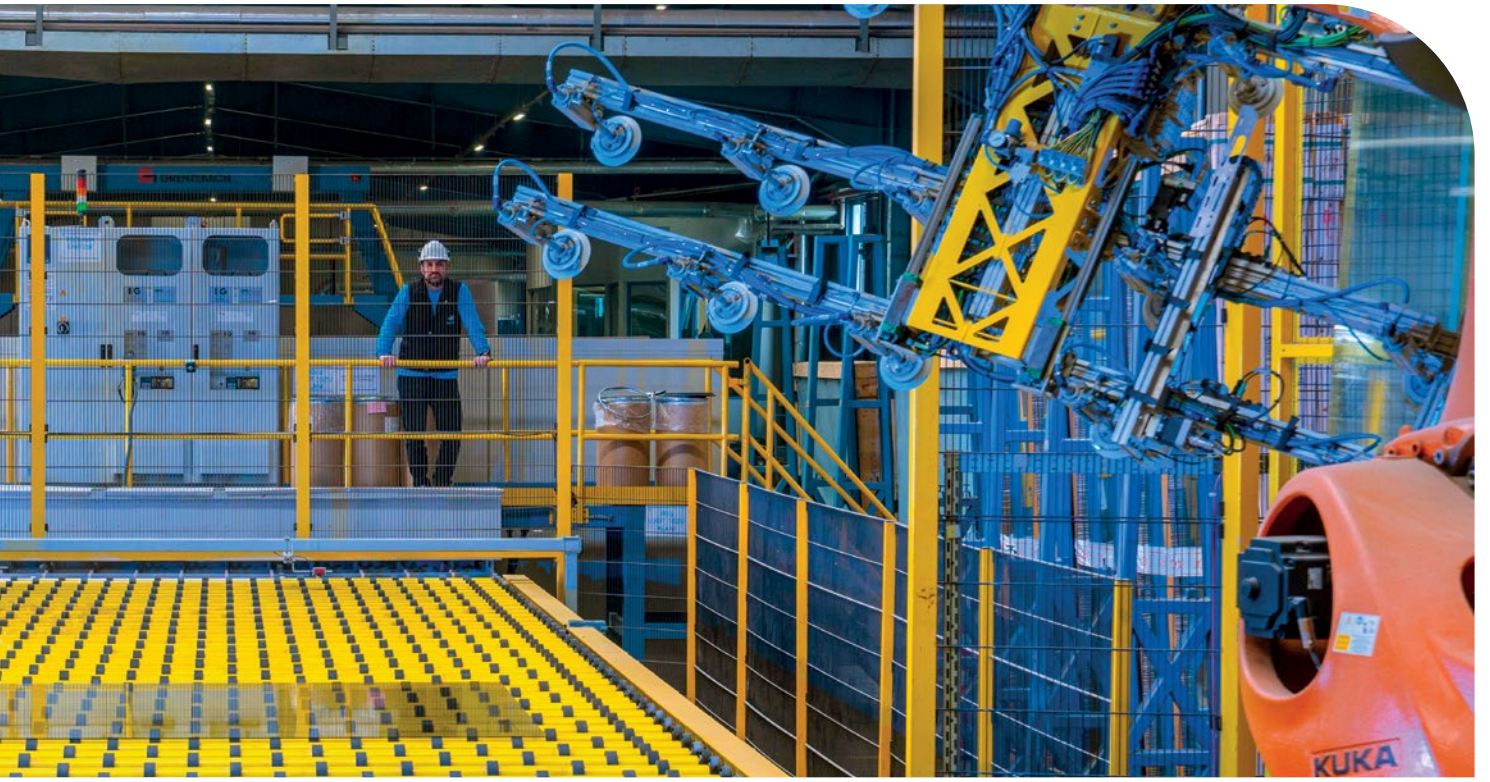
The global solar energy sector, which was 40 GW in 2010, reached 1,120 GW in 2022. Global installed capacity of solar energy is expected to quadruple by 2030 and exceed 3 thousand GW. For example, the USA, which currently supplies 3% of its energy needs from solar energy, aims to increase this rate to 40% by 2030 and to 45% by 2050. This transformation also accelerates the initiatives of industrial actors to transform their energy consumption into green energy sources and to limit their carbon footprints. More companies are putting renewable energy investment for their self-consumption on their agenda every day. Şişecam aims to increase its installed patterned glass production capacity to 324 thousand tons per year, and its energy glass processing line capacity to 26.6 million square meters per year, with the capacity increase in patterned glass production and processing line in Mersin. Şişecam supports the development of the rapidly growing solar energy sector in Türkiye with this decision, which is the outcome of its sustainability-oriented value-added production strategy.

ACHIEVEMENTS IN 2022 AND GOALS FOR THE FUTURE

Adapting to rapidly changing market conditions in the face of all the uncertainties in the world, Şişecam meets the demands coming from both distant markets and nearby geographies at the maximum level with an inclusive approach, within the scope of its capacity, with its widespread production network in 14 countries, and continues to move forward successfully towards its goals. In addition to the current growth opportunities, risks and uncertainties in the market also triggered a process that required the updating of Şişecam's current management methods. In this period shaped by rebalancing, Şişecam reviewed its internal processes and completed the year with successful governance. For Şişecam, 2022 was a year in which national and international markets were diversified, the sales volume was increased by establishing new connections while maintaining its existing customer portfolio, and adaptation was improved through renewals with new investments.



Despite changing market conditions in 2022, the needs of the sectors to which it provides input were quickly met with customer focus, which is one of Şişecam's priority areas, and accordingly with customer loyalty and total quality management practices that have been in place for many years. Şişecam continued efforts by supporting its vision of being a global company that adds value to people and the environment with projects to achieve customer satisfaction, to quickly respond to market needs, to increase the service level, and to implement brand building initiatives on digital platforms. As a result of these values, key customer management and effective sales and operations planning was achieved, and the balance of production, sales, and inventory was successfully managed. The outputs of the communication that Şişecam establishes with all its stakeholders are evaluated as feedback. Improvement studies were continued by analyzing the feedback received and reflecting the obtained data to the processes.



With the declaration of 2022 as the “International Year of Glass” by the United Nations, the technological, scientific, and economic importance of glass, which has a strategic importance in all areas of life, was discussed while studies on the diversity of usage areas of glass were increased. Şişecam continues to increase its collaboration with its stakeholders at home and abroad and to develop projects that generate social benefits by reviewing its strategic approaches.

By investigating the sustainable role of glass and recycling processes, it focused more on energy saving and sustainable products and discussed new investments in the patterned glass and energy glass sectors. With an investment of about EUR 228 million, the patterned glass furnace with an annual production capacity of 244 thousand tons and the energy glass line with a processing capacity of 26.6 million square meters per year were planned to be put into operation in 2024. Solar energy stands out as the most applicable solution for electricity generation. Şişecam took steps to turn this opportunity that emerged in the sector into value for Türkiye. Thanks to the new furnace and processing line investment, the aim is to meet the needs of the market by responding to the increasing demand in Türkiye.

The assumption is that industry segments will be in different growth trajectories in 2023 and competition will increase accordingly. Due to uncertainties such as high inflation and increasing interest rates, a slowdown is expected in the construction sector, especially in the first half of 2023. In addition, the need for housing in Türkiye due to urban transformation, the increasing need in Europe due to the renovation market, and growth momentum in the US market in residential and non-residential buildings will continue to positively affect the flat glass industry.

In order to sustain the satisfaction of all customers in the flat glass value chain, efforts are being carried out, and solutions are being developed for expectations in the face of the dynamism of the market.

GROSS PROFIT

TRY **10.6** Billion

Şişecam Flat Glass posted gross profit of TRY 10.6 billion as of year-end 2022.

GLASS PRODUCTION

3 Million Tons

Flat glass production accounts for 51.9% of Şişecam's total glass production.

NEW INVESTMENTS, NEW CAPACITIES

Şişecam conducts its activities in the field of flat glass with 10 production facilities in six countries and provides inputs to the construction, furniture, energy, and white goods sectors with its expanding product range.

One of the global flat glass brands that feeds innovative approaches with advanced technology, Şişecam is a leading company in its field not only in Türkiye but also worldwide, with its broad product portfolio with high added value and its customer satisfaction-focused approach. Shaping its strategic focus around sustainability, Şişecam is one of the leading players in the sector with its growth investments in varied geographic locations.

Operating in the field of flat glass with eight flat glass lines in four locations in Türkiye, Şişecam continues its investments without slowing down to ensure the continuity and development of the point it has reached today, despite the cyclical uncertainties, the pandemic the effects of which are still being felt, and global recession expectations.



In Türkiye, which is identified as the most beneficial investment area due to investment fundamentals, and as an environment with high returns in terms of expectations, the foundations of Auto Glass Float, a first in its field as it will serve only the automotive sector, were laid in Kırklareli in May 2022 and is planned to be commissioned in 2023. In addition, in December 2021, construction of the TR9 float line with a capacity of 1,200 tons/day was started in Mersin. With the commissioning of these two lines, Şişecam will operate in Türkiye with 10 flat glass lines.

Having also strengthened its position in the global market by expanding its high value-added and innovative product range, Şişecam aims to close the supply gap expected to occur in the energy glass sector by increasing the installed patterned glass production capacity to 324 thousand tons per year with the capacity increase of the patterned glass and processing line to be implemented in Mersin adhering to the principles of Industry 4.0 and by increasing its energy glass processing line capacity to 26.6 million square meters per year. It also aims to contribute to the country's economy by making use of export opportunities.

NEW PRODUCT AND SUSTAINABILITY EFFORTS

Şişecam develops products for different sectors via innovative projects carried out with the Şişecam Science Technology and Design Center, one of the world's leading glass research centers. The company successfully completed efforts to develop high-performance Low-E coated glass, environmentally friendly mirrors, and solar mirrors for the energy sector, which offer innovative solutions in line with the needs of the global market.

Şişecam evaluates collaboration opportunities with research institutions, universities, and various start-up companies and aims to enrich its value-added and sustainable product range with its organic and inorganic investments.

Life Cycle Assessment is a fundamental tool for Şişecam to expand its sustainable product range and is effectively used to ensure sustainability during the design and production stages of the product.



High value-added and innovative product range

Şişecam Science Technology and Design Center develops innovative products for a diverse range of sectors with its advanced research studies.

In line with its CareforNext Strategy, Şişecam completed the product life cycle analysis (LCA) project for its entire flat glass product range as of 2022, in order to register its sustainable products, seize opportunities based on life cycles, and manage sustainability expectations for the entire value chain. As part of the project, independent and verified Environmental Product Declaration (EPD)s were prepared for all flat glass products and made available to stakeholders.

Campaigns and communication activities were carried out to increase brand recognition and loyalty. The primary medium in all communication activities was digital. Brand and product communication was supported via print publications, events, and sponsorship activities.

Digital communication campaigns for ensuring brand awareness, strengthening of the brand image, and promotion of strategically important value-added and qualified flat glass products, were carried out

in Türkiye, Bulgaria, Romania, Qatar, Greece, Italy, France, United Arab Emirates, Spain, Germany, and India throughout the year. Campaigns on digital platforms in 11 countries were also supported by print media.

The Isicam Systems end consumer campaign, which explained the energy saving advantages of the Isicam S/K series against rising energy costs and invited the target audience to make glass replacements with the “Renewal Movement in Homes” discourse, was carried out between September 21 and December 25. Final consumers were reached through digital, print media and dealer sales points.

Sponsorship activities were carried out in events and competitions where architects, facade consultants, construction companies, and industry professionals came together.

We participated in Solar Istanbul in March, Intersolar Europe in May, Glasstec in September, and Eurasia Glass Fairs in November. A meeting was held with authorized dealers in Türkiye in December.