

A photograph of three children (two girls and one boy) running happily in a grassy park. They are holding hands and smiling. The background is filled with lush green trees under bright sunlight. The image is overlaid with a decorative pattern of white hexagons on the left side, some of which are filled with blue sky and clouds.

# SUSTAINABILITY REPORT 2021

The logo for Şişecam, featuring a stylized graphic of blue and red diagonal lines to the left of the company name.

**ŞİŞECAM**

Care for  
Ne**xt**





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# ABOUT THE REPORT

Şişecam, which was founded in 1935 to establish the Turkish glass industry in line with the vision of Mustafa Kemal Atatürk, the founder of the Turkish Republic, is a strong global player in the field of glass and chemicals. Şişecam, the only global company operating in all basic areas of glass such as flat glass, glassware, glass packaging and glass fiber, is among the two largest global manufacturers in the field of glassware and among the five largest global manufacturers in the field of glass packaging and flat glass. Şişecam is also one of the three largest soda producers in the world, and is the world leader in the field of chromium chemicals. Assuming a leading role in flat glass, glassware, glass packaging, chemicals, automotive, glass fiber, mining, energy and recycling business lines, Şişecam continues its production activities in Türkiye, Germany, Italy, Bulgaria, Romania, Slovakia, Hungary, Bosnia Herzegovina, Russian Federation, Georgia, Ukraine, Egypt, India and the USA. With this report we share our sustainability performance covering the period January 1, 2021 - December 31, 2021 with our stakeholders. The data in the report covers all legal businesses of Şişecam in and out of Turkey.

With its competent human resources and smart technologies, Şişecam takes firm steps towards its goal of becoming one of the world's top 3 manufacturers in its main fields of activity, and continues to transform its digital infrastructure and culture uninterruptedly, taking into account the needs of the future. Şişecam has 86 years of experience, 23,000 employees, production activities in more than 14 countries on four continents, and a sales network spanning more than 150 countries, and continues to grow in line with its "Global Excellence" strategy and with an inclusive approach that supports the development of its entire ecosystem. Şişecam assumes responsibility to protect the planet, empower society and transform life through the CareforNext strategy that it has implemented in line, and integrated with the United Nations Sustainable Development Goals, and uses all its experience and competencies to ensure sustainable development in every field.



PROTECT THE PLANET

EMPOWER SOCIETY

TRANSFORM LIFE



# LETTER FROM THE CHAIRMAN OF THE BOARD

## How has Şişecam’s sustainability journey evolved from past to present?

Şişecam, one of the prime examples of the industry-based development drive in Türkiye, is a well-established corporation established in 1935 to meet the increasing national demand for bottle and glassware. It has achieved many successes throughout its 87-year history, and is today a strong global company operating in the glass and chemicals sectors of 14 countries on 4 continents, exporting its products to 150 countries, and employing 23,000 people. Şişecam, which has developed capabilities that support every stage of the value chain based on the inclusive culture that it has been developing since its establishment, derives its outstanding success mostly from this approach. Sustainability and value-creating growth is the cornerstone of Şişecam culture and is a part of its DNA.

Today, Şişecam continues its journey of creating value in many fields, not only with its value-added products, but also in raw material supply, design, R&D to energy production, manufacturing, logistics and glass recycling industries while applying sustainable and innovative solutions and according priority to the philosophy of creating sustainable value while growing. To Şişecam, the relationship between yesterday, today and tomorrow is a cause-effect

relationship. In 2021, we announced our 2022–2030 CareforNext strategy, providing a roadmap of the responsibilities we undertake to protect the planet, empower society and transform life, as our sustainability priorities. We continue to work uninterrupted in line with the 2022-2030 CareforNext strategy, which is compatible and integrated with the United Nations Sustainable Development Goals (UN-SDG). In the light of our sustainability approach, while meeting the needs of the market and society, we continue our growth journey within a structure that responds to the changing needs of communities and offers solutions to protect the planet without leaving behind our employees, suppliers and any of our stakeholders in our value chain, where our CareforNext strategy is integrated in every function. In every step we take, we prioritize creating value for our entire ecosystem.

## What do you think are the requirements of the sustainability concept in the new normal and does Şişecam have an understanding that responds to them?

The global epidemic and the comprehensive and rapid change it brought about increased the adaptability of the world, which was suddenly confronted with conditions for which it was never ready. Without a doubt, one of the most important lessons learned from this extraordinary situation is that any approach that



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has not been harmonized with the needs of the planet and society cannot be sustainable. I would like to proudly state that Şişecam is among the corporations that rapidly adapted themselves to this process thanks to its structure capable of dealing with all situations, its approach that covers the entire ecosystem, the philosophy of “people first” in its culture, and its comprehensive experience. In this period, we continued to progress toward our goals by effectively managing risks and opportunities throughout our value chain and by implementing resilient business models. With the contribution of various factors acting as a driving force such as the European Union Green Deal, sustainability in the supply chain, and portfolio transformation, we continued to provide solutions to the developing and changing needs of the society and the planet while making investments for that purpose in conjunction with all our stakeholders along our value chain, especially our suppliers.

Our 2030 CareforNext Sustainability strategy, which we have devised with this understanding, is an important guide shaped by clear targets in line with the UN Sustainable Development Goals and dynamic assessments focused on environmental, social and governance (ESG). In addition to a thorough analysis of the strategy, ESG risks and opportunities, our strategy, devised with the contributions of more than 400 stakeholders, is supported by a structure extending from Şişecam’s senior management to production facilities and is supported by a compass based on concrete investment needs.

Taking advantage of support we derived from our strong structure, we strengthened our governance structure, which implements our strategy effectively, monitors it and evaluates its performance. In addition to our Sustainability Committee, which consists of our Executive Board members, we established a Board of Directors Sustainability Committee made up of members of the Board of Directors in 2021. With this organ, we have reinforced our mission in respect of which our managers should have guiding responsibilities and opportunities in order to adopt and effectively manage the sustainability strategy at all functions and levels.

**What successes and challenges did you manage in 2021?**

Although normalization steps were taken, 2021 was a year full of uncertainties stemming from the pandemic continued and fluctuations were experienced. As a company with a wide global footprint and value chain, we have succeeded in continuing our activities uninterrupted, taking into account the needs of both our internal and external stakeholders.

I can say that we have comfortably managed risks and difficulties related to our employees by switching to hybrid work with the necessary appropriate infrastructure, following up on vaccination; maximizing the order and hygiene of employee shuttles, cafeterias and offices, creating the “Emergency Committee” and “Covid-19 Communication Committee Support Line”

consisting of the CEO and senior management representatives without experiencing a major disruption.

We have completed this process establishing a crisis and risk management team that includes all our suppliers globally, using alternative/sustainable supply sources, and maintaining close communication with our customers and investors based on our policy of not leaving our stakeholders behind. At the same time, we introduced the ecosystem financing application and provided support to our suppliers regarding payment terms. As a result of this inclusive approach, I see that we have emerged from such a difficult period by reinforcing the trust and loyalty of our employees, customers, suppliers and investors, and I feel happy for this. I would like to take this opportunity to talk about the achievements in our business model, which makes sustainability more effective in our investment, implementation, monitoring and improvement processes in 2021. In line with our mission to supply local and renewable raw materials, we have implemented our investments in natural soda ash in the USA, Basalia Technology, which provides water recovery and bioenergy, and monitoring of integrated waste management. We are also determined to invest in alternative furnace melting plants.

In parallel to our 2030 sustainability goals, our investment in a natural soda ash project in Wyoming, USA at the end of last year enabled us to reduce carbon intensity to half



which caused by the soda ash production of Şişecam. We also had the opportunity to reduce our water consumption caused by soda ash production by more than 50 percent. Thanks to high capacity we have included in our portfolio in the field of natural soda ash, which we believe will be among the main industries in the future, as it is today, and the advantage of lower cost production and its harmony with our sustainability approach, we have become one of the three leading soda ash producers in the world today.

As a company that provides input to many leading sectors, sustainability in production and supply is also of critical importance to us. In this context, we decided to invest in our first glass packaging facility in Europe in Hungary in order to respond more closely to Europe's rapidly increasing demand for glass packaging. The European market, which makes up a quarter of the global glass packaging market, offers important opportunities for the rapid development of the sector and the holistic development of our company's current production footprint. We aim to start the first furnace of this first glass packaging plant in Europe in operation in 2023. Thus, while expanding our footprint in the glass packaging market in Europe, we will also contribute significantly to the strengthening of our country's presence in the global glass trade.

While the break in the supply chain affected every sector on a global scale, sustainability in investments became one of the important

issues of the new period. In order to guarantee the sustainability of our investments and strengthen our playmaker position in the global glass industry, we took over Refel, an Italian company and one of the world's leading manufacturers in the field of refractory material, which is used in the construction of glass melting furnaces and has strategic importance for the commissioning of plants in accordance with the planned deadline. With this investment, we will minimize risks and increase our resilience to interruptions in the supply chain by preventing new furnace investments and cold repairs from being affected by the globally deteriorating supply chain.

Şişecam will continue to make investments that create sustainable value for our stakeholders in all parts of the world where we are operating, as we resolutely move forward in line with our goal of being among the top three players on a global scale in all of its main fields of operation.

**What opportunities does your 2030 strategy offer to attain the UN SDGs? What kind of efforts does Şişecam plan to make in order to strengthen its sustainability governance from now on?**

We completed our 2030 Sustainability Strategy project last year and we are ready to implement our "CareforNext 2030" strategy, which focuses on the changing problems of our planet and the needs of communities. The strategy that sets out our clear and

strong goals in line with the UN Sustainable Development Goals is based on dynamic assessments focused on environmental, social and governance (ESG).

Our strategy, which draws its strength from the multi-participatory stakeholder consultation process carried out since 2020, is also supported by a comprehensive analysis of ESG risks and opportunities, as well as a compass developed based on concrete investment needs with the contributions of over 400 experts "from the head office and plants". This process, handled with great care, allows Şişecam to develop a healthy and robust strategy together with its targets for 2030. In the new period, while continuing our commitment to "PROTECT THE PLANET" and "EMPOWER SOCIETY", we also gave a new purpose and meaning to our sustainability strategy under the title "TRANSFORM LIFE".

In line with our commitment to "PROTECT THE PLANET" as part of our strategy, we have adopted a clear vision to become CARBON NEUTRAL by 2050. The summer of 2021, when we witnessed extremely devastating climate disasters all over the world, was a clear proof of global warming. As Şişecam, we accept the plain reality of the climate crisis and act with full responsibility as an active business partner for its resolution. In the coming periods, we will continue to act with the same approach and produce solutions that meet the needs of the planet and are compatible with the environment.





We have already begun to explore opportunities to realize our science-based goals for 2030. By making use of our deep-rooted R&D background and experience, we carry out critical studies to improve our impact on the environment. For example, we are determined to invest in the field of electric furnace, which we are currently developing. In addition, we continue to research and develop technologies in addition to applying advanced technologies in the fields of advanced furnace control technologies, waste heat recovery, and high glass cullet use.

We also have major targets concerning water use, which is one of the important ESG issues in Şişecam. We are committed to reducing our water footprint in 2030 by at least 15% compared to the level recorded in 2020. In order to achieve this goal, we will make the roof top rainwater collection systems in our factories a standard, while transitioning to closed-loop water cooling systems.

In addition, we aim to reduce waste packaging of our products by 50% in 2030 as compared with 2020, and to increase the rate of external glass cullet in glass packaging production to the level of 35%, as part of our new strategy. I would also like to dwell on our goals for “EMPOWER SOCIETY” one of the focal points of our sustainability strategy. In the new period,

we will continue to assume our responsibility for “transferring our glass heritage to future generations”. As you know, 2022 was declared the International Year of Glass by the UN with significant support and contribution provided by Şişecam. On this occasion, we continue to actively highlight the unique properties of glass and take the lead in this regard throughout the year. The Year of Glass is very important in terms of promoting the glass industry, which aims at leaving a better planet for future generations by producing solutions for environmental protection and energy saving in the fight against climate change, on a global scale. Şişecam also assumes responsibility in this field as a strong player in the sector. It undertakes the development of this awareness in a wide area throughout the year and the coordination of related projects on an international scale.

The rate of female employees, which has fallen in many organizations in recent past, especially due to the pandemic, continues to rise uninterruptedly at Şişecam. In line with our approach to equality, diversity and inclusion, we aim to increase our female employment rate to at least 25% by 2030. In addition to promoting women-friendly factory standards in all our operations, we will also support this goal by implementing the “Women Expression” program.

Our revised “zero accident” vision in terms of occupational safety is based on the integration of programs within the scope of leadership in occupational safety and cultural transformation programs in this field. In line with our approach that is not limited to the zero-accident approach, but also focuses on the protection of our employees’ health throughout their lives, we plan to effectively expand the “Total Well-being Program” throughout Şişecam.

Our last focus within the scope of our 2030 sustainability strategy, that is, “TRANSFORM LIFE”, covers the digitized value chain and three clear and simple targets: “Digital Work Environment”, “Digitalization of Enterprise-Level Operations” and “Data Analytics-Based Decision Making”. In line with our CareforNext 2030 commitments that bring us even closer to the UN SDGs, I would like to express my gratitude to all our stakeholders who contributed to this drive for a sustainable future, while we continue to take responsibility courageously.

Prof. Dr. Ahmet Kirman  
Chairman and Executive Member of the  
Board of Directors



PROTECT THE PLANET

EMPOWER SOCIETY

TRANSFORM LIFE

# LETTER FROM THE GENERAL MANAGER

Dear Stakeholders

A leading global player in the glass and chemicals industries, Şişecam is entering a new era in its sustainability journey, which is at the center of all business processes from raw materials to final products. We have completed the development of our “CareforNext” sustainability strategy for the period 2022-2030, which we have formulated by taking into account the changing priorities of society, life and the planet and integrating our common values and priorities in collaboration with our stakeholders. In 2021, a year full of uncertainties, we resolutely achieved new targets as a result of the merger of “One Şişecam”, which we completed the previous year, and our simple and sensitive governance approach in line with the requirements of the times. I believe that our new sustainability strategy, which we developed during this period, significantly strengthened Şişecam’s sustainable growth journey focused on creating value for our planet and all our stakeholders.

As part of our new strategy, while we remain committed to “PROTECT THE PLANET” and “EMPOWER SOCIETY”, we are demonstrating a new objective to “TRANSFORM LIFE”. Supporting the fight against the climate crisis, which continues to pose a threat to all humanity, in the light of scientific research, is the focus of our strenuous efforts.

By taking actions in line with the strategy we formulated last year, we invested a total of TRY 2.6 billion, focusing on sustainability, and we have already started to see the positive effects of these investments. Among the important steps and

projects we have taken in this context are the following:

- Our investments in natural soda production that will halve our carbon dioxide and water footprints in our soda business line with our low-carbon value chain vision,
- Our digital transformation drive, focused on “Managing by Numbers”, which is one of the three main projects of SAP on a global scale, will enable us to deliver meaningful outputs and serve to strengthen our digital infrastructure and increase its traceability,
- Developing artificial intelligence analytics in addition to our big data processing skills as part of digital transformation; to have the basic tools required for more intensive use of advanced technologies; and to support a data-based rational decision-making culture within the corporation,
- Acquisition of Italian Refel, one of the world’s leading refractory manufacturers, in order to manage the risks that may occur in the supply chain and to guarantee the sustainability of our investments during the pandemic period when the whole world had a better understanding of the importance of supply chain management,



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# LETTER FROM THE GENERAL MANAGER

- Taking the investment step towards achieving zero pollution and obtaining hydrogen gas, as well as capturing carbon dioxide emissions through Basalia Technology providing Biotechnology solutions, which is an integral part of our 2030 sustainability goals and one of our most important initiatives.

We develop all our investment decisions based on our sustainability-oriented culture, which we proudly carry from the past to the present, and we plan our future in line with “CareforNext” sustainability strategy. We also benefit from Şişecam’s very strong R&D capabilities to support this approach. At the “Şişecam Science, Technology and Design Center”, one of the largest R&D centers in Europe, we focus on efficient production and create new products, technologies and inventions that offer value-added solutions for all our stakeholders and our planet. Among the value-added technology and products we focus on are V-Block Technology, which is the world’s first glassware with anti-microbial coating effective against viruses and bacteria on glass surfaces, providing benefits that were crowned with a Sustainable Business Award, micro glass beads used for cancer treatment, and efforts to develop a glass fertilizer composition to increase agricultural yield. Technological improvements are also developed by Şişecam scientists in order to ensure optimum production efficiency and energy efficiency in our furnaces, which are of critical importance in glass production. In addition to evaluating the opportunities for advanced furnace control technologies, waste heat recovery and increasing the use of recycled glass from the design stage, we also closely follow the developments in applications of advanced technology.

We are maintaining our commitment to sustainable growth, which we have demonstrated with our current investments, and our 2030 targets, which we have set in line with our goal of being a strong solution partner for meeting the needs of today and tomorrow, and

presenting them to our distinguished stakeholders.

We have also diversified our energy efficiency efforts to reduce greenhouse gas emissions from our production activities based on the vision of a low-carbon business model and climate-positive products in the value chain within the scope of the “PROTECT THE PLANET” philosophy included in our CareForNext 2030 strategy. As a result of steps we took in that direction in 2021, we have reduced our greenhouse gas emission intensity by 5% while saving approximately 58 million TRY in energy costs.

As one of the important components of our emission reduction targets by 2030, we aim to increase our use of renewable energy by eightfold and to reach an installed renewable energy production capacity of 53 MW, especially for the electricity consumption of our own factories. We are purchasing Renewable Energy Certified (I-REC) green electricity to support the green transformation in electricity generation and we aim to increase this in all regions where we operate.

With the awareness of the expected decrease in clean water resources due to climate change, we have set important targets in this area as well. In 2030, we are determined to reduce our use of clean water by 15% compared to 2020. In that context, we will standardize roof rainwater collection systems in our factories while transitioning to closed-loop water cooling systems. In addition, by using Basalia Technology, of which we are a global partner, we aim to recover waste water and reduce the use of clean water in our facility by taking advantage of the environmental benefits of the investment we will make in our soda production factory in Mersin. This project will be one of the examples of industrial symbiosis in the field of water cycle. As a strong and well-established player in the glass industry, we know the recycling potential of glass and we have been making great efforts for the circular economy for many years and implemented major

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# LETTER FROM THE GENERAL MANAGER

projects. In line with our 2030 Strategy, we have ambitious targets set in this context. We aim to increase the rate of external glass cullet that we use in our glass packaging production processes up to 35% and to reduce all of our packaging waste by 50%.

We do not limit our efforts to create value for society and the environment to our investments or improvement actions we plan for our facilities. Besides, we continue to develop product-based solutions focused on creating value for society and the environment. Gaining more importance and assuming a more strategic position in parallel with the transition to a low carbon economy, glass continues to provide inputs to many different sectors. We stand out with our glass products that are good solution partners to the increasing requirements and norms of the planet, for example, with our coated and low-e glasses that provide energy and light control in the renovation process of buildings within the scope of EU's "Fit for 55". We continue our product development efforts that accelerate the transition to a low-carbon economy in the automotive industry while increasing our market share in the field of renewable energy production and the production of high-quality glass for photovoltaic panels and glass fiber for wind turbines.

While continuing our activities in a very wide area, we are moving forward with a focus on our "EMPOWER SOCIETY" philosophy in order to reflect our inclusive culture in all our business areas and to extend it to our business partners. In this direction, we aim to create a multinational working environment, implement the «Women Expression Program» and increase our female employee ratio to at least 25% by 2030.

As we move towards 2030, our other primary goals are to expand our portfolio and increase the share of sustainable solutions in our turnover. As part of our motto "TRANSFORM LIFE", we are currently

supporting entrepreneurship by developing collaboration with 60 universities and companies from all over the world in the field of R&D based on the principle of "SDG: 17 Partnerships for Goals" which is among the United Nations Sustainable Development Goals. We are working with great determination to take this target even further in the near future. Looking at these investments and targets that I have shared, I can proudly say that Şişecam achieved successful results by focusing on the needs of its stakeholders and the value chain it is a part of even during the period of profound transformation that we are going through. We produced a total of 5.6 million tons of glass, 2.3 million tons of soda and 4.5 million tons of industrial raw materials; increased our consolidated net sales to TRY 32.1 billion as at the end of the operating period, and contributed to cost optimization, effective production planning, healthy supply chain, and, thanks to our successful crisis management, we realized a consolidated net profit of TRY 9.2 Billion in this challenging year.

In the coming period, we will continue to invest in advanced production technologies in the light of our CareforNext strategy and create value together with our business partners, taking advantage of strength we derive from Şişecam's egalitarian, diversity-oriented and inclusive working culture. To achieve this, we will derive great strength from all our colleagues who add value to Şişecam with our infrastructure and their competencies which are ready for the world that is getting more and more digitalized by the day.

I would like to thank you, our esteemed stakeholders, for placing your confidence in us and your contributions and cooperation in our growth journey that creates shared sustainable value.

Gorkem Elverici  
General Manager

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# ABOUT ŞİŞECAM

We were founded by Türkiye İş Bankası in 1935 and started our production journey as one of the main stakeholders of the industrialization drive in the Turkish glass industry. Our journey, which started with Türkiye's first glass production facility to meet national demand for basic glass production, has evolved over the years by extending to different areas and reached other routes. After 86 years, we are operating in nine areas and manufacturing our products in 45 facilities in 14 countries. We are exporting our products to over 150 countries while are growing and creating jobs in parallel with our growth. With our approach that supports sustainable growth while creating value, we employ 23 thousand employees in our facilities spread over different parts of the world and we are hosting a global family.

As Şişecam, we are consolidating our power and decisive role in the global market day by day with our product quality, production capacity and increasing brand value. As the only global company operating in all four of our main fields of activity, namely flat glass, glassware, glass packaging and automotive glass, our goal is to become one of the three leading manufacturers in the world in our fields of activity.

In this context, we set out with the vision of being a global company that produces creative solutions with our business partners, makes a difference with its technology and brands, and respects people and the environment while aiming at becoming a pioneer in the glass industry and in all areas in which we operate. During our progress with this vision, we have made it our mission to become a company that respects people, nature and laws while adding value to life with our products that create quality and comfort. We have always shouldered responsibility for our mission by keeping our bond with our values. At Şişecam, we derived strength from our traditions and supported each other. We have adopted a fair and transparent management approach. As we developed together, we developed others. We have always been sensitive to our environment and have respected differences in all these processes.



Becoming a pioneer in the glass industry and other areas of operations and a global company that produces creative solutions with its business partners, makes a difference with its technology and brands, and respects people and the environment.



Becoming a company adding value to life with its products of high quality providing comfort and respects people, nature and laws.



We derive strength from our traditions and support each other. We adopt a fair and transparent management approach. We grow and develop together. We are sensitive to our environment. We respect differences.





**2,9**  
**MILLION TONS**  
FLAT GLASS+FROSTED GLASS

## ŞİŞECAM FLAT GLASS

It produces architectural glasses such as flat glass, frosted glass, mirrors, laminated glass, coated glass, solar energy glasses, and glasses for white goods.

**It is the fifth largest glass packaging manufacturer and first in Europe.**



**360**  
**THOUSAND TONS**

## ŞİŞECAM GLASSWARE

It produces automatic and handmade glassware and paper cardboard packaging from soda, crystalline, heat-resistant borosilicate glass and lead-free crystal. It also carries out retail merchandising activities.

**It ranks second in the world and Europe in terms of its production capacity**



**2,3**  
**MILLION TONS**

## ŞİŞECAM PACKAGING

It produces glass in various volumes and colors in the food, beverage, pharmaceuticals and cosmetics sectors.

**It is the fifth largest glass packaging manufacturer in the world and in Europe in terms of its production capacity.**



**59,5**  
**THOUSAND TONS**  
FIBERGLASS  
**4,2**  
**MILLION TONS**  
INDUSTRIAL RAW MATERIALS

## ŞİŞECAM CHEMICALS

It produces soda and its derivatives, chrome chemicals, glass fiber, industrial raw materials, electricity, vitamin K3 derivatives and sodium metabisulfite. It also meets the energy needs of Şişecam Group through its power plant.

**It is the 4<sup>th</sup> largest soda maker in Europe and 2<sup>nd</sup> in the world.**

**It is the world leader in the production of basic chromium sulphate.**



**20**  
**MILLION PIECES**  
AUTOMOTIVE GLASS  
**7**  
**MILLION PIECES**  
ENCAPSULATED GLASS

## ŞİŞECAM AUTOMOTIVE

It produces windshield, laminated and tempered side windows, roof windows and rear heated glasses, encapsulation systems, acoustic glasses, antenna integrated systems, heated glasses without coating, glasses with Head-Up Display, light-weight glasses, modular systems.

**It is ranked as 8<sup>th</sup> in the world, and 4<sup>th</sup> in Europe for its industry.**

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# ŞİŞECAM IN 2021

## USA

Wyoming Facility - USA  
Pacific-Atlantic Natural  
Soda Investments

SALES  
**32.1**  
Billion TRY

INVESTMENTS  
**2.6**  
Billion TRY

TOTAL GLASS  
PRODUCTION  
**5.6**  
Million Tons

EQUITY  
**49.4 Billion TRY**

R&D  
EXPENDITURE  
**245 Million TRY**  
(Last 3 years)

TOTAL SODA  
PRODUCTION  
**2.3 Million Tons**

ENVIRONMENTAL  
AND SOCIAL  
INVESTMENTS  
**130 Million TRY**

PROFIT FOR  
THE PERIOD  
**9.2 Billion TRY**

PRODUCTION IN  
**4** CONTINENTS,  
**14** COUNTRIES,  
**45** FACILITIES

NUMBER OF  
EMPLOYEES  
**23 thousand**

INVESTMENTS  
IN DIGITAL  
TRANSFORMATION  
**291 Million TRY**  
(Last 3 years)



PROTECT THE  
PLANET

EMPOWER  
SOCIETY

TRANSFORM  
LIFE

# ŞİŞECAM IN 2021

2021 was a year of growth for our industry and our markets. Along with all those growth opportunities, the current period characterized by uncertainties and risks triggered a process that made it necessary to update existing management methods. In this period shaped by new equilibriums, we also had the opportunity to review our own processes and demonstrated successful governance during this period. In 2021, Şişecam diversified our national and international markets, established new contacts while maintaining our existing customer portfolio, increased our turnover, and enhanced our adaptation by renewing our facilities with new investments.

Şişecam accorded priority to the highest quality, fast and safe solutions designed to meet global demand for glass in 2021 as well. Based on this commitment, we renewed our furnace with a capacity of 240

thousand tons in our flat glass facility in the “Bursa Yenişehir Factory”. We invested in a new furnace with a capacity of 155 thousand tons in our “Eskişehir Şişecam Glass Packaging” production facility. As a result of the investment we made in Hungary, we increased our production capacity in the European market and we are ready to meet rising demand in the European and Turkish markets. Then we moved our ground-breaking investments to Italy and developed projects to minimize the risks in our supply processes and to guarantee continuity in production. We took over Refel, a manufacturer of refractory materials used in the construction and maintenance processes of glass melting furnaces. We strengthened our global position when Refel, an Italian company with a production capacity of 6 thousand tons-year, joined the Şişecam family. Lastly, we shifted our focus to America. Led by

“Şişecam Chemicals”, we made an investment in a natural soda ash plant in the USA. As a result of our investment, we increased our production capacity, expanded our geographical coverage and strengthened our strategic position, moving Şişecam Chemicals to the second rank on a global scale.

We accelerated our R&D efforts in 2021. There was a significant decrease in glass packaging consumption through the HoReCa (Hotel, Restaurant, Cafe) channel because of the closure of businesses during the Covid-19 pandemic. Meanwhile, the use of glass in household consumption increased with the increasing sensitivity for health and hygiene. As Şişecam, we read the consumer’s needs correctly and focused our R&D studies on this area. We broke new ground in the world by implementing the antimicrobial coating V-block technology, which prevents harmful

microorganisms from multiplying on glass surfaces.

In 2021, we did not neglect our principle of doing our best for a sustainable world. We have increased the product range of our “Aware” collection, which includes 100% recycled products that we offer under our Paşabahçe brand. With our collection, we have contributed to awareness on glass recycling by manufacturing products with a low carbon footprint and industrial waste.

In addition, we made our first investment in biotechnology in 2021 as part of the Basalia Project. Thus, we aimed to render solid wastes harmless by using bacteria, to release environmentally friendly hydrogen gas, and to transform waste water into purified water.

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TRANSFORM LIFE



## 1935

- Şişecam was established to meet the needs of society.

## 2011

- We participated in the Carbon Disclosure Project (CDP).
- We launched the “Glass Again Glass” project.

## 2012

- We participated in the CDP Supply Chain Program.

## 2013

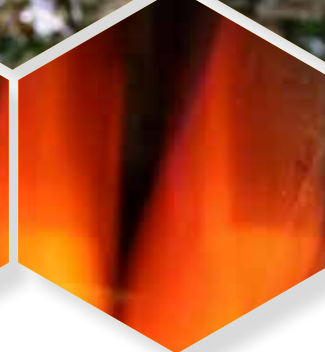
- We published our first sustainability report with reference to the Global Reporting Initiative (GRI).

## 2014

- We established the Şişecam Ethics Committee.
- We held our first Environment and Energy Workshop.

## 2015

- We established the Şişecam Sustainability Committee.



## 2016

- We participated in the Borsa Istanbul Sustainability Index.
- We established “Çevre Sistemleri A.Ş.” for glass recycling with the aim of “Transition to Green Economy”.

## 2017

- We held our first Şişecam International Sustainability Workshop.
- Our flat glass products were certified with an EN 15804 compliant Environmental Product Declaration (EPD).

## 2018

- We became among the top 100 companies in the Vigeo Eiris Sustainability Index.
- We published our “CareforNext” Corporate Sustainability Strategy.
- We launched the “Women from Şişecam from Past to Present” digital exhibition.

## 2019

- We established the Şişecam Climate Change Coordination Board.
- We published our Diversity and Inclusion Principles.
- We received the Sustainable Business Award from the Sustainable Development Association (SKD).
- We received Sabancı University’s “Women Empowered Board of Directors” award.

## 2020

- As “One Şişecam”, we continued to be listed on the BIST.
- We published Şişecam Supplier Code of Conduct.
- We recycled 250 thousand tons of broken glass.
- We moved the Şişecam Glass Works Collection to a digital medium.
- We developed 100% recycled glassware Aware collection and V-Block technology, effective against viruses and bacteria.

## 2021

- We received the Sustainable Innovation Award.
- We invested in biotechnology-centered Basalia start-up.
- We have increased the ESG scores.
- We formulated the 2030 Sustainability Strategy.
- We established the Şişecam Sustainability Committee.

# SUSTAINABILITY GOVERNANCE

Among the factors supporting the success of Şişecam from the past to the present are the growing awareness of society, the correct analysis of customer and investor expectations, and taking timely action. The climate crisis that the world is facing today and the differences in economic level between communities have caused the management models of companies to change and the development of sustainable management practices with a philosophy based on sensitivity. As Şişecam, as a multinational company operating in different business lines, we adopt a sustainable management model in which not only economic values, but also environmental and social values are the elements of the decision-making mechanism.

We strengthen our management policy, which we are implementing with a multi-layered and participatory structure, with long-term goals and duties and responsibilities that have become widespread in the entire organizational structure.

In this context, we established the “Board of Directors Sustainability Committee” in order to fully integrate sustainability into Şişecam’s organizational structure and to formulate relevant policies and approaches to accelerate the process. The committee is structured at the level of the Board of Directors and under the management of Şişecam Board of Directors.

The strategic directions of the Committee are reflected in Şişecam’s activities through the “Sustainability Steering Committee” under the management of the CEO and under the coordination of the Strategy Assistant General Manager. At Şişecam, the Executive Committee follows up on priorities and strategies related to sustainability as well as internal and external stakeholder communication and the sustainability targets and performance of its working groups. Again, this year, our Working Groups reporting to the Committee were formed as “PROTECT THE PLANET”, “EMPOWER SOCIETY” and “TRANSFORM LIFE” groups, including managers from all functional areas, in line with our strategy.



With our effective governance structure, we assume a leadership role in the sectors we are operating in. In 2020, we assumed the management of the 2030 Transformation Project of the International Glass Commission, ICG, of which we have assumed the presidency in the past years and have been an active member for many years.

Thanks to the campaign led by the International Commission on Glass (ICG) in 2021, the United Nations declared 2022 as the International Year of Glass (IYOG2022). Throughout 2022, many local and international events will be organized to raise awareness of the sustainability of glass and its contribution to civilization.

While our sustainability governance steps draw strength from Şişecam's deep-rooted past, we also take current international standards as our reference. In this context, while fully complying with the initiatives of which we are a signatory, we present our performance results to all our stakeholders based on the principle of transparency.



## AWARDS

**Sustainable Business Awards**  
**“Sustainable Innovation-Product”**  
**Surface Coating Material of the Year**  
**Award**  
**Glass Works Collection Golden Spider**  
**Award**  
**Bulgarian Investment Agency**  
**“Sustainable Investment Award”**  
**Peryön Human Appreciation Awards**  
**“Leadership in Digital Transformation**  
**Award”**  
**KREA M.I.C.E. 2 Gold Leader Awards**

## RESPONSIBILITIES and DECLARATIONS

**GRI**  
 (Global Reporting Initiative)  
**CDP**  
 (Carbon Disclosure Project)  
**CDP Supplier Engagement**  
 (CDP Supplier Engagement)  
**EBRD ESG Indicators**  
 (European Bank for Reconstruction and Development  
 Environmental, Social, Governance Criteria)  
**IFC**  
 (International Finance Commission)  
**Ecovadis**  
**Responsible Care**



PROTECT THE PLANET

EMPOWER SOCIETY

TRANSFORM LIFE



# ŞİŞECAM'S SUSTAINABILITY STRATEGY

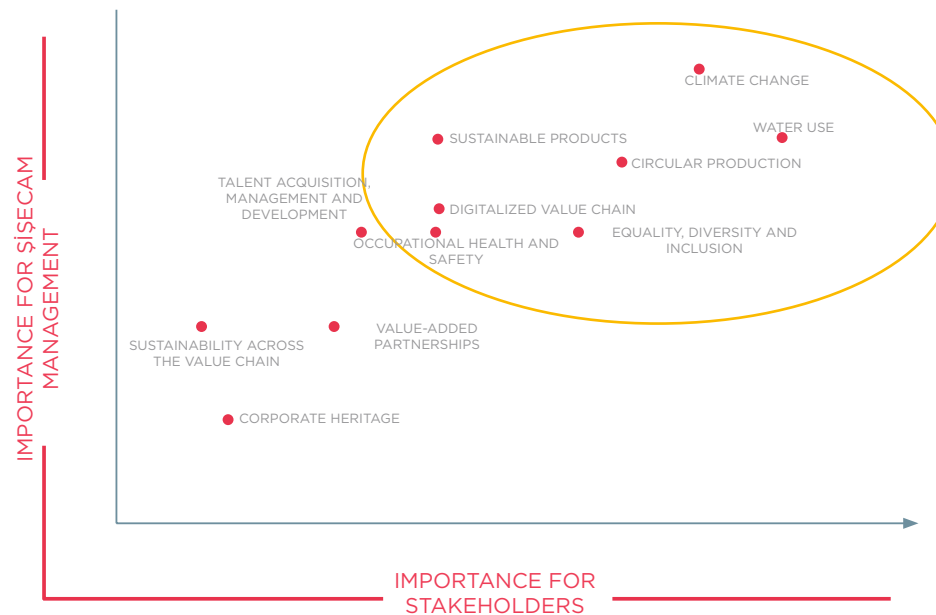
As Şişecam, we entered a new era in our sustainability approach in 2021 and drew the 2022-2030 roadmap. In the first stage of our prioritization analysis carried out to draw a reliable roadmap, we identified important issues within the scope of Company's activities and spheres of influence. Regarding the list of topics determined by the members of the Executive Board, we took account of examples of global good practices, industry-wide practices, criteria of rating agencies, the sustainability priorities of the previous period (2017-2022), and Şişecam's overall strategy. We classified the 200 important

issues selected according to their degree of importance and conducted a materiality assessment for all stakeholders according to their own needs and expectations.

In order to ensure a vision at strategic level and the feasibility of the actions to be determined, we carried out a stakeholder evaluation based on a two-way evaluation approach. In this context, based on the opinions of nearly 400 employees from different levels and departments in 14 countries where Şişecam operations are carried out, one-to-one interviews with

employees including managers, meetings, surveys and workshops, we have established three basic axes and formulated the "CareforNext 2030 Strategy".

We prepared the strategic plan document, which we see as an achievement of Şişecam's strong corporate structure, by setting out targets, indicators and actions for the priority areas under the three main axes determined as "Protect the Planet", "Empower Society" and "Transform Life".





## PROTECT the Planet

- Climate Change
- Water Use
- Circular Production



## EMPOWER Society

- Corporate Heritage
- Equality, Diversity and Inclusion
- Talent Acquisition, Managing and Developing Skills
- Occupational Health and Safety



## TRANSFORM Life

- Digitalized Value Chain
- Sustainable Products
- Sustainability Across the Value Chain
- Value-Added Partnerships

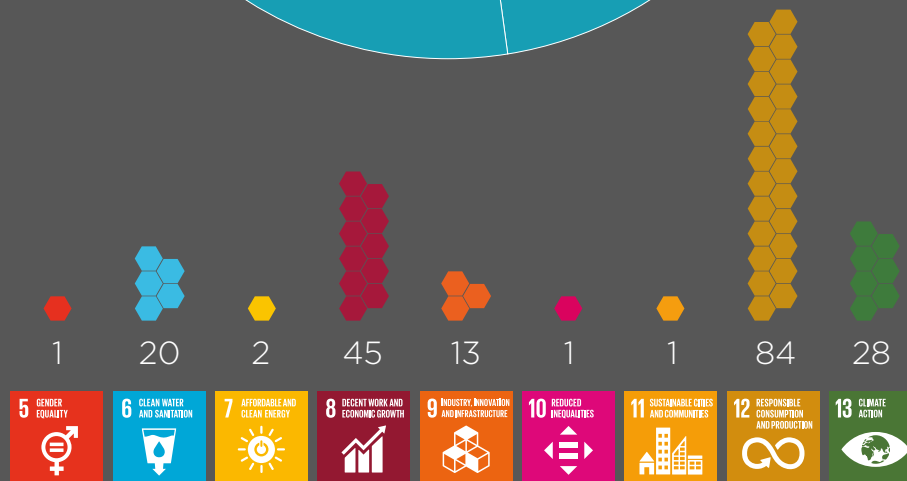
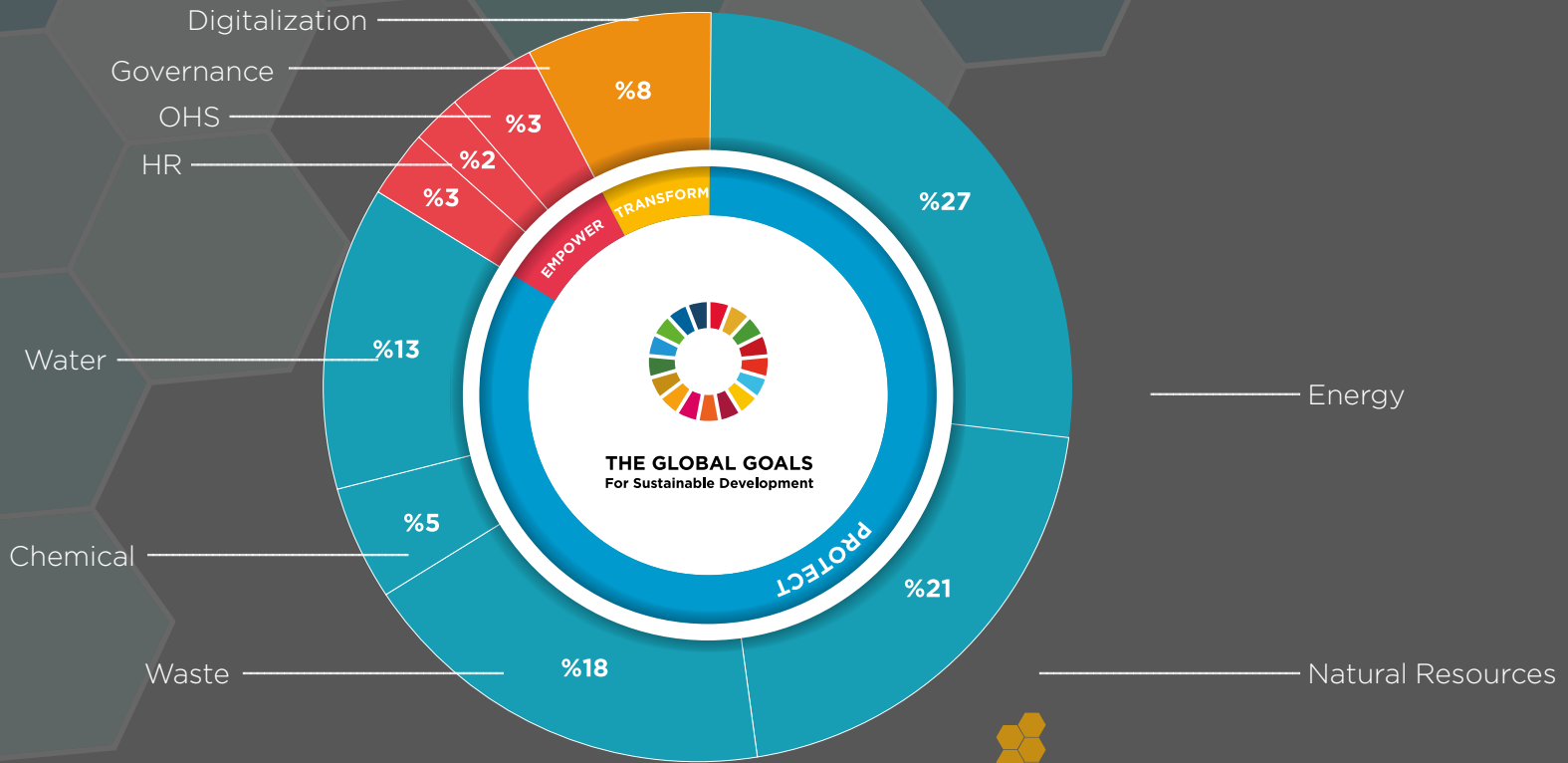


# SUSTAINABILITY AT A GLANCE







Care for NeXt

# GOOD PRACTICES





# OUR 2021 SUSTAINABILITY PERFORMANCE

	2017-2021 TARGETS	2021 PROGRESS	PROGRESS IN STRATEGY PERIOD	2030 STRATEGY	RELATED SECTION	
<b>PROTECT</b>	5% recovery of industrial wastewater	21%	✓		<a href="#">Water Use</a>	
	Using at least 20% recycled glass in glass packaging production	26%	✓		<a href="#">Circular Economy Approach and Glass</a>	
	Reduction of NOx emission values with primary measures in at least 10 glass furnaces	11	✓		We will continue our activities within the scope of Protect the Planet	<a href="#">Management of Emissions to Air</a>
	Realization of at least 4 industrial synergy programs	4 units	✓		We will continue our activities within the scope of Protect the Planet	<a href="#">Circular Production</a>
	20% increase in forest areas in existing mining sites	10%	~		We will continue our activities within the scope of Protect the Planet	<a href="#">Combating Climate Change</a>
	Renewal of corporate procurement procedures within the scope of sustainability principles	Completed	✓			<a href="#">Sustainability in the Supply Chain</a>
	Initiating biodiversity and conservation practices with local people in operational geographies		~		We will continue our activities within the scope of Protect the Planet	<a href="#">Combating Climate Change</a>
<b>EMPOWER</b>	Zero occupational accident "Lost Time Rate Due to Frequency of Injury" (LTIFR)	12	~		<a href="#">Occupational Health and Safety</a>	
	Determination of Şişecam Group's "Diversity and Inclusion Principles"	Completed	✓		<a href="#">Equality, Diversity and Inclusion</a>	
	Dissemination of inclusive culture in Şişecam and stakeholders, measuring its development with indicators (female employment rate)	22.8	✓		<a href="#">Equality, Diversity and Inclusion</a>	
	Supporting national and internationally declared policy and regulations on equal opportunity	Planned	~		<a href="#">Equality, Diversity and Inclusion</a>	
<b>PROGRESS</b>	5% reduction in greenhouse gas emission intensity of glass production facilities (domestic and international)	1%	~		<a href="#">Combating Climate Change</a>	
	2% reduction in annual specific energy intensity in glass production facilities (domestic and international)	1.4 %	~		<a href="#">Energy Management</a>	
	Obtaining 12 MW of energy from renewable (wind and/or solar) sources	6.3 MW	~		<a href="#">Energy Management</a>	
	In order to reduce natural gas consumption, transition to reactant pre-heating method in at least one additional plant	Completed	*		<a href="#">Energy Management</a>	
	Transition to Waste Heat Recovery system in at least 2 more factories	0	~		<a href="#">Energy Management</a>	

✓ completed.  
~ continues.

\*Alternatively, higher efficiency has been achieved by switching to Heat-Ox technology.  
2030 Target



# ŞİŞECAM CAREFORNEXT 2030 SUSTAINABILITY STRATEGY



In line with our vision of creating sustainable value, we are committed to taking responsibility along the entire value chain to achieve strong global transformation goals integrated with the UN Sustainable Development Goals.

CareforNext strategy, defined as the mission to secure a place among organizations that create positive impact and value on a global scale with solutions and services that Protect the Planet, Empower Society and Transform Life, is Şişecam’s sustainability roadmap for the period 2022-2030. While developing this strategy, we took into account our value chain from a life-long perspective and the needs and expectations of all our stakeholders in this cycle. According to the materiality analysis outputs carried out with wide stakeholder participation in 2021, three main axes were determined and activities were carried out in the light of these focus areas.

Under the leadership of the sustainability committee, in 2021;

- A water campaign was launched during the week of World Water Day on March 22, and we raised awareness of water consumption with Tomorrow’s Water Video, our good practices and the National Geographic 25 Liter Documentary,

- We shared reports about the Product Life Cycle Analysis project initiated in Şişecam, support given to the Turkish Ministry of Environment and Urbanization for the determination of the environmental label criteria for the glass industry, global and sectoral sustainability developments, Şişecam’s participation in the COP-26 Conference, climate change, our exemplary good practices on water management and women’s employment in the Community through the CareforNext Bulletins published both in Turkish and English during the year.
- Şişecam Occupational Accidents statistics, on the other hand, are presented to all community employees under the name “OHS Bulletin” on a monthly, annual, field of activity, and quarterly basis.
- Informative articles continued to be published in the sustainability section of Şişecam Magazine and articles were published under the following headings:
  - Water
  - Circular Economy
  - Partnerships for Global Goals
  - Climate Change



# ŞİŞECAM CAREFORNEXT 2030 TARGETS



**PROTECT THE PLANET**

**Climate Change**

2050 Vision for Carbon Neutrality Setting of 2030 Target Compatible with SBTi (Science Based Targets), Development of Installed RES Capacity of 53 MW, Transition to Fully Electric Furnace

**Water Use**

15% Reduction in Fresh Water Consumption

**Circular Production**

50% Reduction in Packaging Waste, Reaching 35% Glass Cullet Use in Glass Packaging

6 TEMİZ SUYE GİRİŞİMLERİMİZ

7 ENERJİ VERİMLİLİĞİ VE YENİLENER ENERJİ

9 SAKARYA YATIRIMCILIK VE AKTİVİTE

12 SORUNLU ÜRETİM VE YERELİTİM

13 İKLİM EYLEMİ

**EMPOWER SOCIETY**

**Corporate Heritage**

Global Dissemination of Glass Heritage and Culture

MAJOR SPONSOR

**Talent Acquisition, Management and Development**

Increasing Functional and Personal Competences through Training (47 person-hours of training per year) Gaining Skills of New Generation, Increasing the Rate of Employee Loyalty

**Occupational Health and Safety**

Zero Work Accidents, Well-Being Program

**Equality, Diversity and Inclusion**

Reaching a 25% Female Employment Rate, Implementation of Women Expression Program, Promoting the Multi-National Work Environment

3 SAĞLIK VE KALİTE YASAMI

4 İHTİŞAFLU ÖĞRENİM

5 TEKLÜSAL ÇEKİMLİ FİZYON

8 İNSAN YATIRIMISIN VE EKONOMİK BÜYÜME

10 SORUNLU ÜRETİM VE YERELİTİM

17 AMANLARIMIZIN ÖZELLİKLERİ

**TRANSFORM LIFE**

**Digitalized Value Chain**

Transition to a Digital Working Environment, Completion of Digitalization of All Organizational Operations, Decision Making Based on Data Analytics

**Sustainable Products**

Increasing the Share of Sustainable Products in Turnover, Increasing the Number of Sustainable Products and Solutions for Transforming Life and, Dissemination of Life Cycle Analysis Program and Eco-Labeling

**Sustainability Across the Value Chain**

Dissemination of the Supplier Capacity Development Program, Compliance with the Code of Conduct by All Suppliers

**Value-Added Partnerships**

Establishment of Collaborations and Partnerships in Pursuit of SDG 17 (Partnerships for Goals)

8 İNSAN YATIRIMISIN VE EKONOMİK BÜYÜME

9 SAKARYA YATIRIMCILIK VE AKTİVİTE

12 SORUNLU ÜRETİM VE YERELİTİM

17 AMANLARIMIZIN ÖZELLİKLERİ





# KEY STAKEHOLDER GROUPS AND PARTICIPATION PLATFORMS

While evaluating the needs and expectations of each stakeholder in our value chain, Şişecam consider their ideas and feedback as an important input to our continuous improvement efforts. While communicating with different stakeholders and in different focus areas, we aim to align all the decisions and actions we take with our sustainability priorities.

## Investment Oriented

**Risk / opportunity and action plans with a TCFD (Task Force on Climate-related Financial Disclosures) approach within the scope of the transition to a low carbon economy**

Analysts	Face to face meetings, Workshops
Investors	Face-to-face meetings, Telephone / teleconference and e-mail communication, Workshops
Stock and Bond Investors	General board meetings, Investor conferences at home and abroad, Roadshows, Telephone / teleconference and e-mail, Periodic information reports, One-to-one meetings

## People-Oriented

**Initiatives to increase competencies and employee commitment with the goal of Empowering Society**

Employees	Satisfaction survey, Suggestion and idea-sharing platforms, Face-to-face meetings, Seniority incentive award, Recognition and reward system
Universities	Conferences, Collaborations, Internship programs

## Product-Oriented

**Dissemination of the Protect the Planet philosophy while focusing on customer satisfaction with a lifelong perspective**

Customers	Satisfaction survey, Social media, Face-to-face meetings and conferences, Telephone and e-mail
Media	Press conferences, Press releases, Conferences

## Production-Oriented

**To contribute to development through the knowledge and values of our corporate heritage**

Public Institutions	Regular reporting, Meetings, Forums and conferences, Press releases, One-on-one meetings
Suppliers	Daily workflow, Face-to-face meetings, Email communication
Non-Governmental Organizations	Strategic collaborations, Events



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# CORPORATE MEMBERSHIPS

We believe that stronger steps will be taken with common goals as we move forward with the application of sustainability principles from yesterday to today and tomorrow under our CareforNext Strategy. In line with SDG 17 (Partnerships for the Goals) of the United Nations, “, we contribute to sustainable development by supporting associations that share and expand their knowledge, expertise, technology and financial resources.

Şişecam	Flat Glass	Glass Packaging	Automotive	Glassware	Chemicals
ARGEMİP (R&D Centers Communication Platform)	BEYSAD (White Goods Suppliers Association)	Packaging Manufacturers Association	Glass Producers Association of Bulgaria	United Brands Association	AICE (Associazione Italiana Commercio Estero)
Celsian Glass Solar	BuildingSMART Türkiye	CEVKO (Environmental Protection and Recycling of Packing Wastes Foundation)	Automotive Industry Association Romania	Bor District Industrialists' Association	ASSICC (Associazione Italiana Commercio Chimico-Italian Chemical Trades Association)
DEİK - Bulgaria Business Council	Glass Producers Association of Bulgaria	Georgian and Turkish Businessmen's Association	TAYSAD (Association of Automotive Parts and Components Manufacturers)	Glass Producers Association of Bulgaria	Association of Employers of Bosnia and Herzegovina
DEİK - Romania Business Council	Confindustria Foggia	IPGR (International Glass Research Association)	Turkish Businessmen's Association - Romania	EDG (European Glassware)	Foreign Investors in Bosnia and Herzegovina
DGG (German Society of Glass Technology)	Bulgarian Federation of Energy Consumers	Russian-Turkish Businessmen's Association		ICF (International Crystal Federation)	ENSIA (Energy Industrialists and Businessmen's Association)
ESG (European Society of Glass Science and Technology)	Confederation of Employers and Industrialists of Bulgaria	Glass Manufacturers Association of Russia		KASAD (Carton Packaging Manufacturers Association)	ESAPA (European Soda Ash Producers Association)
GAE (Glass Alliance of Europe)	GENSED (Turkish Solar Energy Industry Association)	Turkish Mineral Water Producers Association - MASUDER		OMÜD (Corrugated Board Manufacturers Association)	ICDA (International Chromium Development Association)
ICG (International Commission on Glass)	Gujarat Employers' Organization			TUSID (Industrial Kitchen, Laundry, Service and Catering Equipment Industrialists and Businessmen's Association)	Red Cross
İKSV (Istanbul Foundation for Culture and the Arts)	İMSAD (Association of Construction Material Producers)			ZÜCDER (Turkish Houseware Association)	SERHAM (Ceramic, Glass and Cement Raw Materials Association)
TAPV (Family Planning Foundation of Türkiye)	İZODER (Heat, Water, Sound and Fire Insulators Association)			KALDER (Türkiye Quality Association)	TCMA (Composites Manufacturers Association)
TEDAR (Supply Chain Management Association)	India Glass Manufacturers' Federation			Egyptian Organization for Standardization & Quality	TKSD (Turkish Chemical Manufacturers Association)
TKYD (Corporate Governance Association of Türkiye)	TÜRKBEŞD (Turkish White Goods Manufacturers' Association)			Chemical and Fertilizer Import Council of Egypt	Turkish Miners Association
TÜYİD (Investor Relations Association)				Chain Stores Association	Turkish Wind Energy Association
EÜD (Energy Generators' Association)					Unindustria Ferrara
Şişecam Foreign Trade: TURKTRADE (Foreign Trade Association of Türkiye)					
Şişecam Energy: PETFORM (Petroleum and Natural Gas Platform Association)					

# CORPORATE GOVERNANCE

Within our organization, our Investor Relations unit cooperates with the Financial Control and Reporting Directorate to ensure our obligations related to the capital markets are fulfilled without delay.

Simultaneously, the Investor Relations unit provides internal and external coordination of the activities regarding the Corporate Governance Score and Credit Score.

As a result of the work we have carried out through our unit and directorate, a Corporate Score of 9.55 was determined in 2021, marking an increase on the previous year. This score, achieved especially due to our developments in the field of “Public Disclosure and Transparency”, documents the high level of our corporate governance standards. By the end of 2021, our BIST-100 Index increased to 26%, BIST-30 Index to 24%, BIST Industrial Index to 45% and BIST Holding Index to 23%.

Şişecam  
Our stocks outperformed the index  
with a value gain of 87%.

PROTECT THE PLANET

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# BUSINESS ETHICS, ANTI-BRIBERY AND ANTI-CORRUPTION

In 2021, we started a global-scale e-learning process, reflecting the revisions in our Code of Business Ethics, and completed a training program consisting of 13 modules.

As Şişecam, we adopt an honest, impartial, inclusive and transparent stance, and act with a business ethic that is ethical in competition, supportive in diversity, respectful to all kinds of life, and aware of its responsibility towards society. In this context, we use the “Şişecam Group Code of Ethics” as a guidebook, and aim to extend our ethical codes to the solution partners and stakeholders with which we come into contact throughout our business processes. Our ethical codes are a statement that reveals our principles, brings us together with all the actors with which we are in contact, determines our boundaries and allows us to act in protection of the same values. As a part of our ethical approach, we comply with the law under all circumstances and stand against all forms of discrimination, with respect for human rights at the center of our operations.

In this context, we require all newly recruited white-collar employees to participate in “Şişecam Ethics Training” as part of their orientation process, thus providing them with an awareness of ethics and providing information on our Group’s ethical codes and ethical mechanisms. Following a similar ethical approach, acts such as bribery, corruption, abuse of office and favoritism

based on any material or moral interests are prohibited in our organization. In accordance with our Anti-Bribery and Anti-Corruption Policy, appropriate information is provided to all our employees so as to raise awareness on the subject. Within our policies, our bribery and corruption commitments, possible risks, the actions to be taken in the event of contraventions in this context and the responsibilities of our employees within this framework are clearly defined.

All organizations within Şişecam Group are managed in an ethical, legal and fair manner. An “Ethics Committee” was established in 2014 under the Corporate Governance Committee, with the aim being to maintain this order and spread the ethical culture throughout our organization. The Committee is also responsible for detecting and evaluating unethical or contradictory practices. If any of our employees witness any discrimination, bribery, corruption or violation of rights, they are obliged to report their testimonies to our Ethics Committee, Risk Management or Internal Audit Department through the appropriate channels.

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LIFE

# BUSINESS ETHICS, ANTI-BRIBERY AND ANTI-CORRUPTION

In 2021, we provided a total of 3,365 hours of training to our employees within the scope of Şişecam Ethics Training.

As of the end of 2021, Şişecam hotline system has been updated and we have switched to a new application that allows independent and anonymous notifications to be received in compliance with international regulations. All employees and stakeholders were thus given the freedom to notify their managers and/or the “Ethics Hotline” - the ethical reporting line - about any suspected violations of Şişecam Group’s Code of

Business Ethics, and the relevant policies and laws, without fear of reprisal. The aforementioned notices can be given verbally or in writing to the relevant managers, either via the [ethicshotline.sisecam.com](mailto:ethicshotline.sisecam.com) email address, or by phone in 17 languages. In line with Şişecam Group’s internal legislation, all incoming notifications are reported to the Ethics Committee.



### Report an Incident

This system makes it easy to report an incident about workplace issues like financial and auditing concerns, harassment, theft, substance abuse and unsafe conditions.

Click the button below to get started with your report and we'll ask you a few questions about the incident.

**GET STARTED**

### Check Status

You can check the status of your report or question using the access number and password you created when you submitted the report or question.

Access Number

Password

[Forgot your password?](#)

**CHECK STATUS**



# SYSTEM, PRODUCT AND FACILITY CERTIFICATIONS

While operating in 14 countries, 45 facilities and nine areas, we adopt and apply international standards as facilitators in order to realize our production at values befitting Şişecam's quality and corporate heritage. The management system or product certifications applied by each facility may differ depending on their needs, although we aim to ensure the integration of the management (ISO 9001, ISO 14001, ISO 45001) system into all facilities. Our management systems contribute to the development of our sustainability practices through effective data tracking, risk management and target setting. In addition, our R&D building in Gebze, which we built within the framework of sustainability principles, and the İş GYO & Şişecam Tuzla General Directorate all possess LEED Gold Certificates.

FACTORY NAME	COUNTRY	ISO 9001	ISO 14001	ISO 45001	ISO 50001	ISO 27001	IATF 16949	ISO 22000
Türkiye Şişe ve Cam Fabrikaları A.Ş.	Türkiye	✓				✓		
Şişecam Dış Tic. A.Ş.	Türkiye	✓				✓		
Türkiye Şişe ve Cam Fabrikaları A.Ş. Şişecam Glass Packaging Mersin Plant	Türkiye	✓	✓	✓	✓	✓		✓
Türkiye Şişe ve Cam Fabrikaları A.Ş. Şişecam Glass Packaging Mersin Plant	Türkiye	✓	✓	✓	✓	✓		✓
Türkiye Şişe ve Cam Fabrikaları A.Ş. Şişecam Glass Packaging Eskişehir Plant*	Türkiye	✓	✓	✓	✓	✓		✓
OOO Ruscam Glass Packaging Holding - Gorokhovev Plant***	Russia	✓	✓	✓				✓
OOO Ruscam Glass Packaging Holding - Ufa Plant	Russia	✓	✓	✓	✓			
OOO Ruscam Glass Packaging Holding - Kirishi Plant	Russia	✓	✓	✓				✓
OOO Ruscam Glass Packaging Holding - Kuban Plant	Russia	✓	✓	✓				
JSC Mina	Georgia	✓		✓				✓
Türkiye Şişe ve Cam Fabrikaları A.Ş. Şişecam Glassware Eskişehir Plant	Türkiye	✓	✓	✓	✓	✓		✓
Türkiye Şişe ve Cam Fabrikaları A.Ş. Şişecam Glassware Kırklareli Plant	Türkiye	✓	✓	✓	✓	✓		
Türkiye Şişe ve Cam Fabrikaları A.Ş. Şişecam Glassware Denizli Plant*	Türkiye	✓	✓	✓	✓	✓		
Pasabahce Bulgaria EAD	Bulgaria	✓	✓	✓				✓
OO Posuda	Russia	✓	✓	✓				
Pasabahce Egypt Glass Manufacturing S.A.E.	Egypt	✓	✓	✓				✓
Camiş Ambalaj Sanayi A.Ş.	Türkiye	✓	✓	✓	✓	✓		
Türkiye Şişe ve Cam Fabrikaları A.Ş. Şişecam Flat Glass Kırklareli Plant	Türkiye	✓	✓	✓	✓	✓		
Türkiye Şişe ve Cam Fabrikaları A.Ş. Şişecam Flat Glass Bursa Plant	Türkiye	✓	✓	✓	✓	✓		
Türkiye Şişe ve Cam Fabrikaları A.Ş. Şişecam Flat Glass Mersin Plant	Türkiye	✓	✓	✓	✓	✓		



FACTORY NAME	COUNTRY	ISO 9001	ISO 14001	ISO 45001	ISO 50001	ISO 27001	IATF 16949	ISO 22000
Türkiye Şişe ve Cam Fabrikaları A.Ş. Şişecam Flat Glass Ankara Plant	Türkiye	✓	✓	✓	✓	✓		
Trakya Glass Bulgaria EAD	Bulgaria	✓	✓	✓	✓			
Sisecam Flat Glass Italy S.R.L.	İtalya	✓	✓	✓	✓			
Şişecam Flat Glass South Italy Srl	İtalya	✓	✓					
Trakya Glass RUS A.O.	Russia	✓	✓	✓	✓		✓	
Sisecam Flat Glass India	India	✓		✓	✓			
Şişecam Otomotiv A.Ş. Lüleburgaz Plant	Türkiye	✓	✓	✓	✓	✓	✓	
Sisecam Automotive Rus JSC	Russia	✓	✓	✓			✓	
Sisecam Automotive Bulgaria EAD	Bulgaria	✓	✓	✓			✓	
Sisecam Automotive Romania SA	Romania	✓	✓	✓			✓	
Sisecam Automotive Germany GmbH-Aurach	Germany	✓	✓				✓	
Sisecam Automotive Slovakia S.R.O.	Slovakia	✓	✓				✓	
Sisecam Automotive Hungary Kft	Hungary	✓	✓				✓	
Türkiye Şişe ve Cam Fabrikaları A.Ş. Şişecam Chemicals Mersin Kromsan Plant**	Türkiye	✓	✓	✓	✓	✓		✓
Camış Mining A.Ş.	Türkiye	✓	✓	✓		✓		
Şişecam Elyaf Sanayii A.Ş.	Türkiye	✓	✓	✓	✓			
Oxyvit Chemical Industry. Ve Tic. A.Ş.	Türkiye	✓	✓	✓	✓			
Şişecam Soda Lukavac d.o.o.	Türkiye	✓		✓				
Cromital S.p.A.	Türkiye	✓		✓				
Camış Energy Production Inc.	Türkiye	✓	✓			✓		

\* TS 6500 Belgesi - ISO 10002 - ISO15378  
 \*\* Helal, KOSHER, FSSC 22000, GMP+  
 \*\*\* BRC V.5/V.6

## Safe Production during the COVID-19 Period

Unfortunately, the negative effects of the COVID-19 pandemic continued to affect life in 2021. Although we are feeling the same difficulties experienced by organizations all over the world as a result of interruptions to the supply chain, as Şişecam, we have been able to maintain production and service continuity while providing a healthy and safe working environment for all our employees thanks to our strong infrastructure.

As a result of our Epidemic Action Plan, our action plans to counter different scenarios and our “Emergency Committee”, led by the CEO and senior management, we have been able to continue production safely during the COVID-19 period. We have implemented the official measures published by the World Health Organization and other countries to the maximum extent in all our activities. We have provided for process follow-up through our “Crisis Committees”, and have entered the “COVID-19 Communication Committee Support Line” into service.

Facility Name	Covid 19 Production Safety Certificate
Türkiye Şişe ve Cam Fabrikaları A.Ş. // Şişecam Glassware Kırklareli Plant	✓
Türkiye Şişe ve Cam Fabrikaları A.Ş. // Şişecam Glassware Eskişehir Plant	✓
Türkiye Şişe ve Cam Fabrikaları A.Ş. // Şişecam Glassware Denizli Plant	✓
Türkiye Şişe ve Cam Fabrikaları A.Ş. // Şişecam Glass Packaging Eskişehir Plant	✓
Türkiye Şişe ve Cam Fabrikaları A.Ş. // Şişecam Glass Packaging Mersin Plant	✓
Şişecam Elyaf Sanayii A.Ş.	✓
Türkiye Şişe ve Cam Fabrikaları A.Ş. // ŞişecamChemicals Mersin Kromsan Plant	✓
Türkiye Şişe ve Cam Fabrikaları A.Ş. // Şişecam Flat Glass Kırklareli Plant	✓
Türkiye Şişe ve Cam Fabrikaları A.Ş. // Şişecam Flat Glass Bursa Plant	✓
Türkiye Şişe ve Cam Fabrikaları A.Ş. // Şişecam Flat Glass Bursa Plant	✓
Türkiye Şişe ve Cam Fabrikaları A.Ş. // Şişecam Flat Glass Ankara Plant	✓
Camiş Mining A.Ş. Yalıköy Sand Prossesing Facilities // Yalıköy Quartz Sand Prossesing Plant	✓
Camiş Mining A.Ş. Karabük Mining Operations // Karabük Quartz Sand Processing Plant	✓
Camiş Mining A.Ş. Bilecik Mining Operations // Bilecik Raw Material Processing Plant	✓
Camiş Mining A.Ş. Aydın Çine Feldspar Processing and Magnetic Separation Plant	✓
Camiş Madencilik A.Ş. Mersin Mining Operations Mersin Quartz Sand Processing Plant	✓

### Antimicrobial V-Block:

The introduction to the market of the world’s first antimicrobial coated glassware products, based on V-Block Technologies, by Şişecam glassware has attracted great interest and appreciation around the world. This special formula, which provides ultra-hygiene 24/7, has been proven by authorized laboratories and the TR Ministry of Health to be 94.1% effective against COVID-19.

Some 3,544 person-hours of online seminars and e-training on the pandemic have been given. 2,832 support requests were responded to via the Free Employee Hotline, which provides support including psychological counseling, as well as advice on medical and financial issues. The “COVID-19 Information Center” is open to all employees. 5,700 employees participated in two separate COVID-19 Employee Experience Surveys, after which 90% of the participants stated that they found the communication successful.

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A young child with blonde hair, wearing a blue dress, is holding a small green plant with soil in their hands. The child's hands are covered in dirt, and the plant has several green leaves and a small stem. The background is a blurred outdoor setting with green grass and trees. A blue hexagonal graphic is on the left side of the image.

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# CLIMATE CHANGE



2021 has seen important developments in our country and around the world with the scientific advances made to address and adapt to climate change, and in this context, affecting also the decisions taken in the international arena. The 6th Assessment Report (AR6) of the Intergovernmental Panel on Climate Change, which is internationally binding in terms of its scientific findings related to climate, has taken an important place on the world agenda, providing us with access to the most recent data on the possible point impacts of climate change and global warming. In the light of this information, Şişecam has evaluated the risks stemming from climate change in the geographies in which we operate, and has reconsidered the improvements made in its operations with the goal of combating and adapting to climate change. The 6th Assessment Report (AR6) of the Intergovernmental Panel on Climate Change emphasizes that examples of the increased flood risk due to excessive precipitation in Europe and the ecological and agricultural drought risk for the Mediterranean basin are beginning to be seen. In the Mediterranean geography, in which our facilities are concentrated, attention is drawn to the danger of low precipitation and drought should an increase of 2°C be witnessed when compared to the period before

With our flat glass solutions, such as our Solar Low-E coated glass, produced under the brand of Isıcam K T to combat climate change, heat losses are reduced by 50% and solar heat input by 40-65% when compared to ordinary double glazing, hence saving fuel in winter and reducing the energy consumption of air conditioning systems in summer.

the Industrial Revolution. If the aforementioned increases continue, new risks with unpredictable consequences will start to enter our lives, posing a fundamental danger to humanity. In the summer of 2021 we witnessed the mucilage disaster that resulted from the increase in sea temperature and pollution, as well as the forest fires in the Aegean region as concrete examples of this danger. The fact that similar disasters are being experienced with increasing frequency in our nearby geography and in our country has accelerated the initiatives we have undertaken as Şişecam to resolve the Climate Crisis and the actions we have taken regarding adaptation.

In parallel with the scientific findings related to the climate, we follow international and national regulations and legislation related to climate and the environment and continue to develop our capacity beyond their requirements. The Green Deal of the European Union, which is one of our main areas of activity and our largest market, outlines the Fit for 55 package and its operating schedule, as a window of opportunity due to our preparations against the transition risks pending for Şişecam and our innovative practices to be implemented.

**Determining the 2030 Target Compatible with the 2050 Carbon Neutral Vision SBTi**



Products such as architectural glass that save energy due to their heat and solar control features, lightweight automotive glass, photovoltaic panel glasses, glass fiber used in wind turbines and 100% recycled glassware, etc. in our product portfolio, as building blocks that support the meeting of our decarbonization targets, and we continue our work on the development of further innovative products. We aim to contribute to the goal of sustainable cities by providing air conditioning and energy savings with the architectural glass we produce, while preventing noise pollution with acoustic laminated glasses.

We think that the approval of the Paris Agreement by the Turkish Grand National Assembly will lead to the creation of a decarbonization agenda and a cooperative environment in which many industrial organizations in our country will take on leading roles. As Şişecam, we participated as a sectoral and national representative of our country at COP 26, where special importance was attached to the implementation of the decisions following the Paris Agreement and the construction of a future where global warming will remain below 2°C. We had the opportunity to follow the sessions at COP 26, and



## COP 26 ŞİŞECAM PARTICIPATION

Şişecam participated at the COP26 Conference as part of the Turkish Delegation with the status of a State Party member. During the “Towards Zero Emissions - Turkish Private Sector Initiatives” panel held at the Turkish Pavilion on November 8, where the Turkish Glass and Glass Products Industry Council was represented for the first time, we made a presentation entitled “How to Uncover the Potential of the Glass Industry in Combating Climate Change”. In the presentation made by our Sustainability Director, the importance of solutions that directly serve decarbonization in the glass sector was conveyed, and the need for a technological revolution related to the reduction of production emissions was emphasized.

also to convey the role of the sectors with which we interact and the glass sector, through Şişecam, in achieving the global decarbonization targets.

While following the developments in the field of climate change in our country and around the world, we attach importance to the awareness and knowledge of our employees on climate change beyond literacy in terms of developing institutional capacity and having the necessary trained human resources. We include information about greenhouse gas emissions and the connection to climate change, the risks stemming from climate change, and natural events that are occurring with increasing frequency and severity in the environmental trainings we organize in-house. In addition, we regularly share the latest findings and developments related to the climate revealed by the scientific world with our employees through our CareforNext bulletin and internal communication channels.

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RISK TYPE

RISKS

OUR ACTIONS

Regulatory Risks

Cost increases due to carbon pricing mechanisms such as the European Green Deal

Target-setting studies with Net Zero Vision and evaluation of new investments with carbon pricing  
 Increasing the use of renewable energy with a target of 53 MW installed capacity by 2030  
 Use of IREC at Şişecam Headquarters  
 Execution of a project for the determination of the glass industry benchmarks in Türkiye- cost analysis work

Market Risk

Possible loss of income due to increased demand for sustainable products

Developing and increasing sales of lifecycle-based sustainable products  
 Studies carried out to develop architectural glass with insulating and heat and energy conservation properties, and providing air conditioning advantages

Physical Risks

Investments in R&D studies to prevent the potential damage of extreme weather events to our products which occurs by climate change

Studies into the development of products and technologies that contribute to the adaptation to climate change and the development of resistant (fire and similar) glass technologies

Physical Risks (Supply Chain)

Possible effects of disruptions in the Supply Chain due to the Effects of Climate Change on production

Establishment of alternative supply networks and support programs that do not leave suppliers behind



# COMBATING CLIMATE CHANGE



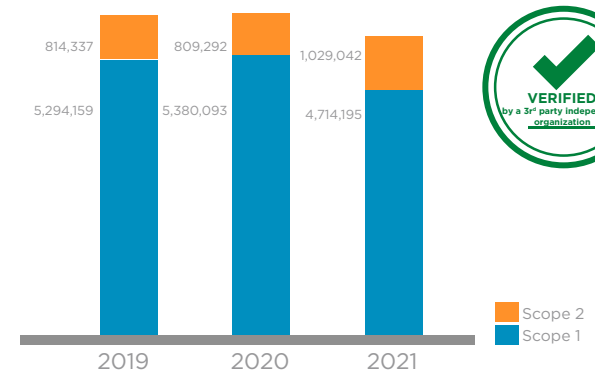
Integrating the low-carbon business model into all our operations, developing a low-carbon value chain, as well as climate-positive products and services constitute the main steps we have taken in our efforts to combat and adapting to climate change. With the development of a low-carbon business model and value chain, we aim to contribute mutually to the fight against climate change and decarbonization with all of the stakeholders in our impact network. In order to contribute to the global efforts to keep global warming below 2°C and to minimize its impact, we act with the principle that the products we produce should have a positive effect on the climate, and so attach special importance to the development of technologies that make this possible and the implementation of reparative activities.

To achieve our low-carbon roadmap and to develop a calendar for net reductions, we started our work within the scope of the Science Based Targets Initiative (SBTi) in 2021. We continue our preparations to contribute to the fight against climate change to the furthest extent, taking into account the sectors in which we operate and the scope of emissions. In 2021, we have completed our internal studies into the collection of relevant

As Şişecam, we continue to devise lightweight glass packaging solutions targeting the use of less raw material and less energy in our designs. With the design changes carried out in this direction, we achieved a 14% greenhouse gas emission reduction in the single bottle type.

data while identifying deficiencies with a view to the establishment of science-based targets in accordance with the SBTi methodology. We continue our efforts to ensure that the decarbonization targets that we have set with our roadmap will be reflected across the entire value chain, and to reveal the potential in this regard. In the management of their operations, we expect all our stakeholders to comply with our roadmap, which was drawn up based on the outputs of the study.

**Şişecam GHG Emissions (Ton Carbon Equivalent)**



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# COMBATING CLIMATE CHANGE

While establishing our scientific-based goals, we are carrying out a detailed study that will cover all our facilities into the potential provided by current and developing technologies. The amount of energy consumed in glass melting processes has decreased by 15% over the last 20 years, and we are planning to implement further projects aimed at the reduction of energy intensity, making use of existing and developing technologies based on our strong R&D culture. In particular, we are planning to make investments into the use of green electricity in energy-intensive processes involving a transition to hybrid furnace technologies in which electric melting furnace technologies are used. By utilizing this technology, we anticipate a 70-80% reduction in glass melting emissions. We believe our natural soda production facilities, where we have increased our investments into the use of natural resources with a lower environmental impact in place of synthetic raw materials, will be one of the main contributors to the achievement of green hydrogen production and carbon capture through the planned BASALIA project. In addition, with the implementation of the BASALIA project, we aim to bring important solutions to waste management and pollution together.

With a lifelong perspective, we address the acquisition of raw materials and natural resources, the reduction of carbon throughout the supply chain, and the reduction of product-sourced emissions. We plan to reduce the

carbon intensity of our raw material inputs by using natural soda in soda production and glass cullet in glass production, and to reduce emissions during production and transportation with lighter products.

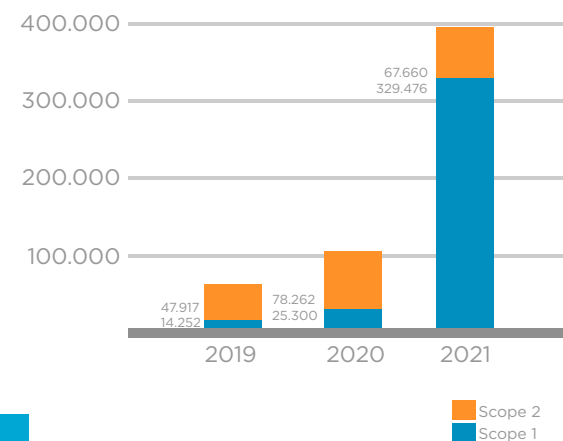
In order to create a positive climate impact and to carry out restorative activities within our own structure, we are working on the rehabilitation of areas from which our natural resources are extracted and operated, turning them into qualified carbon sinks and expanding the existing forested areas. We develop biodiversity projects in the locations in which we operate and in the geographies where our facilities are located, and we detail our follow-up parameters for the development of biodiversity and the protection of natural areas for the works we will implement in this context.

In order to improve our institutional resilience in adapting to climate change, we identify potential risks in the light of up-to-date scientific data and increase our level of preparedness for these risks. At this point, disasters such as forest fires and floods, which threatened many of our stakeholders in the summer of 2021, in Türkiye and Italy, in the geographies in which we operate, became an important stimulus for all of us in the adaptation to climate change. As Şişecam, we have taken measures to protect our mining sites and our facilities in Aydın and Muğla, which are in fire impact areas.

As a result of afforestation and rehabilitation works, an increase of 10.4% was achieved in the forest areas in the mining areas at the end of 2021 compared to 2017.

At the same time, we have contributed to the evacuation and emergency response activities carried out in nearby settlements. As a result of the adaptation needs and threats arising out of the ongoing climate crisis, we have included its dimensions in the disaster risk assessments we carry out against these and similar situations, and ensure that the necessary response capacities are observed in the investment plans.

**Emissions Reduction in return for Energy Savings (Ton Carbon Equivalent)**



**2030 TARGET**  
Switching to Full Electric Furnace

# COMBATING AND ADAPTATION TO CLIMATE CHANGE

## Şişecam Disaster Response Volunteer Team

The forest fires, floods and landslides encountered in 2021 once again revealed the importance of the interventions of volunteer teams and public institutions. Given the apparent need, we took a new step at Şişecam in the fight against natural disasters. We have launched efforts to establish volunteer teams from among our

workforce, recruiting those with the necessary training, experience and knowledge in combating natural disasters and situations that may require civil defense.

With the support of the authorized association, the regional number of people and their training needs were determined, and a calendar was drawn up for Şişecam Emergency Case Team / Şişecam Aid Volunteer Efforts

(SAVE). We aim to finalize regional volunteer team lists and to complete the structuring of the accredited emergency response team for five different regions in 2022, following the completion of the theoretical and practical trainings that the applicant employees will undergo.



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# ENERGY MANAGEMENT



As a result of the energy efficiency and energy saving efforts carried out in 2021, a total of 58.7 million TRY in energy savings was achieved.

One of the most important tools for the achievement of global emission reduction targets and for the compliance of companies with these targets is the realization of energy transformation at a company scale. For this, Şişecam tries to disseminate the use of good practices and technologies that enable energy transformation in all our facilities, to follow global developments and to continue to identify new areas for improvement. The International Energy Agency (IEA), in the 2050 Net Zero roadmap published for the energy sector, includes energy efficiency, changes in consumption behaviors, electrification, green energy use, hydrogen and hydrogen-based fuel use, bioenergy use, carbon capture and storage technologies as basic tools for the achievement of decarbonization targets.

Within the scope of existing technologies:we implement energy efficiency and saving projects in the applications we carry out within Şişecam in the fastest way, and make the most of electrification and green electricity opportunities. We are working to ensure that the technologies that are developing and that we plan to integrate into our processes to include at least one of the hydrogen energy, bioenergy and

carbon capture and storage technologies. In order to achieve our targets detailed on the decarbonization roadmap, we first developed our in-house Energy Management System to prevent energy losses and achieve efficiency at the highest level. In this context, our aim is to minimize losses and reveal heat recovery potentials by conducting energy studies specific to our equipment and facilities. We instantly monitor the main energy consumption areas in our facilities and the energy consumption of our equipment through the Energy Monitoring System (EnİS), and identify energy losses and potential areas for improvement.

We realize energy savings through operational improvements, equipment renewal and efficiency-enhancing projects based on the energy surveys and the outputs of the instant energy monitoring system. We aim to increase energy savings and prevent losses through innovative projects. In addition, in order to minimize energy consumption in our operations, we take care to ensure that the buildings, warehouses and offices in which we operate are environmentally friendly buildings that utilize the most efficient technologies in

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# ENERGY MANAGEMENT

such areas as lighting and air conditioning. The Şişecam Headquarters are powered from renewable energy sources, for which we hold a guarantee certificate, and we evaluate opportunities to expand the use of I-REC certified electricity in other geographies in which we operate. In 2021, 15440 GJ of Renewable Energy certified (I-REC) green electricity was purchased. Among the issues we prioritize in our production processes and operations are the increased electrification of our processes, and accordingly, increasing the use of electricity from renewable energy sources. We plan to make advances in this area through the increased use of hybrid technologies, including electric melting furnaces and rooftop photovoltaic solar power plants. While benefiting from

self-consumption opportunities, we also prioritize electricity consumption, and hold a renewable energy source guarantee certificate for our remaining electricity consumption needs.

As of 2021, the installation of rooftop photovoltaic solar power plants on the roofs of our facilities has been completed, producing a total of 6.3 MWp. We are targeting a total installed power from renewable energy sources of 53 MW by 2030. To this end, evaluation and pre-feasibility studies are being carried out for the installation of solar and wind power plants at our facilities. For the realization of these projects, studies have been initiated

We are targeting a total installed power from renewable energy sources of 53 MW by 2030.

on roof designs and the static conformity of buildings, and investments will be made with priorities decided in line with financial conditions. In the projects developed for the use of wind and solar energy in our priority facilities, calculation and technical guidance studies have been completed and have been included in the 2022 investments.

# MANAGEMENT OF AIR EMISSIONS

Reducing NOx and SOx emissions and transition to technologies with lower emissions are among the primary targets of Şişecam. The online monitoring of NOx emissions, as one of the main pollutants in glass production, is carried out continuously at our 10 facilities. As the primary measures for operation in all our furnaces, improvements are made to such parameters as air-fuel ratio and furnace bur-

ner angle. In this context, the “Nox Emission Reduction and Fuel Saving Techniques Guide in Glass Furnaces”, which details operational improvement practices, has been published by R&D. Investments continue in structural studies such as the use of combustion equipment with low NOx emission and furnace design. As of the end of 2021, the target “reduce NOx emission values through pri-

mary measures in at least 10 glass furnaces” between 2017-2021 have been exceeded with reductions in 11 glass furnaces. In addition, organic compounds released from processes such as mirror and coating production are monitored in accordance with local regulations and are kept below the defined limits.

53 MW Installed RES Capacity Development



# WATER USE

The most profound impact of the climate crisis is the effects of extreme weather events on the water cycle. As the number of extreme weather events, such as floods and droughts, increases, precipitation and seasons become unpredictable. The number of water stressed areas is increasing and water-related risks are becoming more visible. Ensuring effective water consumption in accordance with its Corporate Sustainability Approach "CareforNext", Şişecam is implementing projects and studies one after another aimed at reducing water consumption in all production geographies, and maximizing its recovery. Our activities targeting a "zero discharge" approach are continuing with the identification of water saving areas and awareness-raising studies. Water risks are also important in some of the locations in which we operate. For this reason, our water consumption is monitored on a factory and water-source basis. The amount of recovered water and the amount of discharged water are also monitored.

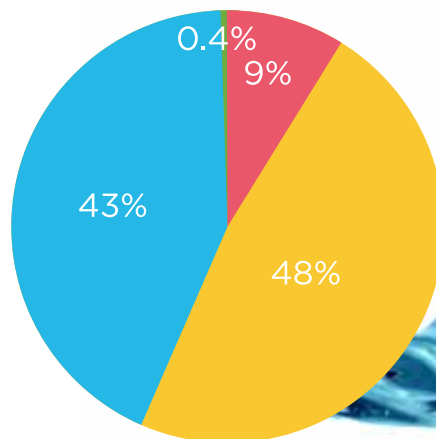
As of last year, we have achieved our industrial wastewater reuse target under our "Protect the Planet" approach. With our target of reducing clean water consumption

by 15% by 2030, we support responsible resource consumption and take action against water risks.

We have contributed to the global development goal of the United Nations entitled "Clean Water and Sanitation" (SDG 6) with 20% of the good practices and projects we realized in 2021. In 2021, we recycled/reused 7,983,535 m<sup>3</sup> of water.

Approximately 8 million m<sup>3</sup> water was recycled/reused in 2021.

Water Withdrawal Rates by Source:



- Surface Water
- Groundwater
- Municipal Water
- Other

**2030 TARGET**  
15% Reduction in Clean Water Consumption

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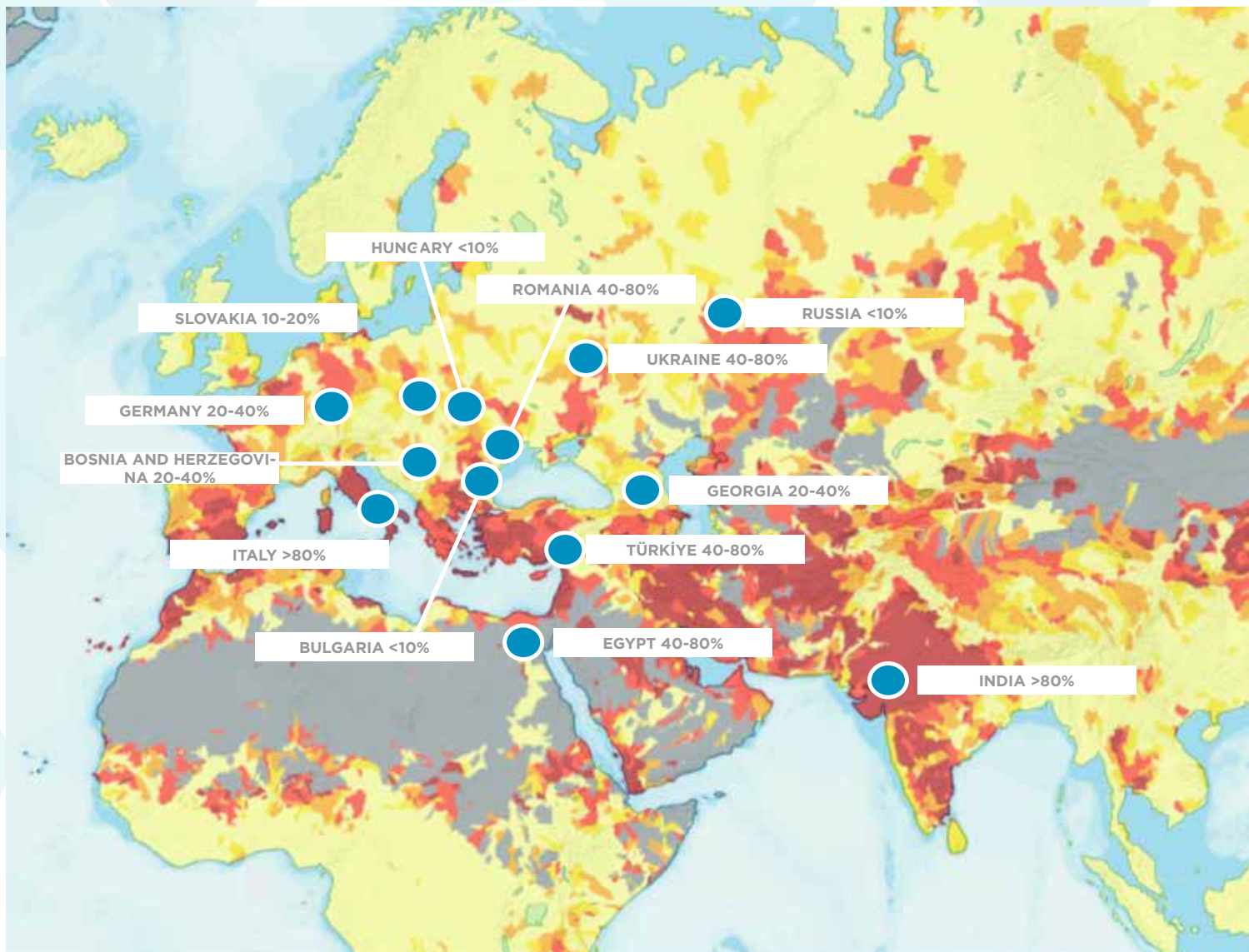
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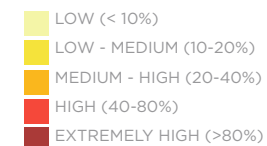




# WATER USE



The water stresses of the countries in which we operate are evaluated according to the WRI Aqueduct Water Risk Atlas, and the water stress rates are shown on the adjacent map.



Water Stress



# GOOD PRACTICES

## ŞİŞECAM FLAT GLASS

Wastewater from the production of laminated glass and coated glass in our Bulgaria facility is recycled and used as demineralized water in production. Thus, a water saving of 11,799 m<sup>3</sup> has been achieved in clean water consumption. In addition, 8,661 m<sup>3</sup> less wastewater was generated.

In our Ankara facility, 87,600 m<sup>3</sup> of water savings were achieved by shutting down the washing machines except for specially requested tasks.

## ŞİŞECAM CHEMICALS

In our Mersin Kromsan facility the cooling water that prevents the water jet pumps from overheating is supplied from the raw water tank. The used water is sent to the factory canals, and from there to the wastewater treatment unit for recovery, after which it is used as washing water. 3240 m<sup>3</sup> of clean water was saved annually.

## ŞİŞECAM GLASSWARE

In our Kırklareli facility, wastewater from the reverse osmosis unit is stored in an underground water storage tank and sent to the softening unit to be used as process water in production, or for the construction of fire lines. Thus, a saving of 100 m<sup>3</sup>/day was achieved.

## CAMIŞ PACKAGING

In order to increase the amount of rainwater collected at the Tuzla plant, water started to be collected from the roofs where rain water could previously not be collected. The stored rain water is conveyed to the units where it is needed by a hydrophore system, and is used for machine cleaning, glue making, and for the operation of toilets. At the end of 2021, 1,071 m<sup>3</sup> of rain water had been collected.

In the production phase of the adhesives used in the lamination process, savings were achieved through the reuse of water from the manufacturing processes. The quantity of wastewater was reduced from 288 m<sup>3</sup> last year to 2021 m<sup>3</sup> by the end of 3.

## ŞİŞECAM GLASS PACKAGING

The wastewater collected in the fusion channels in our Yenışehir facility was analyzed and was found to contain glass. The waste that collected in the canals was dried and used in the furnaces.



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# CIRCULAR PRODUCTION

The supply chain problems experienced during the pandemic, the increases in commodity and energy prices, and the problems on accessing to natural resources caused by climate change increase the need for efficiency and effectivity in the use of our resources.

As Şişecam, we consider the dissemination of circular production practices, which are among our top priorities in our efforts to combat climate change and in the field of responsible production, to be a solution and an area of opportunity in our Company and within our stakeholder network. We prioritize the use of raw materials, natural resources and other production inputs that are sourced from recovery practices and the outputs of other industries, thus localizing the supply chain, decreasing emissions from transportation and production, and reducing our environmental footprint. We believe that circular economy practices will change the production and waste removal processes, starting from the design phase, and will initiate an important industrial

transformation by ensuring the products and waste are recyclable.

With a view to expanding our circular production practices, we are continue our studies for potential industrial symbiosis applications in areas such as energy and heat use, and the common use of by products,in addition to from resource and waste management. With the interaction network we have created, we aim to gain new stakeholders and develop partnerships in the fight against climate change. We develop our solutions in the belief that acting together can contribute to many sustainable development goals.

In line with our ongoing collaborations, the quartz sand and non-standard sand that are produced as by-products of our processes are recycled by our stakeholders in the cement sector, while by-products arising in the formation of waste sand and feldspat are recycled by our stakeholders in the ceramics sector.



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# CIRCULAR PRODUCTION

In 2021, we sourced 85% of our raw materials locally.

In this context, in 2021 we launched efforts aimed at recycling the waste sand and other waste generated during the production processes of our stakeholders operating in the cement sector. We expect this project to contribute to waste management within our company, while contributing to our stakeholders in terms of alternative fuel use and the reduction of emissions.

We aim to bring innovative industrial practices together with innovation in sustainability, and to increase the number of responsible production and consumption practices in

which we are engaged. We plan to implement circular economy practices and to come up with solutions to waste and pollution, while making the most efficient use of resources in the innovative projects we implement. As an example of this, we are working together with MESKI (Mersin Water and Sewerage Administration General Directorate) to prevent the use of clean water and to use treated wastewater at our Şişecam Chemicals Mersin Soda Plant as a symbiotic practice. In 2021, we supplied 85% of our raw materials locally.



# CIRCULAR ECONOMY APPROACH AND GLASS

Glass offers significant advantages in terms of reducing the need for raw materials and the environmental impact of their extraction due to its material properties and its 100% recyclability. As Şişecam, we aim to reduce our energy consumption and emission values, and to take a leading role in efforts to make the most of these advantages by using high rates of internal and external cullet. As a company operating in every field of glass production, we launched circular economy practices within our Eskişehir and Yenişehir glass recycling facilities. We aim to expand our circular economy practices by developing a product portfolio

of products made from recycled resources.

***By ensuring the use of 70% cullet furnace in the glass furnace used in the production of green glass, specific energy consumption can be reduced by 33% and greenhouse gas emissions by 46%.***

26% cullet used in our glass packaging production in 2021.

“The Journey of Glass” video presenting Şişecam’s contribution to the circular economy was posted on Şişecam’s social media accounts on June 5, World Environment Day.





# CIRCULAR ECONOMY APPROACH AND GLASS

To achieve these goals, the use of internal and external cullet has higher priority on our agenda. As a result of long-term studies on the separation of glass at source and the supply of cullet, we have exceeded our target of 20%. The use of cullet in 2021 was 26%, and we continue to work towards our 35% by 2030. In order to increase this rate even further, we are developing projects and communication campaigns promoting the use of recycled cullet in production. As part of the works carried out in Türkiye in 2021, social media posts and videos were made showing how glass recycling is achieved with the cooperation of all stakeholders, from production to consumption. At the same time, we raised social awareness by sharing the benefits of glass recycling and the importance of consumer participation through the use of social media platforms.

We have completed the certification processes confirming the 100% circularity of our products and 100% recycled glass content by third-party certification bodies following an audit carried out according to the Recycled Claim Standard, and by carrying out a Life Cycle Assessment analysis in order to develop products that make use of, and that eventually feed back into the circular economy. As part of the “Aware Collection” CareforNext strategy,

we reached out to our consumers with the “Are you aware?” communication campaign, which attracted great interest.

We carry out campaigns to expand deposit programs in all of the geographies in which we operate so that products can be recycled at the end of their life, and ensuring the establishment of separation and collection points at source. To this end, we brought the National Deposit - Return System Project to life by placing a “Smart Glass Recycling Vending Machine” in the main entrance corridor of Şişecam Headquarters in July 2021. Working in cooperation with Turkcell, we encourage the development of a recycling habit by allowing points to be collected via the “Paycell” mobile application for each recycled bottle, and started working to raise awareness about the deposit value. We aim to increase the number of smart glass recycling vending machines and Paycell applications in the coming period.

## Loyalty Network

Awareness of the benefits of recycling was raised and interest was kept alive through competitions and questions asked on the Cam Yeniden Cam (Glass and Glass Again) webpage.

With our Aware Collection, significant reductions have been achieved in energy and raw material consumption during the melting process, along with 39% reductions in natural gas consumption and 41% reductions in greenhouse gas emissions.

## Gamefed Hackathon Competition - Strengthening Glass Recycling

To increase the awareness of glass recycling, the “Sebastian Team”, made up of university students and mentored by the Şişecam Environmental Management team, took first place in the Gamefed Hackathon Competition with its POTTLE solution and application, and the preparation of a loyalty program with “gamification” support to transform it into a real mobile application that directly touches the end consumer has been discussed within the scope of a project.

2030 TARGET  
Use of Glass Waste in Glass Packaging at 35%

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# CIRCULAR ECONOMY AND WASTE MANAGEMENT

As Şişecam, we consider all process outputs and waste arising from the inputs used in our production processes until the final product is obtained as natural resources and sources of energy. Through a “True Cost of Waste” model, we analyze the process outputs and waste generated by our value chain to identify the real cost of energy, time and resources with a life-long perspective. At this point, we have adopted a waste management policy that prevents waste generation considering the economic and environmental costs of waste generation.

**As a result of the 2021 Kaizen Project, which we carried out to prevent waste generation at the Glass Packaging Mersin facility, we reduced the amount of Fusion Slime, which is classified as Hazardous Waste, by 22.5%, and saved 353,930 TRY in waste packaging, transportation and disposal costs.**

With the Şişecam Waste and Circular Economy Policy that we published in addition to our Environment and Energy policy in 2021, we took an important step toward the prevention of waste throughout the value chain, and expanded circular economy practices within our stakeholder network. Thus, while providing economic

gains through the impact on the value chain, we aim to prevent emissions and reduce environmental footprints from the acquisition of primary sources used instead of lost sources to their disposal. In addition, in line with our Integrated Waste Management System and “Zero Waste” practices, we prevent waste generation during the use of packaging for raw materials and products, and continue our efforts to increase our recycling rates.

**Glass Packaging Mersin facility: By reusing Waste Batch in production, we have recovered 783 tons of 904 tons of waste and saved 526,000 TRY.**

We carry out the recycling and recovery of all non-hazardous wastes generated during production, within the borders of threshold to threshold, through licensed companies. We also ensure the recycling and disposal of 99% of the hazardous waste generated through licensed institutions. While increasing our production, we reconsider our processes and make the necessary technological investments to reduce the amount of waste that is recycled or disposed of through licensed companies, and implement pilot practices to change employee behaviors and habits.

We have recycled approximately 37,500 tons of paper, cardboard, plastic and wood.

As part of these practices, in 2021 we completed the Integrated Waste Site Management Pilot Study Phase-1, which relates to digital traceability and waste management processes. Within the framework of our Circular Economy Policy, in line with the experiences and study results obtained from these studies, it is planned to expand the pilot study to the Glass Packaging and Flat Glass facilities in Mersin, and to the Bulgaria, India and Glassware Kırklareli facilities in 2022.

2030 TARGET  
50% Reduction of Packaging Waste

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# INTEGRATED WASTE MANAGEMENT APPROACH AND EFFORTS

Within the scope of the Integrated Waste Management Program that has been underway since 2019, we continued our project studies in 2021 with implementations at the pilot facilities. In June 2021, we initiated the “Integrated Field Management Pilot Study” to investigate the traceability and waste management processes at 50 waste generation points selected at the Mersin Soda Factory and Kromsan Factory sites for selected wastes, and achieved financial/non-financial gains in terms of waste management and separation over a 12-week period

## **Within the scope of projects carried out in pilot facilities, our aim was;**

- Instant and digital monitoring of waste
- Standardization of practices by increasing waste separation efficiency

- Tracking of waste on a unit/department basis instead of a facility/factory basis – determination of the waste amounts and non-compliance of each unit
- Establishment of the True Cost of Waste (TCOW) approach by identifying the cost components of all wastes
- Dissemination of best practices
- Ensuring optimization and standard requirements in temporary waste storage areas
- Utilization of wastes with industrial symbiosis and energy recovery potential within the scope of zero waste
- Ensuring legal compliance proactively
- Addressing the reduction of packaging waste as of the production planning stage;
- Ensuring equal distribution of duties and responsibilities regarding waste management within the facility/factor.





# FIELD STUDY APPROACH AT PILOT FACTORIES

## OPERATIONAL PRACTICES

TECHNICAL CAPACITY

EXPERTISE LEVEL

DATA MANAGEMENT

WASTE FLOW ANALYSIS

PRODUCTION / TRANSFER LOSSES

RESOURCE EFFICIENCY

GOVERNANCE

LEGAL COMPLIANCE

ECONOMIC VIABILITY



Identifying gaps and opportunities to reduce, reuse, recycle and recover waste in the organization

Prioritization of Min. time / Max. benefit options

Cost / feasibility requirements and the achievement of savings & environmental impact reductions

Identification of risky issues in legal compliance, determination of investment needs

Understanding the measurement needs for quantitative benchmarking across facilities

Understanding the practice maturity level of the Şişecam rules set forth in the Waste Management Standard / Procedure



## SODA & KROMSAN WASTE MONITORING STUDY

Due to factors such as the close proximity of the Glass Container, Flat Glass and Chemicals (Soda, Kromsan, Oxyvit and Mining) production facilities, and the resulting relatively large quantity of waste, and the collective management of valuable wastes under a central waste tender, we planned to expand the model in question to production facilities in the Mersin Region. In this way, we envisaged that practices would be standardized for the relevant lines of production, and the obtained benefit would thus be increased. With this practice carried out in our soda ash factory, we accomplished the following achievements:

- Increase in the rate of economic recovery of wastes thanks to more efficient waste separation
- Reduction in disposal costs by preventing the disposal of non-hazardous wastes by making correct separation
- Waste collection optimization thanks to the online waste monitoring system
- Performance of waste management with “qualified employees with waste management professional certificate” among the cleaning staff.
- Statistical online factory- and

- department-based waste data
- Preliminary preparation for legislative change expectations
- Instant detection of noncompliance / root cause analysis

We carried out “Waste Separation” and “Digital Monitoring” operations for a total of 8 waste types, 4 hazardous and 4 non-hazardous, selected by the factory at the relevant facility sites. The types of waste are as follows;

- Cable Wastes
- Electric Motors
- Contaminated Wastes
- Oil and Grease Wastes
- Contaminated Packaging
- Soda Product Packaging
- Kromsan Product Contaminated Packaging
- Recyclable Packaging Waste

We use waste monitoring software specially adapted to the workflow in order to monitor waste and report non-compliances. We define waste collection routes through the software, allowing us to monitor parameters such as the capacity percentages of containers in the field, the number of

trips carried out by the waste collection vehicles, fuel consumption, and the type and amount of waste collected, instantly and cumulatively within the desired date range, and reflect these data in our reports. Using the software incident management tab, teams involved in the collection of waste in the field can instantly send their observations and any non-compliances detected to the management unit, including photographs or videos. By increasing the quality of separation methods, we have greatly reduced the amount of recyclable waste contaminated with hazardous wastes and decreased the level of hazardous waste to 1%. We reduced the inappropriate segregation rate detected in each container at the source by 70%, and eliminated 100% with the operations in the temporary storage area. Since providing training to the facility employees, we have achieved a 40% increase in efficiency through the appropriate separation of cafeteria waste (organic and recyclable). In 2022, we aim to continue the implementation of the project with the selection of a pilot facility and to expand it to all our global operations in a short period of time.

# SODA & KROMSAN WASTE MONITORING STUDY

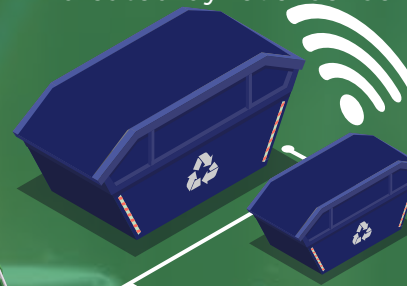
**1** Mapping the use of digitally labeled waste within the facility



**2** Waste collector and reader terminal (Each container contains QR code)



**4** According to the information received from the software, waste is collected from the points indicated by level sensors



**5**

Storage in the relevant closed compartment in the Temporary Waste Storage Area and reporting of the noncompliance

**3** Weighing using a digital reader scale and transferring waste to the database







# EMPOWER SOCIETY





## CORPORATE HERITAGE

The industrialization of glass production in Türkiye started in 1935 when the task of establishing and developing a glass manufacturing industry was assigned to İşbank. The glassware sector, the seeds of which were planted with the establishment of our facility in Beykoz, Paşabahçe in 1935 in our country, is a production branch that has made a name for itself in the global market and has gained decisive power in the sector at the point we have reached today. We are proud to be taking part in this journey of success with the first large-scale glass production facility in our country, and to be one of the building blocks in the preservation and development of a glass culture in our lands. It is our most fundamental goal to preserve this institutional heritage we have taken over. In this direction, we act with the responsibility of being one of the main manufacturers in the glassware sector, and with the motivation to play a leading role both in our business segments and in society. We guide our customers to the selection of suitable glass through the consultancy services we provide in the sector, and support the creation of a cleaner environment with our contribution to energy savings. In addition, we prioritize the dissemination of the importance of glass to all layers of society from a social perspective.

**Global Dissemination of Glass Heritage  
and Culture**

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## Glass Works Collection

As Şişecam, we believe that the era we live in will be the “Era of Glass”, and we are working to effectively hand down the glass heritage in our geography to future generations. Within the scope of our works, we take glass on a journey through time with the Glass Works Collection at Şişecam Headquarters, and shed light on this journey with our collection.

The Glass Works Collection consists of 520 archaeological and ethnographic works collected and brought together by our organization. Glass works manufactured in the Greek, Roman, Byzantine and Ottoman periods between the 6th century BC and the 19th century AD, is registered with the Istanbul Archeology Museum Directorate. The works presented to the visitors in the special exhibition area established in our headquarters are made available to all art enthusiasts via a virtual digital platform.

***Our website, which hosts our digital museum that we designed as a virtual cultural tour, was deemed worthy of 3 prestigious awards by the Golden Spider Awards.***

- ***We are honored to be awarded the second place in the “Culture, Art and Activity” category, the third place in the “Microsite” category***
- ***and the “People’s Favorite” award.***

You can access our online exhibition, which has been created to present our glass heritage and to spread the importance of glass culture, at [www.sisecamcameserleri.com](http://www.sisecamcameserleri.com).



## 36<sup>th</sup> Şişecam Glass Symposium

We also organize the Şişecam International Glass Symposium every year to provide contribution to the glass industry, which is always at the center of our focus. In here, we talk about global trends in the field of glass through scientific discussions, which provide guidance for all our stakeholders in the industry, and we share information about the future of the industry. In 2021, we held the 36th Şişecam Glass Symposium with the theme “Glass is the Future”. We completed our symposium, in which many academics, scientists, industry experts and students participated, in 3 online sessions. In 13 presentations made within the scope of the event, we opened the future of the glass industry, new technologies that can be implemented, global trends in glass and sustainability practices for discussion. In all these intellectual discussions, we emphasized that glass, which offers unlimited opportunities to create a sustainable world, is our future, and we aimed to raise awareness about the unique nature of glass by conveying this belief to our stakeholders.

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## International Year of Glass

As Şişecam, we represent the glass industry on international platforms as a pioneer in the industry and assume the leading role in global organizations. We consider the possession of glass as one of the most important achievements in human history, with its enormous sustainability performance and wide range of uses. With this belief, we are proud to be one of the key players in glass production, and consider raising the recognition of the technological, scientific and economic importance of glass as one of our core responsibilities.

Unfortunately, the importance of the glass industry in the fight against climate change, protection of environment and energy saving has not been able to attract the necessary social response yet. We believe that a global emphasis should be placed on the environmentally friendly feature of glass in order to raise awareness in line with this axis. We made a breakthrough in 2021 in this regard in ensuring the comprehension of the importance of glass all over the world. As Şişecam, we contributed to the declaration of 2022 as the International Year of Glass (IYOG) by the United Nations General Assembly, for which we entered into a cooperation with the International Commission on Glass (ICG), and benefitted

from the support of more than 1,500 manufacturers, universities, museums, associations and artists from 78 countries.

As a result, many events will be held to raise the profile of the glass sector throughout 2022, including the following planned activities:

- Opening conference in Geneva
- ICG Congress in Berlin
- Glass Expo in China
- Art/History Congresses in Egypt, the USA and Europe
- Special issues in international journals
- Private glass collection exhibitions in museums and public
- Workshops, trips and seminars
- Training materials

The organization of IYOG 2022 activities will be carried out by several regional groups, and in Eastern Europe/Middle East, where we have been selected as the regional representative of the ICG, we will be organizing many events under the coordination of IYOG.

In this context, we will coordinate other events that will be held in Türkiye, Bulgaria, Greece, Cyprus, Israel, Jordan, Lebanon, Malta, Bahrain, Saudi Arabia and the United

**As we leave 2021 behind, our efforts have served their purpose and glass has given its name to 2022. In 2022, which has been declared as the “International Year of Glass” by the United Nations, we will support this important development together with the world’s biggest glass manufacturers as the main sponsor of the events.**

Arab Emirates. For detailed information: [www.iyog2022.org](http://www.iyog2022.org)

In his speech at the opening event of the 2022 International Year of Glass, held at the United Nations in Geneva and attended by the leading representatives of the world glass industry, our Chairman of the Board of Directors Prof. Dr. Ahmet Kirman stated that glass, which has added value to the development of civilizations and human life from past to present, will be one of the most strategic materials of the future due to its sustainability-oriented features, and announced that Şişecam will continue to support international efforts to increase the global focus on glass throughout 2022. Our R&D Glass Technologies Director made a presentation about the innovative products developed by Şişecam’s scientists and the contributions of these products to many different sectors, from health to agriculture

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# EQUALITY, DIVERSITY AND INCLUSION

At Şişecam, we see diversity as a new contribution to our color spectrum. We treat everyone in our company with equal respect and involve our employees in decision-making processes as we continue our journey with an inclusive culture, leaving nobody behind, and with the motivation to progress together in unity. We focus on creating a fair, ethical, productive, respectful and egalitarian working environment knowing that we have a lot to learn from and teach each other. In this context, we are making effort to facilitate the equal opportunity in our organization by all means, to increase participation, to broaden our inclusivity, and to augment our diversity.

We stand against any discrimination that may arise among our employees based on language, religion, race, nationality, age, sexual orientation, gender or any other dissimilarity. We see our differences as a reflection of our diversity, and we approach them with respect by appreciating the value of our differences. We believe that we can create areas of development by learning from different experiences. We carry out awareness-raising activities on equality, diversity and inclusion so that our employees also embrace this development. Keeping in mind that we remain students on

the path of learning throughout this process, we follow local and global development and update our own processes while continuing our learning journey.

At Şişecam, we offer new areas of social participation and professional development in order to increase the happiness and success of our employees, and we ensure that this is offered in an equal and inclusive manner for all. While we have full confidence in the competence of our employees, we also organize training programs to reveal their different potentials and we invest in development with the equal opportunities we offer. In a way that reflects the value we give to our colleagues, we give importance to everyone's opinion, create environments where they can share their opinions and suggestions, and encourage participation. With the Suggestion Development Platform, we collect creative and original practice recommendations submitted by our employees and improve our organizational structure and functioning together with a holistic participation. With the feedback and suggestions we receive, we keep not only our employees but also ourselves open towards evaluation and development.



**Reaching 25% Rate of Women's Employment,  
Implementation of the Women Expression Program**

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# EQUALITY, DIVERSITY AND INCLUSION

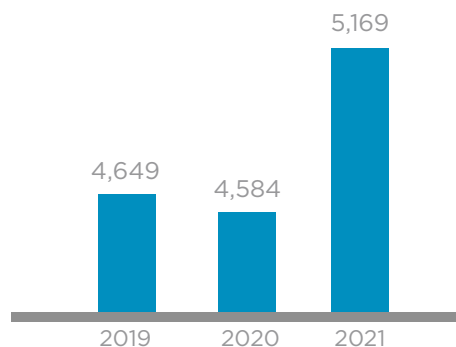
When evaluating our employees, we use an impartial measurement system based on competency and ability, and determine our internal change/allocation policy in accordance with this system. By adopting a similar approach, we create our salary policy based on objective criteria. We evaluate our employees' competence, experience, performance, workload, scope of work, career position, equivalent salary systems in the sector and our ability to pay in a holistic manner. In this way, we offer our employees a fair, stable, competitive and incentive salary policy.

With the Diversity and Inclusion Guide created by our company, we aim to ensure that all our employees understand the principles we adopt. We regard our guide, which we have prepared to share the way we do business and establishing relationships, to define our boundaries and to ensure the comprehension of the principles of our corporate culture by all, as a beacon for both ourselves and our stakeholders. Our aim is thus to ensure that our corporate culture, which we have built on the axes of equality, diversity and inclusion, exceeds the boundaries of our company and reaches all of the actors with which we come into contact while carrying

out our business. In this way, we aim to establish contact with the society and to enable the spread and internalization of our principles by our stakeholders.

We know that a good practice is capable of creating thousands of good practices. For this reason, we continue to walk in solidarity, preserving our differences, protecting our diversity and expanding our inclusiveness.

**Total Number of Women Employees**



**2030 TARGET**  
Creating a Multinational Working Environment





# EQUALITY, DIVERSITY AND INCLUSION

## Our 2021 Equality, Diversity and Inclusion Activities

- We included “mentoring” practices in our employment policies. We assigned our volunteer female employees to share their experiences with the newly hired female employees, and thus we aimed to provide assistance to our female employees by enabling a transfer of experience among our employees.
- With our “Women Friendly Factory” initiative, we aimed to undermine gender-based assignments and increase women’s employment in every field. We authorized and recruited women to such positions such as forklift operator, quality control worker, logistics worker and fiber processing master. As a result of our efforts, we managed to bring in the first women glass drawing master in our Ankara Factory.
- We continued our work on the transformation of physical spaces to cover the basic needs and comfort of all our employees and made architectural improvement investments.
- On March 8, International Women’s Day, we opted to remove words discriminated against women from our jargon and to keep our business area clean on a lexical basis. By playing online word games with our employees, we raised awareness

- regarding the expressions we use.
- In order to increase the ratio of female employment and to raise professional competence in the glass industry, we launched the “Glass Application Certificate Program” in cooperation with Balıkesir University and the Balıkesir Labor and Employment Agency Directorate.
- By implementing the “Women Expression” program, we aimed to inspire our female employees and increase the effectiveness of women in Şişecam’s organizational structure through our mentors consisting of female managers. In 2021, we started the Women Expression program as a pilot with 3 female managers.
- By supporting the participation of one female manager in the Advanced Management program and two female managers in the Management for Development program of the IESE Business School, which is considered one of the most prestigious schools on a global scale, we supported the increase of female competences in our organization.
- In order to provide contribution to the journey of our 3 female managers who were admitted to IESE Business School, we offered mentorship assistance to our managers with our female Assistant General Managers. Within the scope of

**As of the end of 2021:**  
**The ratio of female employees was 23%**  
**The ratio of female employees in our senior management personnel is 26%**  
**The rate of female employees in our senior management personnel is 24%**

- our sustainability strategy practices, we completed our preparations for becoming a member of the “Bloomberg Gender Equality Index”.
- Within the scope of our global young talents program entitled “Together”, we backed up our “equal opportunities for young talents” pledge by accepting an equal number of male and female interns.
- In order to facilitate the access of our visually impaired stakeholders to our reports, we published our sustainability reports in both Turkish and English as an audio book on our website.
- We also maintained our digital exhibition under the name of “Women of Şişecam” in 2021, which we initiated in 2019 under the name of “Women of Şişecam From Past to Today”. We put an emphasis on the value that our female colleagues, who have been with us since our establishment, have added to us and our success.



# TALENT ACQUISITION, MANAGEMENT AND DEVELOPMENT

As Şişecam, we designated bringing in new talents to our corporation, managing these talents and developing them properly as the focal point of our human resources strategies in 2021 as well. In this context, we revised the positions within our organizational chart. With our redesigned structure, we created stages for certain career positions. We enabled transition between different career paths and we aimed to ensure a holistic mobility at Şişecam in the local and international context and to establish a global standard.

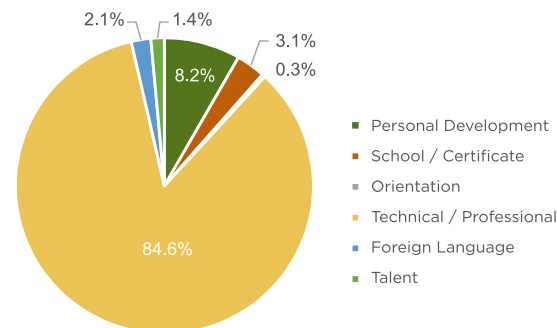
In addition to utilizing the talents in our organization for different positions through internal mobilization, we also benefited from our global internship program Together and First Step to introduce young people to our Company. We also continued to use the Global Talent Management Program "Journey" to develop the leadership skills of our current employees with leadership potential and to prepare them for this role.

It has always been one of our main goals to increase the performance of our employees and to support them in working with the highest efficiency. In this context, we launched the Success and Performance Development System in order to ensure the integration of personal successes and goals with those of the corporate body.

We developed a dual goal system for our employees and we placed the corporate goals on one layer of this system and the individual goals of our employees specific to their jobs on another layer. By enabling our employees to progress simultaneously with the goals on these two levels, we ensured a regular communication flow between managers and employees. In this way, we created an interactive performance development system, and we achieved improvement in our processes by utilizing the outputs of our system in our human resources processes.

***In 2021, we provided 470.406 hours of training to our employees and spent 9,767,342 TRY (including external training) on training***

## Distribution of total training hours\*



Distribution of Total Training Hours\*

**Increasing Functional and Personal Competences through Training (47 person-hours of training per year) Introduction of Next-Generation Skills**

Our Together Program received the Bronze Award in the "Best Young Talent Employment Strategy" category in the Stevie Awards for Great Employers competition in 2021.

We received a silver award in the Human Resources Team category at the Stevie International Business Awards.

We were recognized with an achievement award in the "Leadership in Digital Transformation" category for our Human Resources Global and Digital Transformation Project at the PERYÖN Human Value Awards.



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### Global Talent Management: Journey

“Global Talent Management: Journey” is a program that aims to identify the employee profile required in our community according to the nature of the job, to classify the talents of current employees and to realize global resource planning in the most efficient way with these practices. With this program, we divide our employees in all countries where Şişecam Group operates into 4 different categories which are “Pioneer”, “Navigate”, “Discover” and “Explore”. The program aims to prepare our high-potential employees for leadership positions, with development opportunities offered to our managers and prospective managers in the Pioneer and Navigate categories. In this context, we designed the Factory Manager Development Program together with INSEAD, which is regarded as one of the best schools in the field of management, in 2020 for our managers and prospect managers. In 2021, we implemented

our Management Coaching practices to complement this program. We organized learning and sharing seminars for managers who have participated in and completed the INSEAD program. In addition to all these, we started the voluntary Şişecam Internal Mentoring program, and aimed to put theoretical knowledge into practice. We created a platform for our Şişecam employees in the “Pioneer” and “Navigate” categories to share their knowledge and experience with our employees in the “Discover” and “Explore” categories. With this dual flow that includes mentors and mentees, we facilitated both the learning of our employees from experience and the development of leadership skills of our managers. Additionally, we use our Individual Development Journey application for all groups in our categories within the scope of our program. We identify the strengths and areas of development of our employees by taking their talent profiles into account. Afterwards, we prepare individual development plans for our employees and determine a need-based flow with in-class training. With the English Language Development Program we started, we aim to equip our employees with foreign language competencies.

In 2021, 42 of our managers participated in the administrative, strategic and women’s leadership programs carried out within our talent management activities, with 150 of our employees participating in the mentoring experience and 362 employees participating in the development journeys.



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# ŞİŞECAM SCHOOL PROGRAMS

We completed our organizational transformation with the reorganization of roles and competencies within the scope of Şişecam Global Transformation Project and redesigned our School Programs with this transformation in mind. In this context, in line with our reorganization in 2021, we provided online and hybrid trainings according to the needs of our employees.

As of the end of 2021, our average training time per employee is 22.2 hours in Türkiye.

**LEADERSHIP SCHOOL - THE FIRST STEP INTO MANAGEMENT:**

To support the technical and leadership competencies of our newly appointed managers, we established the First Step toward Management program in 2021. We supported our managers with group coaching on personal leadership, team management, motivation and flexibility through our program, which was started with 3 groups.

**LEADERSHIP SCHOOL - MANAGERS OF THE DEVELOPMENT:**

In 2021, we launched the Managers of the Development program, which was designed to support the leadership competencies of our colleagues in management positions, as 2 groups. We supported our program consisting of 3 modules, namely Self, Work and Team Leadership, with individual coaching sessions.

**LEADERSHIP 2.0 TRAININGS:**

In 2021, we completed the Leadership 2.0 Trainings, designed to contribute to the professional, personal and leadership development of all managers working in managerial and higher positions, with three seminars and 15 different training courses, participation in which was open to all. Through the trainings we have held with the participation of our managers working domestically and abroad, we aimed to offer tailor-made development solutions and support the development of micro competencies.

**LEAN 6 SIGMA GREEN BELT CERTIFICATION PROGRAM:**

We designed the Lean 6 Sigma Green Belt Certification Program to provide contribution to operational excellence strategies within the scope of Continuous Development Projects. It is anticipated that the program, which was launched for 60 employees in November 2021, will continue for 4 months. With our program, we aimed for the project leaders to specialize in the methodology, process analysis and improvement methods required in the execution, decision making and problem solving processes of the Lean Six Sigma project.

**TECHNICAL TRAININGS:**

It is obligatory to fully attend our program which consists of Virtual Classroom, Video Training, Gaming Platform, Project Coaching/Consultation Studies, Management Review Studies and a Certification Exam. In addition to full attendance, the candidates are be entitled to receive a Green Belt Certificate of Achievement if they are successful in in-training practices, in the final exam at the end of the training, and in their projects.

**PROJECT FOR THE ESTABLISHMENT OF AN ENVIRONMENT OF COLLABORATION AND COOPERATION:**

In order to support the Factory-HR project carried out in all our factories, we started the Project for Establishing a Sense of Collaborative Work and Cooperation. Through the project, our goal is to create an environment of collaboration and cooperation among our employees, and to make this cooperative spirit sustainable in all business activities and relations.



**SCHOOL OF HUMAN RESOURCES**

Through our School of Human Resources, which we launched within the scope of the Şişecam Global Transformation Project, we aimed to train Human Resources Specialists who follow the latest developments and practices in the field. The primary aim of the program is to include experts in our human resources processes who are competent in HR practices and duties, who can work under their own initiative, who can carry out the necessary actions, who possess teamwork skills and who include future trends

in their vision. In this context, we launched the HR Business Partner Development Program in Bulgaria in 2021 to create a global standard in our processes. Within the scope of our program, we provided training on HR Analytics, Competency Based Interview Techniques, Inventory Interpretation and Feedback. We have also launched operations to expand the scope of our program to the other countries in which we operate, and to enter it into practice in these countries, and our efforts in this regard

are continuing. We have redesigned the training opportunities we offer in line with our renewed organizational structure, and have included our duties and responsibilities in our renewed design based on the professional criteria of the Chartered Institute for Personnel and Development. In this way, while being renewed in the light of latest trends, we offer our employees updated training opportunities compatible with our new operation models and in accordance with different areas of needs and expertise.

**PRODUCTION – HR PROJECT PHASE 3: SCHOOL OF FINANCIAL AFFAIRS: SALES AND MARKETING SCHOOL:**

Within the scope of our project, we envisaged the establishment of a Multi-Skill System for our hourly paid employees in all our factories in Türkiye. We identified competency sets in the categories of “legally-supervisory mandatory”, “technical”, “behavioral skill” and “work instruction” based on position and person. In this context, we identified the deficiencies of our employees and revealed their areas of improvement, and in this way, we aimed to provide support to our employees more effectively.

Within the scope of the Şişecam Global Transformation Project, we identified technical competencies specific to each role and redesigned the School of Financial Affairs and launched it in December. Through our school, our goal is to train employees who have a good command of financial trends, who are competent in financial affairs and who have a broad perspective.

Through our school, we set out we aim to raise employees who are experts in sales and marketing, aware of their qualifications and open for improvement. In this context, we have identified the competencies required for our organizational transformation, and compiled assessment inventories on a global scale for the measurement of these competencies. We are evaluating the inventory outputs in order to use them in the design of the Sales and Marketing School in 2022.

**GLASS SCHOOL: LANGUAGE DEVELOPMENT PROGRAMS:**

Through our school, we aim to improve the skills of our employees in glass production and to preserve our quality while increasing our productivity in glass. Within the scope of the Glass School, whose new design works are still in progress, Bubble Training was provided in 2021 as a follow-up training.

As we move forward as a global power in our sector, we aimed in our journey for our employees to possess a global communication competence. In this context, we designed the English Language Development Program in order to make it easier for our employees to adapt to all the locations where we operate and to follow the literature in their fields of expertise.

We organized online trainings with the digital content we prepared within the scope of our program, and in our face-to-face training groups, we facilitated the language acquisition process of our employees with our specially designed training materials. In 2021, we carried out 49,972 hours of foreign language training within the scope of the Language Development Program.



## Collaborations with Schools

As Şişecam, we give great importance to keeping in touch with young people and discovering the talents that we can bring to our sector. By contributing to the development of these young talents, we aim to increase the quality of the workforce in the glass industry and thus provide contribution to the development of the sector. In line with this aim, we cooperate with high schools and universities in Türkiye and abroad, and simultaneously, we work with the Ministry of National Education regarding the steps that can be taken to increase cooperation between the industry and schools.

### Collaborations with Schools in 2021

- Working with Balıkesir University, we opened the 4th Glass Application Certificate Program with the participation of 63 students, and offered employment opportunities to 10 students who successfully completed the program.
- We also provided 8-weeks of training to 3rd and 4th-year students of the Department of Metallurgical and Materials Engineering of Middle East Technical University in the fields of production, quality and supply.
- We opened an Industrial Automation

- department in Bursa Yenişehir Şişecam Vocational and Technical Anatolian High School and completed the workshop setup. We provided scholarships to 9 out of 70 students who received education in this department.
- We established cooperation with 3 additional schools for our ongoing dual education program with the participation of 72 students, which we designed on the basis of Bulgaria-Türkiye.
- Glass Science and Technology Master's Program, which we designed with Gebze Technical University in 2016, continued providing education in 2021 as well. We blazed a trail in Türkiye

- By providing opportunities to students who wanted to develop themselves in the science of glass. We took part in the graduation project of 17 students from 6 universities.
- We became a guest speaker in 24 lectures at 9 universities with our expert Şişecam personnel.
- Under the "Together Doctorate Program", we participated in the "2244 Industry Doctorate Program" in cooperation with TÜBİTAK, and carried out 9 TÜBİTAK 2244 projects with 7 universities.

## Alternative Training Technologies

In order to minimize the risks of infection following the COVID-19 outbreak, we moved the training and development programs carried out within the framework of Şişecam Academy online. We revised our existing programs to comply with the virtual classroom layout. In addition to saving time and effort through online trainings, we also reduced vehicle-related CO2 emissions as we eliminated need for vehicular transportation

for participation in the training. As part of our alternative training technology activities, we have digitalized the orientation activities we carry out for our colleagues who have recently joined the Şişecam family. Making use of a Virtual Reality Application, we have standardized the job adaptation and company familiarization processes of all our employees and completed the preliminary stages of the application. By launching the Factory HR Virtual Reality Application as

a pilot, we enabled our employees in the production line to experience the work flow and instructions before starting to work. In this way, we prioritized the occupational health and safety of our employees with the applications we designed, and reduced our risks.





## Academy Seminars

Due to the ongoing effects of Covid-19, we continued to hold our “Academy Seminars” on the digital platform. We arranged online seminars that were open to the participation of the entire Şişecam via the Team Live Events platform. Within the scope of our 2021 seminar program, which we designed based on latest developments and needs, we brought forward various topics in the fields of sustainability, health, technology, personal development and psychology, and we acquired intellectual vitality all together.

Our Academy Seminars in 2021:

- **Understanding Humans in the Grip of Technology**
- **Facts We Need to Know about the Covid-19 Vaccines**
- **How Does a Person Change or Not Change? Changing Habits**
- **Is a Sustainable Life Possible?**
- **Human Relations in Business and Life**
- **Myths and Facts about Design Thinking**

## Employee Engagement Survey

With the “My Şişecam Employee Engagement Survey” held every two years at Şişecam since 2017, we measure the expectations, demands and satisfaction of our employees, and we identify actions in the light of the collected data and implement these actions in the following year. In line with the goal of providing a happier and more balanced work environment for our colleagues, we determined our actions to increase employee engagement in 2021. Our Human Resources unit has become our guide for the reflection of the past survey results in a meaningful way, and

in 2021:

- **We identified improvement points and turned them into projects.**
- **We shared the survey results with the management teams and finalized the actions to be taken.**
- **We added the improvement activities to the manager’s scorecards, thus aiming to follow up the actions taken systematically.**

With our works, we planned nearly 1000 action steps in 2021 and we followed up the implementation of these actions.



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## Our 2021 Employee Engagement Activities

- With the “Roots and Wings Digital Transformation Journey”, we brought together the employees of Şişecam all over the world on a common digital platform. In this way, by transcending limits of time and space, we have made our business processes easier, faster and more efficient for our employees.
- With the “HROne Contact Center”, we created a platform where all our employees can benefit from human resources services more quickly and effectively, and we made business life easier for our employees.
- With the “Şişecam Career Opportunities Application”, we created an opportunity for Şişecam employees to move into suitable positions within our company and increased the effectiveness of our application with internal mobilization incentives.
- We created a new platform that presents our available career opportunities to our employees with our global internal announcement system “YolaÇık!” (“SetOut!”). In this way, we created additional career routes for our internal talent reserves, increased our in-company movement with new assignments and used our internal resources more effectively.

- We renewed our “NAR Suggestion Development Platform”, where our employees share their suggestions on issues of development and innovation. We made certain improvements to allow the submitted suggestions to be followed interactively and quickly.
- We brought together employees and management teams for “One Şişecam Meetings”, and deepened the culture of “Production by Thinking Together” and “Participation” by including our employees in these processes.
- We have kept in touch with all Şişecam employees and their family members through the “Support Line” application that we created as part of the “Employee Support Program”. We offered our employees the help they needed with free support provided in the fields of psychology, health, nutrition, law, childcare, technology and finance.
- With our Şişecam Sports and Social Activity club “NOW!/ŞİMDİ!”, we offered various tournaments, live broadcasts, hobby clubs, workshops and sports activities to our employees. Due to the social restrictions during the pandemic period, we moved our events to online platforms. For our online yoga sessions, and through our “Now! Book Friends” group, we set reading lists, held interviews with authors, and had discussions about the books we had read.
- We aimed to increase the well-being of our employees by launching the “Şişecam Life-Wellbeing” activity. We supported our employees with activities that aimed at mental, physical, financial and social improvement.
- The impossibility of getting together physically due to the pandemic has pushed us to benefit more from the digital world. We held online activities open for access by our employees and their family members on special days such as New Year’s Day, semester, 23 April National Sovereignty and Children’s Day, and 8 March International Women’s Day. We organized digital quiz competitions on the Kahoot platform and had fun while learning with our employees.
- We implemented the “Remote Teleworking Model” to contribute to the work-life balance of our employees. In this system, our employees are able to determine the times they will be in or out of the office according to their wishes. In addition, within the scope of the flexible working arrangement, we provided our colleagues with the opportunity to plan their own working hours, provided that they complete their working hours. Our monthly paid employees can start working at any time between 7-9 am and can complete their work according to their own working arrangement.

**2030 TARGET**  
**Increase in Employee Engagement Rate**



# OCCUPATIONAL HEALTH AND SAFETY



As Şişecam, it is among our key priorities to ensure that our human resources have decent working environments with the highest level of health, hygiene and occupational safety. We are constantly improving the occupational safety of our employees with an understanding of continuous improvement, and identify and implement internal development and improvement areas as quickly as possible. The improvements we have made in the field of occupational health and safety to counter potential disasters and risks arising from the work environment contribute to the increase in our corporate resilience and operational excellence, and are part of our efforts toward continuous improvement in our business processes. The results of these efforts are an increase in business continuity, a decrease in downtime and maintenance times, and a decrease in the number of severe injuries and serious accidents. We evaluate technological developments and integrate them into our systems where suitable to minimize human interventions into dangerous processes. At this point, we assess the opportunities provided by technological innovations and global good practices, and maintain our works

with the support of R&D and the relevant departments to develop exemplary practices. Regarding the improvements we have made in the field of occupational health and safety, we attach importance to the fact that employees from all levels of our organizational structure contribute to these processes with their feedback, and participate proactively in the development and implementation stages. We believe that this high level of participation and inclusiveness makes the dissemination of the OHS and “Zero Accident” culture throughout the organization possible.

OHS training plays a key role in the creation of the necessary corporate culture to achieve our “Zero Accident” target and a healthy life, in line with our 2030 strategy. With OHS trainings, we ensure that our OHS policy is adopted by all our employees, and we develop the competence of our employees regarding the standards (ISO 45001) we are subject to. With the Training Tracking System, we monitor the completion of the target-oriented and legally-bound OHS training modules by all of our employees, and maintain a training data register on the system. The Training Tracking System will be established at and expanded to our abroad facilities in 2022.

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At the end of 2021, the total number of training hours provided at Şişecam specifically for OHS was 304,800 person-hours. We completed 65,700 person-hours of target-oriented training, and 153,500 person-hours of legally mandatory OHS training in our workplaces in Türkiye. We provided 85,600 person-hours of OHS training in workplaces outside of Türkiye.

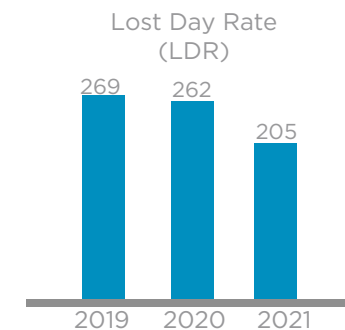
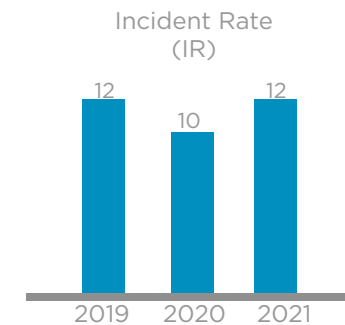
We put the OHS Risk Management and Action Tracking System into use in Romania, Slovakia, and Hungary in 2021, and we provided training regarding its use. We continue to regulate the “Action”, “Risk Assessment” and “Incident Notification” modules within the OHS Risk Management and Action Tracking System in line with the legislation of the countries in which we operate. Within the scope of the HR Analytics Project completed in 2021, 18 key OHS performance indicators are accessible and instantly followed by OHS teams and all managers on the digital platform under the title of “Notifications, Actions and Completion Rates, Accident Data, Personnel Distribution and Training Data”. Through these implemented projects, such data as improvement requests related to OHS, the actions taken and the progress in such actions, and accident statistics and causes have become accessible and analyzable by the entire global organizational structure via digital platforms. In order to implement OHS practices at Şişecam with the same understanding and approach, teams consisting of our OHS experts subject our facilities operating in different fields

to internal audits regarding compliance with our OHS policy and ISO 45001 standard. Audit findings are reflected in our operational excellence efforts, and at the same time, we aim to increase the harmonization of the OHS culture for the organization with the actions taken as a result of the audit outputs.

We monitor the results of the studies we carry out with a principle of continuous improvement, and aim to achieve our “Zero Accident” objective based on the accident frequency rate and the number of lost workdays, while prioritizing the closure of open OHS risk scores. In 2020, as in many businesses, the pandemic has had severe effects on our operations, such as reductions in production capacity and line closures, with the use of unpaid leave and short-term working practices coming to the fore. This was reflected in our 2020 accident frequency rate as a decrease compared to 2019. In 2021, following the year 2020, when the effect of the pandemic was felt more severe, our risk level in the facility increased due to the increased investments and cold repairs.

Due to the fact that maintenance teams and contractor company employees worked in this environment, accident frequency rates increased compared to 2020. In addition, the decreasing trend in the lost workday rate observed in 2019 and 2020, thanks to our long-term improvement efforts and our actions, continued in 2021 despite the increase in the accident frequency rate.

In addition to preventing potential accidents, we attach importance to our employees’ access to health services at the workplace, and we also provide examination and control opportunities for chronic diseases that are in the risk group.



2030 TARGET  
Zero Work Accidents, Well-Being Program



### Pandemic Practices in 2021

- Within the scope of pandemic measures and Case Tracking Systems, 650 meetings were held by OHS committees to follow latest developments and case management on a factory basis. We established a Health Tracking System to monitor the health status of employees instantly and holistically. The health status of our employees, who have chronic illnesses and are at high risk of being affected by the pandemic, are monitored instantly through this system by the workplace health units in accordance with the Personal Data Protection Law. We performed out on-site vaccination with the cooperation of local official institutions.
- We registered the COVID and all required vaccine doses information on the health cards of our employees, and we arranged the working conditions of our employees whose vaccine information is unknown, in a way that

- will not put other employees at risk.
- We conducted strict controls with rapid antigen tests in our health units in order to reduce the contamination during the pandemic period for our employees returning from vacation or business trips, and in case of any risk, we sent our employees to have PCR tests without any cost. In all job descriptions that can work remotely, we switched to a remote working system with a ratio of 25% to 75%, according to the number of cases. We organized the social areas, dining halls and personnel bus services in our workplaces, where our employees come together, with rule sets to meet social distance and prevent contamination.
- The meeting frequency of workplace OHS committees, which must be held legally in certain periods, was increased and we created weekly “pandemic committees” specific to the pandemic both in the senior management and in our workplaces.



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**PREVENTIVE**

**THE PROJECT OF ERGONOMIC IMPROVEMENT IN PRODUCTION AREAS OF ŞİŞECAM AUTOMOTIVE LULEBURGAZ FACTORY**

Automation and space expansion works were carried out for all of the operations requiring manpower for the 5 assembly lines of laminated door glasses, the PVB installment in BL2 Line and the LSF13 furnace model changing apparatus. All 3 projects we implemented are preventive in terms of ergonomic improvement and occupational diseases and accidents.

**THE PROJECT OF INCREASING EMERGENCY SAFETY LEVEL IN GLASS STOCK AREAS OF FLAT GLASS TÜRKİYE**

Thanks to the escape routes and walking paths, we aimed to prevent our personnel in the Manufactured Goods Warehouse from suffering any injury or losing their lives in a potential earthquake, fire or stock collapse. We created safe passageways with a total width of 1.5m, including the column spaces behind the glass stocks, in order to safely evacuate the personnel from the stock area in case of potential danger.

**CORRECTIVE**

**GLASSWARE BULGARIA EAD SECURING PROJECT**

It is essential for us to ensure the protection of our workers from the parts fixed on the conveyor belt and the falling glass pieces. In addition, the adjustment of the distributors on the machines is carried out by our employees. If the worker loses balance, there is a risk of falling on the machine and suffering a serious injury. The availability of a safety guardrail in this area prevents the worker from having a serious accident.

**GLASS PACKAGING ESKİŞEHİR HIGH PRESSURE FIRE FIRST RESPONSE SYSTEM PROJECT**

In the event of a fire, fire trucks will be able to enter areas in which the furnaces and IS machines are located, and to intervene in areas where it would not be possible otherwise to intervene. This will significantly increase our response distance and area in a possible fire in our operation with a high ceiling structure. Its suitability for narrow spaces allows it to be used in the production area.

**AWARENESS**

**THE PROJECT OF GLASS PACKAGING BURSA OCCUPATIONAL HEALTH AND SAFETY KNOWLEDGE CONTEST / OHS FROM SCHOOL TO WORKPLACE**

For the Occupational Health and Safety Week and Public Health Week, we prepared a multiple-choice 20-question test and held a quiz program. We granted awards to the employees who were ranked according to the points they received. We organized trainings in order to raise awareness of the Occupational Health and Safety of the students of Akçağışme Primary School, where most of the children of the personnel working in our workplaces receive education, to raise awareness of risks, to teach correct behavior models, to ensure that they gain a safety culture at an early age, and most importantly, "to reach out to our employees via their children".

**GLASSWARE BULGARIA EAD PROJECT OF RISK REDUCTION THROUGH DISTRIBUTION OF OHS INFORMATION NOTES**

Training our personnel using information brochures reduces the risk of spread of the disease by allowing us to disseminate information without bringing people together in one place.



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#workthatmakesadifference

## WE REACHED TO ITALY WITH OUR INCLUSIVE CULTURE

Şişecam has taken its first step toward becoming one of the largest manufacturers of architectural glass in Italy with the acquisition of the Manfredonia Vetro facility of the Sangalli Group by our Company in 2018. Today, our Şişecam Flat Glass Italy S.r.l. factory in southern Italy has a production capacity of 190,000 tons of flat glass, 4 million m2 of coated glass and 2 million m2 of laminated glass, providing us with significant power to take a leading position in our markets.

Our facility has 209 employees and represents a new hope for our employees, rather than being just a workplace. After starting production, we were happy to take on the former Manfredonia employees in 2019, who had been left unemployed by the closure of the Manfredonia plant and who were uncertain about their future for 5 years. We continued our growth in 2019 and 2020 and offered job opportunities to our employees. In our interactions with society, we have adopted social inclusion as a principle. Employing the principle of social inclusion, we have had the chance to bring together under the umbrella of Şişecam those employees who lost their jobs due to the closure of the facility, regardless of race, age or gender. We employed women in blue collar positions for the first time at the facility, becoming stronger while producing, and making a difference while getting stronger.







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# SUSTAINABILITY ACROSS THE VALUE CHAIN

As sustainability studies mature, it has been revealed that the ESG practices carried out by the organizations only within the boundaries of their activities are not sufficient for the transformation needed by society. At this point, organizations with a strong institutional structure are bringing about a transformation in the value chain, taking advantage of their leadership characteristics.

## Customer Relations

Despite the changing market conditions in 2021, we quickly responded to the needs of the sectors to which we provide input through our customer focus, as one of our priority areas, and accordingly, customer loyalty and total quality management practices that have been going on for many years.

We have maintained our vision of being a global company that adds value to people and the environment by ensuring customer satisfaction, responding to the needs of the market as fast as possible, increasing the service level and supporting brand-strengthening projects on digital platforms. As a result of this strategic approach, key customer management and effective sales & operations planning have been achieved

and we have successfully managed the balance of production, sales and stock. As Şişecam, we regularly share statements and reports detailing our sustainability practices with all relevant stakeholders. In addition, we are regularly subjected to SEDEX, BSCI, CTPAT, ETI, ECOVADIS, SAQ and specific customer requirement audits, especially our glass packaging, glassware and automotive groups. With the merger with "One Şişecam", we have been provided a more integrated and organized management in customer sustainability surveys and audits. We are being rated by Ecovadis as Şişecam Holding, Şişecam Chemicals Fiber, Şişecam Automotive, Şişecam Glassware and Şişecam Chemicals Soda, and upgraded to corporate membership in 2021.

***In the 2021 evaluation, our Mersin Soda facility was awarded a Silver medal, being among the top 25% companies reporting to Ecovadis, while our Şişecam Fiber branch was awarded a Bronze medal being in the top 50%.***

As Şişecam, we conduct customer satisfaction surveys with a holistic perspective in order to identify our strengths and areas in which we need to improve, and to ensure excellence in customer service quality. The survey includes questions on general satisfaction,

advice, continued custom, price evaluation, perception of value for money, future work volume, brand image, product and service evaluation, trust, support services, marketing and communications. With awareness of the need for continuous improvement, we regularly conduct Şişecam Customer Satisfaction surveys with a view to improving our performance.

In order to ensure excellence in our service quality at Şişecam Flat Glass, we extended the customer satisfaction surveys that we started in Türkiye, Bulgaria, Russia and Romania in 2019 and 2020, to the Italian market in 2021. In the light of the feedback we received from our customers, we took actions on delivery times, logistics services, after-sales services, communication methods, and product diversity in our Turkish, Bulgarian and Russian markets, and increased our customer satisfaction rates. At Şişecam Chemicals, we conducted customer satisfaction surveys for our Soda-Chrome-Oxyvit product groups. In the light of the feedback we received from customers, we identified customer demands and evaluated our product, packaging, after-sales service and complaint management processes. Thus, we increased our product and service quality in local and international markets.

**Dissemination of the Supplier Capacity Development Program,  
Compliance of all suppliers with the Code of Conduct**

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**ŞİŞECAM FLAT GLASS**

In 2021, customer segmentation was made for the effective management of the increasing demands, which were met from the factories in Italy, Bulgaria and Türkiye.

The acquisition of the Manfredonia factory in Italy, as the market leader in 2021, enabled us to increase the value-added product varieties in demand in the market, and to achieve successful business results.

Based on the demands in the target markets and changing customer needs, our Solar Low-E product portfolio has been enriched with the development of non-temperable equivalent products having the same appearance and performance as the “Temperable Solar Low-E Glass Neutral 50/33 and Neutral 50/25” products.

**ŞİŞECAM GLASSWARE**

As an important example of digital transformation, Tuzla Showroom was moved to the digital environment and opened for customer use, attracting great interest.

Product range rationalization project studies were carried out depending on customer needs and a high service level was targeted.

In India, loyalty campaigns were organized for direct customer and sub-customer groups in order to increase brand awareness and sales of products with added value.

We allocated a budget of 1.6 million Euros for 2022 to reduce the danger areas by making improvements regarding Bekra at our Flat Glass Mersin facility.

**ŞİŞECAM GLASS PACKAGING**

Şişecam Science, Technology and Design continues its efforts to add new ones to its innovative, quality and customer portfolios.

**ŞİŞECAM CHEMICALS**

In 2021, the number of sales in customers in Brazil increased by 33%.

As we continue taking steps to increase the number of approved suppliers in the wind energy sector in Türkiye, expanding the portfolio of products with high added value is also among the priorities.

**ŞİŞECAM AUTOMOTIVE**

Strategically, we maintain our quality and supplier management operations at the level of Tier-1 supplier standards, and we also strengthen resource management by optimizing all our process and quality activities. Thanks to this approach, the leading companies in Türkiye and the world are included within Şişecam’s customer portfolio.

Increase of digital applications in customer quality operations, preparation of customer-based action plans and efforts for customer areas along with instantaneous feedback mechanisms continued at the planned pace and scope.

The mass production of HUD-feature windshields, the customer approval processes of which were completed in 2021, will start in 2022.

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## Sustainability in the Supply Chain

As Şişecam, we are looking to extend our works that have touched society and the environment over the years also into our supply chain. In this way, we progress together with our value chain and increase the positive impact we create. The Sustainability Directorate aims to evaluate, monitor and develop suppliers in line with environmental, social and governance (ESG) priorities. As Şişecam, we continue to work to ensure full integration with the following systems:

- Supplier Commissioning and Decommissioning Systems
- Supplier Risk Assessment and Monitoring Applications
- General Terms and Conditions for Procurement
- Şişecam Suppliers Code of Conduct
- Supplier Qualification Audit

With the Supplier Risk Assessment and Monitoring Application, the activities of suppliers are evaluated from operational, financial, ethical, geopolitical, continuity and strategic perspectives, and a supplier risk score is determined. These annual risk assessment criteria address such important sustainability issues as ethical practices, risk of child labor, risk of forced/uninsured employment, occupational health and safety conditions, and natural disasters, all of which have been determined as high priority

issues. A supplier that is deemed to be risky in any of these criteria is directly classified as a “highest risk supplier”. Its practices and procedures are closely followed, and its category remains the same until improvement is observed. If no improvement is observed, actions such as reducing the supplier quota and finding alternative suppliers are initiated. As a result of these practices, the awareness of Şişecam’s suppliers of the importance of sustainability is increased and their continuous development in this area is ensured.

Within the scope of effective supply chain management and a responsible purchasing approach, we want to make sure that the way Şişecam’s suppliers do business is in compliance with the “Şişecam Supplier Code of Conduct”. Accordingly, we follow up on the Şişecam Supplier Portal whether our suppliers have policies related to such issues as child labor, gender equality, bullying and harassment, and discrimination. Through the CareforNext 2030 Strategy, the aim is to have all suppliers comply with the criteria of “Şişecam Supplier Code of Conduct”. Another important aspect of sustainable purchasing practices for Şişecam relates to conflict minerals. We prepare CMRT (Conflict Mineral Template Format) reports, prepared in line with the “Responsible Minerals Initiative”, reporting on the compliance of the sources from which our suppliers obtain conflict minerals, with the principle of responsible purchasing,

and share them with our customers upon request.

Within the scope of our Environmental Management System practices, we have entered our “Chemical Management Procedure” into effect as of 2021 and have made it accessible within the company to ensure our suppliers comply with the chemical management requirements. In the procedure, all the rules, including those applicable to the supply, use and storage of chemicals, and the disposal of the same after the date of expiry, are explained in detail.

In addition, an e-mail was sent to all our suppliers in 2021 by the Environmental Management Directorate informing them of their responsibilities as regards to the EU REACH and the Turkish Chemicals Regulation (National Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals). Most suppliers have declared that they use pre-registered chemicals in their products in this context, while those who have not pre-registered will accept their responsibilities and complete their registration by the mandatory deadline, which has become a legal obligation.



## Digitalized Value Chain

As a part of our move toward a digitized value chain at Şişecam, we have developed our technology infrastructures and expanded Industry 4.0 practices throughout the organization. We have carried out various studies to correctly assess the needs that arise in parallel with developing technologies and to offer the most correct response to these needs. We have developed mobile applications in the field of architectural glass with a view to supporting end-users, architects, industry professionals and project experts with rapid access to accurate information. We have launched seven different mobile applications, namely Isıcam Selection Wizard, Glass Acoustics, Glass Projects, Glass Consultant, Performance Calculator, Coated Glass Detector and Right Glass Right Solution, in the English, Italian, Russian, Bulgarian and Romanian languages. As of the end of 2021, our applications been downloaded 32,000 times and have achieved great successes in their fields, taking their place in the digital world as pioneering technological moves that shape the sector.

We launched the “Human Resources Global and Digital Transformation” project in 2019 as part of the “Roots and Wings Digital Transformation Program”. Under the project, we have added digital, innovative and creative business practices to our processes. We have implemented the

“Global Orientation Virtual Reality Project” to standardize and facilitate the adaptation processes of all our employees to our organization. Through the “Factory Human Resources Virtual Reality Project” we aimed for our colleagues who will work on the production line to contact the work before starting work, to see possible scenarios, to gain an awareness of the work process and to identify risk points. It is foreseen that our project will contribute to the improvement of occupational health and safety, and will be implemented as a pilot project in our Mersin facility in the upcoming period. In 2022, it is aimed to support the spread of the virtual reality projects of all our organizations globally, and thus to ensure the adoption of an understanding of shared work and cooperation in all organizations under the umbrella of our Group.

As part of our digitalization process, we have developed an online tracking and information system for our suppliers. We aimed to convey our principles and approaches to our stakeholders and to include them in our processes, to produce and consume them in an ethical line. In this context, we monitor compliance with the “Şişecam Supplier Code of Conduct” that we have created for our suppliers through the Şişecam Supplier Portal. Our target for 2030 is to ensure that all our suppliers comply in full of the current ethical rules.

**Transition to Digital Work Environment,  
Making Decisions Based on Data Analytics**



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***In 2021, Flat Glass carried out digital communication campaigns in the local languages of nine different countries for our stakeholders. Through our campaigns, we reached more than 25 million people in total, including 7.2 million in Italy, 4.6 million in Romania, 3.2 million in France, 2.5 million in India, 2.5 million in Bulgaria, 2.2 million in Greece, 1.4 million in the United Arab Emirates, 1 million in Qatar and 200,000 in Germany.***

As part of our efforts to ensure the use of the right glass in the right architectural applications, when determining the most appropriate glass solution for our target audience through the glass consultancy we offer to each specific project, we take care to introduce energy-saving glass products to our stakeholders, thus raising awareness of the ecological contribution of the appropriate glass choices.

As part of our efforts to expand the use of our flat glass products in global projects that require the use of BIM (Building Information Modeling), we have produced “BIM Smart Objects”, being digital replicas of flat glass products. It has been made accessible to industry experts both through our website and within the BIM object digital material library. As part of our customer-focused digitalization, we have launched the “Transparent Conversations” program on Youtube for the Isıcam brand to provide information about our products. The programs we have carried out to support user experience and convey expert opinions to our target audience reached

more than 21 million users. To increase customer satisfaction, we facilitate the automatic transfer of customer suggestions and complaints shared on the website to the Dynamics CRM System, and reflect these in the targets for the coming period. Again in the field of customer satisfaction, we have realized the “E-Pack Project”. With our online packaging project, we ensure our customers gain the maximum benefit from our products by offering packaging that is resistant to impacts and other adverse conditions. With the “Pattern Decor Archive” that was launched in the last quarter of 2021, we started work on creating a pattern/decor library for our customers.

We prioritize our customers’ ability to scan effectively, to meet their needs quickly, and to provide prompt suggestions to customers regarding their decor requests. We have implemented the “Digital Data Platform Project” so as not to limit the digitalization move in the current processes to customer satisfaction, but also to allow the monitoring of the marketing, sales and product management processes from a single center, simultaneously, and with the same quality. Finally, we have enriched our e-content, which we make available to our business partners, by supporting the user experience and increasing its effectiveness on the digital platform. We have integrated the digital possibilities of the age into our processes with the aim being to expand our awareness in the global market and our customer portfolio, and to increase customer loyalty.

**As Şişecam Glass Packaging, we have carried out a communication campaign focusing on sustainability, based on the concept “We Lighten the Burden of Nature” in 2021.**

In this context, 40 different videos on our flat glass products and production processes have been prepared by the Şişecam Academy in English, Bulgarian, Romanian, Russian, Italian and French. By the end of 2021, our training videos had been watched 6,000 times, nationally and internationally, and achieved a customer satisfaction rate of 99%.

***MTo ensure sustainability by meeting the glass supply and customer needs for architectural glass in an uninterrupted and complete manner, we carry out a Glass Industry Index Study every quarter involving online surveys. Our work, which is a first for the glass industry in Türkiye, also shows the reflections of the economic conjuncture on the glass industry. Through the Glass Sector Index, we have come to understand the expectations of our sector by measuring the current activities, future expectations and confidence assessments of the Turkish flat glass sector, thus contributing to more accurate demand forecasting and production planning.***

**Completion of Digitization Across the Corporate Operations**

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#workthatmakesadifference

At Şişecam, we have invested approximately 300 million TRY into digitalization over the last three years.

## DIGITALIZATION

With digitalization, technological features such as robotic production, data engineering and artificial intelligence have been included in our business processes, ensuring difficult jobs become easier and process monitoring is improved with transparency, all managed from a single center. With this awareness, the digitalization move launched at Şişecam continued at full pace in 2021, enabling us to achieve important outputs. Through our investments, we made improvements in our supply chain, customer relations, marketing, sales and production processes in 2021. We have carried out Robotic Process Automation (RPA) in our management processes and applied Overall Equipment Efficiency (OEE) to our operational processes. We have thus increased our efficiency, productivity and flexibility with environmental awareness, allowing us to offer fast and unique solutions to our customers. Our projects continue for the coming periods with the aim of improvement, because technological advancement does not end for us, being rather a perpetual journey.



**Our 2021 Digitalization Activities:**

- **With the EDI (Electronic Data Interchange)** Application project, we eliminated our paper dependency by transferring financial transactions and documents to the electronic media. With the systematic integration of our processes, we have secured our invoice submission confirmation processes. With our e-invoice application, we have made it easier for our customers to pay and follow up on their purchases. At the same time, we have completed our legal compliance processes for the e-waybill application.
- **With respect to purchase orders, we have singularized the price lists in the glass packaging group with the Customer/Sector Based Variable Maturity Determination project.** We created the maturity difference automatically, without the need for approval, for our customers who requested an order different from their current maturity, and enabled the order to be processed quickly with the differing maturity.
- **Within the scope of our Purchasing and Reporting Process Improvement project, we have ensured that purchase approvals are carried out on the digital platform.** While reducing our paper usage, we are tracking our purchasing processes end-to-end with the integration of data into the system, and have accelerated and eased our reporting activities, thus increasing our efficiency.
- **With our MAN Turkey Supplier Portal (VSRM) Integration project,** we have automated the ordering processes of MAN customers, and thus we have become able to ship to our customers on a chassis basis.
- **The BG Conveyor Automatic Barcode Installations project** will allow us to automatically read pallet barcodes and direct them to the relevant applicator in the conveyor

system according to the product feature. We have thus made our reporting processes more efficient by sending pallet movements to the SAP system. By automating the delivery-receipt transactions, we ensure that the transactions can be tracked through the system. Through integration with SAP S4, we have made it possible to automatically enter EMW and MM warehouse movements into the system and to carry out pallet labeling.

- **With our Project Momentum application,** we ensure that pallet barcodes are automatically read and directed to the relevant applicator in the conveyor system for the product feature.
- **Through the Romania Factory MRP project** we are able to automatically determine material needs through the system. This allows us to increase our control over our production and purchasing processes, while allowing the user to evaluate their effort and time more efficiently.

We are also engaged in activities:

- to keep stock levels lower through timely production and purchasing,
- to view needs on a monthly, weekly or daily basis and to revise stocks accordingly,
- to reduce purchasing costs through effective planning, and
- to make such improvements as reduced delivery times with systematic follow-up.
- With our **RFID Label Software Standardization** project we have gained the ability to respond quickly and flexibly to customer demands. We created barcoding infrastructure in GS1 standard. We have provided for RFID system integration and have established a central design and management structure.
- Infrastructure works have been launched under **the DDP-Digital Product Platform project** that will permit data flow to digital platforms (such as mobile devices, e-commerce, marketplaces).

We have thus created a digital product platform where all product-related information is brought together. We have taken the decision to extend the implementation our project, which was launched for the Paşabahçe, Nude and Paşabahçe Stores product groups, to all fields of activity under the roof of “One Şişecam”.

- With the **Financial Affairs Joint Service Center Platform** project, we have created standardized business processes in financial affairs. The platform features allow the measurement of processing times, the creation of automatic requests for periodic jobs and the assignment of requests to the right specialist, and the reporting of progress, allowing us to perform our workflow follow-ups on a daily basis. Through all these processes, we have contributed to the operational excellence and digitalization processes.
- Under the **Logistics Transport Purchasing** project, we have implemented end-to-end digitized, standard, measurable, transparent and simple logistics/purchasing processes.
- With the Catalog Purchasing project, we plan to reduce our operational workload by speeding up our purchasing processes. We are contributing to sustainability through the benefits of the project in the fields of operational excellence and digitalization.
- With the **Open Auction** project, we have switched to an online, live auction system. The tender processes have thus been accelerated, and a better pricing process has been achieved based on the advantages offered by live tender processes.
- **The Procurement Printed Contract Management project** will allow us to record supplier contract terms, to follow contract approval processes and to monitor any changes in the contract terms.



# PROCESS AND CONTINUOUS DEVELOPMENT

## Process Excellence

In order to achieve excellence in our processes, we set out with the guidance of our “One Şişecam” vision and renewed our existing Process Governance Model. We created the Şişecam Process Architecture by prioritizing the timely updating and sustainability of all activities. In this process, our main goal is to define, monitor, improve and develop our processes in accordance with rules and responsibilities. Tasks and roles compatible with the targeted organizational structure were then assigned to ensure the effective functionality of the model at the corporate level. We have thus clarified the responsibilities of Corporate Process Excellence (CPE Directorate), Functional Excellence Officers (FEO), Global Process Owners (GPO) and Business Process Owners (BPO).

## Process Standardization/Harmonization Activities

We have carried out CAP Activities to ensure that the Şişecam operational model

and processes are standardized and harmonized in line with the vision of “One Şişecam”. We have evaluated the outputs of our work, and ensure that these outputs can be integrated into Şişecam Process Architecture, simultaneously with the FEO Alignment Project.

We have thus ensured that the Functional Excellence processes defined in the CAP are aligned with corporate processes. With our project outputs, we have standardized the functioning and management of corporate processes on a functional basis, making use of our Functional Excellence structures.

## Operational Excellence

At Şişecam, while learning to increase the culture of participation, to progress by producing together, to question as we move forward and to produce creative solutions, we consider learning from each other as steps in our journey of excellence. With the awareness that this journey will never end, we aim to move our operations forward, and support our motivation for continuous

improvement with our CareforNext strategies. In this direction, we have created the Operational Excellence Development Program to increase the competencies of our employees within the scope of continuous improvement. Under this general roof, we have launched training and accreditation programs that include online and field applications.

Our CareforNext strategies are directly supported through the creation of a culture of continuous improvement, and making continuous development sustainable throughout our community. For the improvement and optimization of processes at Şişecam, the “Decision Tree” is based on the determination of the most appropriate methodology according to the nature of the problem addressed. A new process or business model that currently does not exist or that needs to be developed from scratch can be studied, or an existing process can be improved. Continuous improvement projects are initiated and managed according to the chosen project methodology.

# PROCESS AND CONTINUOUS DEVELOPMENT

## PROCESS IMPROVEMENT PROJECTS IN 2021

**118 PROJECTS**

**FINANCIAL RETURN \$6.7 million**

### CONTRIBUTION TO CONTINUOUS IMPROVEMENT AND PARTICIPATION

Training of 280 Participants  
Kaizen  
Lean 6 Sigma  
5S & Visual Management

Number of employees that participated in continuous development programs in 2021  
White Collar ~ 240  
Blue Collar ~ 500

#### As part of our Continuous Improvement Activities, in 2021:

- We initiated 118 Continuous Development projects. Approximately 24% of these projects served sustainability goals directly.
- As part of the “PROTECT THE PLANET” approach of our CareforNext strategy, we have implemented 28 projects on recycling, saving resources and reducing pollutants, and devised solutions.
- We developed the Operational Excellence Platform, which was launched in 2020, in 2021 with the vision of One Şişecam. We recorded all continuous improvement projects through the Operational Excellence Platform and created the necessary infrastructure for the dissemination of good practices.



### RPA Activities

At Şişecam in 2019, we started Robotic Process Automation (RPA) studies, which contributed significantly to our “Operational Excellence and Digitalization” strategies. Through our activities:

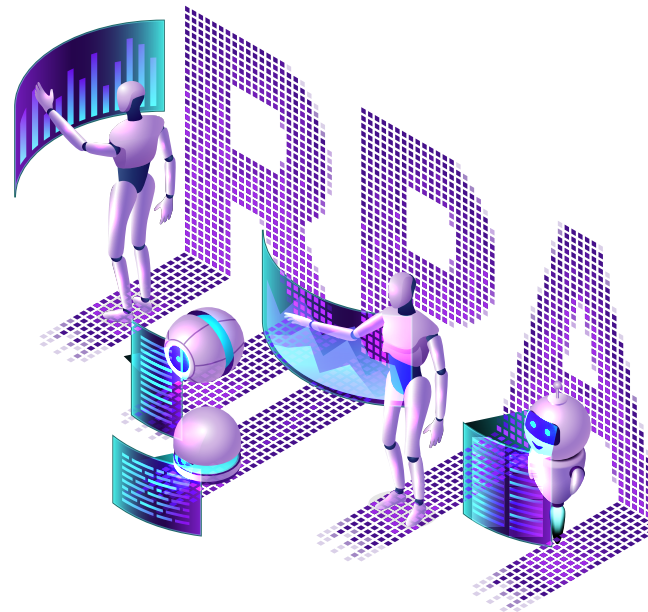
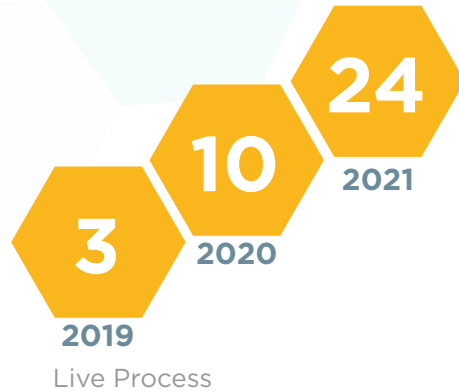
- we have reduced our operational costs,
- we have directed our employees from routine jobs to jobs that create added value,
- we have provided a basis for the assurance of error-free or minimized errors in production, and
- we have facilitated an increase in corporate awareness of process automation activities.

we started using the UiPath Automation Hub platform under license in January 2021. We evaluated the RPA requests regarding Financial Affairs, Supply Chain and Human Resources, Information Technologies, Sales-Marketing and Production processes within the framework of ROI and strategic contribution. We then completed our prioritization study, taking into account CAP activities.

We continued our RPA activities within the scope of 14 processes that were identified as priorities in 2021. In addition to gaining a workforce of 32 FTE through our efforts, we have reduced our operational costs and increased our employee satisfaction.

## ROBOTIC PROCESS AUTOMATION

Robotic Process Automation (RPA)





## Şişecam Resilience - IT Business Continuity

As part of our digital transformation projects at Şişecam, we identify our risks and carry out studies to develop strategies to eliminate these risks. Within the scope of our work, while determining our operational, market-based, strategic and legal risks; on the other hand, we analyze our potential IT risks; we make assessments in financial and non-financial frameworks. We develop this process, which we call "Business Impact Analysis", by utilizing new generation technologies and allow acceptable downtime in information technology services.

In 2021, we carried out various infrastructure renewal projects as part of our Business Impact Analysis process. Through our efforts, we have activated private and public cloud infrastructures and carried out tests on our recovery platforms in order to ensure continuity in the delivery of critical services, and to overcome events with minimum damage in a possible disaster scenario.



# SUSTAINABLE PRODUCTS

Within the scope of our “CareforNext” sustainability strategy, we bring positive value to the world, providing sustainable products and services that satisfy the changing needs of the planet and society as a whole. The “Transform Life” sustainability axis explains Şişecam’s vision for future improvement, being based on research and development and digitalization efforts. Şişecam focuses on sustainable products, accepting its responsibility as a leading light in its sector as regards to environmental awareness.

In this direction, we aim to increase the number of sustainable product patents we hold, increase the share of sustainable products in our turnover, produce new sustainable solutions and products and evaluate the effects on all stages of the product lifecycle through the Life Cycle

Analysis Program. In order to achieve these goals, we continue to work on product development in different sectors with innovative projects carried out at the Şişecam Science Technology and Design Center, one of the world’s leading glass research centers. The Center conducted 239 designs and carried out 134 analyses on 139 product projects in 2021. In addition, it carried out 18 improvement and mitigation activities.

Considering sustainable products that make a difference in Flat Glass, Auto Glass, Glass Packaging, Glassware and Chemicals, it will be ensured that life cycle analysis, environmental labeling/eco-label (EPD: Environmental Product Declaration) and other relevant certification studies for the selected products are carried out, and institutional capacity in this field will thus be

In 2021, a comprehensive Life Cycle Analysis Project was initiated with lifecycle-oriented approach in the value chain in which the impacts on all stages of the product life cycle were evaluated, and the registration of sustainable products.

developed.

Within the scope of the “Project for the Establishment of a National Environmental Labelling System” coordinated by the Ministry of Environment, Urbanization and Climate Change in 2021, and carried out within the scope of EU Integration Process Support Activities, support was provided for the determination of environmental label criteria for the glass product group (flat glass, glass packaging, glassware) and their publication in line with Environmental Label Regulation No. 30570 dated 19.10.2018.



**Increasing the Share of Sustainable Products in Turnover, Solutions that Transform Life and Sustainable Products, Life Cycle Analysis Program and Eco-Labeling**



## R&D

Our glass product solutions, which create value for society and the environment, are gaining more and more importance in the global decarbonization efforts. As we move towards 2030, we aim to increase our share of sustainable products by focusing on R&D.

***In 2021, 28% of R&D expenditures were for sustainability projects.***

We work in cooperation with 60 universities and companies from all over the world in the field of R&D, and will further expand these collaborations in the near future. Şişecam Science Technology and Design Center (BTTM/STDC), as the most developed of its kind in Türkiye and one of the largest centers in Europe in the field of glass, contains 31 separate specialized laboratories and a product design center for glassware and glass packaging.

To keep up with the technological momentum required by the era, we cooperate with research institutions, universities and various young and innovative companies for the development of smart glass systems. In a similar vein, our innovative product development efforts are continuing at the corporate "Şişecam Science, Technology and Design Center". In addition to the development of our production operations, we also provide university education on architectural glass

and support scientific studies in the field of glass. Through the online training provided in 2021, we met with approximately 1,100 students during various courses given in the Architecture and Civil Engineering faculties of 13 different universities.

We have also contributed to scientific studies of glass by sharing our products, production processes, standards and regulations, and technical knowledge related to glass, and have discussed the future of glass in an interactive format. At the same time, we have cooperated with the world's leading companies and carried out studies to produce environmental friendly products. In this context, we are carrying out Solar Mirror development activities for the solar energy sector (CSP power plants) and have developed environmental friendly Flotal E Max products to meet the demands of both the Turkish and European markets.



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# INNOVATIVE PRODUCTS

For the first time in medical practice, glass microspheres with micron diameter, spherical shape and a special composition were synthesized in the laboratory at Şişecam for the treatment of cancer in medical practice. In order to increase agricultural productivity, studies have been carried out to develop controlled release glass fertilizer compositions, and patent applications have been made for two such glass compositions. In addition to innovative products in the field of health and agriculture, a patent has been obtained for the Antimicrobial V-Block Technology that has been commercialized in the glassware product group, and studies have been carried out into its application in the flat glass and glass packaging product groups. To support our increasing share in the renewable energy field, we continue our efforts to offer high quality glass for photovoltaic panels and glass fiber for wind turbines. In addition, within the scope of the development of heliostat solar mirror, which is an important component of the new generation ecological water-based mirror and tower-type concentrated solar power plants, production-scale trials have been completed and patent applications have begun. Within the scope of our environmental technologies researches, studies of existing carbon capture technologies have continued with focus on the biological cyclic Basalia

process. While bringing radical solutions to many environmental problems, the project's potential to break new ground in energy supply and hydrogen production is being studied.

Our coated and low-e glasses permit energy and light control in buildings, responding to the needs of such emerging principles as the "EU Renewal Wave". To support the transition to clean mobility, we continue to work to provide light automotive glasses with a wide range of light and heat transmittance, with products being developed in parallel with the increasing use of glass in the automotive sector.

## Environmental Friendly Products from Paşabahçe Stores

In line with the CareforNext strategy, a recycling-oriented campaign has been launched in Paşabahçe stores.

Emphasizing that glass is a 100% recyclable and reusable material. In 2021, the collection was expanded with the addition of new product groups to the Aware Collection series, which is produced from 100% recycled glass, giving new life to glass that has completed its working life. The collection, prepared in environmental friendly packaging, has been presented over a wide territory at a global level.



The "Aware Collection" comes with a certificate confirming that 100% recycled glass has been used, following a third audit by the relevant certification body confirming compliance with the "Recycled Claim Standard" in 2021.

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# VALUE ADDED PARTNERSHIPS

## Stakeholder Relations and Partnerships for Goals

As Şişecam, we aim to increase our local and global interactions with all our stakeholders, thus increasing our social, environmental and economic sustainability impact. We gain influence while making an impact through the partnerships we have established, and evaluate the outputs of our communications through stakeholder feedback. Reflecting this data on our processes, we carry out improvement studies and develop projects that generate social benefits.

In this context, as one of the main sponsors of the International Commission on Glass (ICG), which brings together academicians and companies specialized in the field of glass, we are working to determine the path to the development of the glass sector and to take the necessary steps. In line with ICG's 2030 transformation goals, we contribute to activities to increase communication and cooperation between industry experts, academicians and industrial enterprises so as to produce glass-appropriate solutions for all areas of sustainability, and to support scientific studies related to glass. We also play an active role in ensuring more effective operations by integrating digital platforms into all these processes. The online Şişecam Flat Glass Stakeholder Meetings attract the

participation of over 10,000 industry experts and students from various countries. At these events, we share with our audience presentations on the application of glass in architecture, appropriate glass selections and the benefits that can be achieved through the correct use of glass, and convey the current trends in the field of glass to the audience.

As Şişecam Flat Glass, we reach approximately 19,000 architects per month through our "Şeffaf Bülten" – a digital platform we created in cooperation with XXI Architecture Design and Space Magazine. Through the English version of this bulletin, published under the name "Transparent Architecture", we are in contact with nearly 7,000 international architects per month. In our newsletter combining the worlds of glass with art, architecture and innovation, we center the use of glass in architecture and touch upon aesthetics and science at the same time through our content.

As part of our technological development and design activities, we collaborate in innovation and produce joint projects with universities both in Türkiye and abroad. In 2021, we have completed three TÜBİTAK Projects as a result of these collaborations. Within the scope of our collaborations for innovation, we have carried out

nine TÜBİTAK 2244 projects with seven universities. We are continuing our work with 26 students who are participating in these projects. In addition, as part of our collaborations, we have realized joint projects with Özyeğin University, Sabancı University, Middle East Technical University, Gebze Technical University, Marmara University, Yıldız Technical University and Bilkent University. As part of the TÜBİTAK 1004 Centers of Excellence Support Program, we are continuing our involvement as a consortium member in two programs being carried out by ODTÜ-GÜNAM and Bilkent-UNAM.

**Establishment of Collaborations and Partnerships  
Serving SDG 17 (Partnerships for Goals)**





## GLASS AND GLASS AGAIN

We have been working on glass recycling under the Glass and Glass Again Project since 2011. We shape our projects with three targets in mind: raising awareness about the recycling of glass waste, the establishment of the infrastructure required for the collection of glass waste and the establishment of the necessary system for the effective separation of glass waste.

Under our project, we have provided recycling training to more than 250,000 primary school students in total. We have allocated more than 20,000 glass collection boxes to municipalities in order to promote recycling and facilitate the collection of glass waste. As a result of our collection activities, we have contributed to the recycling of approximately 2 million tons of glass waste. We are simultaneously working on social media to expand the scope of this ongoing project. We share our activities and events, our glass recycling figures and the glass heritage of our nation with our followers through our social media accounts.

In 2021, we reached an average of 4 million people per month through our social media accounts as a result of our Glass and Glass Again project.



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## ADD GLASS TO LIFE

At Şişecam, we consider the widespread use of glass packaging in our daily lives as one of the most important activities preventing the destruction of nature. With a structure that allows an infinite number of transformations, glass is respectful to nature, friendly to health and has a place in almost every area of our daily lives, with a wide range of uses. "Add Glass to Life" is a glass promotional project initiated by Şişecam Packaging to extoll the virtues of this magnificent material. Under this project, we offer our visitors original content under the categories of "taste", "life", "environment", "health" and "glass" through our website at [hayatcamkat.com](http://hayatcamkat.com), and aim to inform our visitors by touching the glass.



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# CONTRIBUTION TO SOCIAL DEVELOPMENT

As Şişecam, our goal is to contribute to both social and economic development in all locations where we operate. To this end, we identify areas that are compatible with our sustainability strategies, set targets in these areas and realize projects through investments. Our social responsibility project areas that we prioritize while taking social welfare to our center are “environment”, “gender equality” and “education”. While carrying out our projects in these priority areas, our guide is our corporate social responsibility principles. At Şişecam, we carry out all our development activities while adhering to our principles, and structure our work on an ethical plane that is faithful to our principles.

## ŞİŞECAM CORPORATE SOCIAL RESPONSIBILITY PRINCIPLES

At Şişecam, our Corporate Social Responsibility Principles reflect the sustainability approach that we have developed around three main motivations: “Protect the Planet”, “Empower Society” and “Transform Life”. In this direction, as a reflection of our understanding of “Protect”, we carry out studies that center on passing on our natural resources and corporate heritage to future generations. As a reflection of our empowerment approach, we carry out practices to increase our inclusiveness, encourage the employment of women and support disadvantaged groups. As a projection of our understanding of development, we develop educational opportunities for future generations and move forward while keeping up with the digital age.



	Attaches importance and priority to efforts that contribute to social development based on social needs in the countries where it operates as required by its corporate citizenship approach		Cares about the participation of employees and encourages them to contribute to society on a voluntary basis
	Places importance on carrying out all social development activities based on the principles of sustainability, transparency, and participation		Acts sensitively about the traditions and cultures of the countries where it operates.
	Executes social responsibility projects in accordance with national and international standards		Acts in accordance with all applicable laws, rules and regulations



# CONTRIBUTION TO EDUCATION AND TRAINING

Through our projects in the field of education, we aim to provide young people with a quality education and to support their self-development. In order to contribute to education and training, we provide scholarships to young people, engage in projects in collaboration with schools, and offer our students the opportunity to develop through experience. In addition, we are creating an educational legacy for future generations through the Yenişehir Şişecam Vocational and Technical Anatolian High School and Private Şişecam Vocational and Technical Anatolian High School built by our organization.

**As Şişecam, through our Education Incentive Scholarships, we provided scholarship opportunities to the value of 8532 million TRY to 2021 students at primary, high school and university levels.**

**Within the scope of the Koç University “Anatolian Scholars” Program, we covered the education expenses of two students selected from among the children of our employees.**

## Şişecam Vocational and Technical Anatolian High School

The Yenişehir Şişecam Vocational and Technical Anatolian High School (MTAL), after being constructed by Şişecam Group, was transferred to the Ministry of National Education and started to provide education and training in 2019. The

school has 16 classrooms, three laboratories and 13 workshops on a campus covering an area of 20,000 square meters. In 2020, in cooperation with the Ministry of National Education, Yenişehir Şişecam MTAL opened a “Mechatronics” branch for operations in the field of Industrial Automation Technologies, and started accepting students.

Mechatronics students are provided with internship opportunities at Şişecam, and are evaluated at the facilities of our group companies after graduation as regards to their ability to meet the needs of our technical units at all levels. In the school, which provided education to total 240 students in the 2021-2022 academic year, 63 students are studying in the Mechatronics Department of the Industrial Automation Department.

## Private Şişecam Vocational and Technical Anatolian High School

The Private Şişecam Vocational and Technical Anatolian High School (MTAL) was built by Şişecam Group under the “Vocational Education Development Project” carried out by the Mersin Governorship. The Private Şişecam MTAL was transferred to the Ministry of National Education after construction was completed by our company, and was established in 2014. Located in Tarsus, the campus has 28 classrooms, four workshops and one food laboratory. The school, which has 951 registered students as of the 2021-2022 academic year, has graduated 895 students to date.



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# CONTRIBUTION TO SPORTS

## Şişecam Çayırova Sports Club

Şişecam Çayırova Sports Club was founded in 1982 as the Çayırova Sailing Specialized Sports Club. Our club, which was granted the status of a federated club by the General Directorate of Youth and Sports in 1984, offers training and development opportunities to our youth in the canoeing, rowing and sailing branches. Our goal is to introduce more young people to sports and to inspire them, to add a sporting perspective to the physical and mental development of our young people, and to train athletes who are sufficiently equipped to compete against the world's leading athletes.

*From 1984, when we started out as a federated club, up to 2021, Şişecam Çayırova Sports Club has introduced a total of 1961 athletes to sports, 80 of which have become national athletes. Today, we are proud to be able to reach out to our young people and to bring them into sports with five coaches and 139 athletes.*



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### CANOE BRANCH

In 2021, our athletes in the canoe branch participated in 10 national and two international “Stillwater Canoe Races”. Our branch completed 2021 successfully, winning 118 medals and one cup.



### ROWING BRANCH

In 2021, our rowing athletes participated in six national races. Our branch completed 2021 successfully, winning 74 medals and six cups.



### SAILING BRANCH

In 2021, our sailing athletes participated in 11 national races. Our branch completed 2021 successfully, winning 65 medals and one cup.



# PERFORMANCE INDICATORS

PERFORMANCE INDICATORS	Şişecam Consolidated			Şişecam Flat Glass			Şişecam Glass Packaging			Şişecam Automotive			Şişecam Glassware			Şişecam Chemicals			Şişecam Headquarters	
	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2020	2021
<b>ECONOMIC PERFORMANCE INDICATORS</b>																				
Total turnover (thousand TRY)	18,058,686	21,340,686	32,057,875	6,650,648	4,959,765	9,169,529	4,307,228	5,449,024	7,472,165	3,562,032	2,382,126	3,229,910	3,080,475	3,196,871	4,876,128	4,182,491	4,272,387	5,864,874	1,080,513	1,445,269
Wages and Benefits Paid to Employees (thousand TRY)	1,602,009	1,924,541	2,417,437	759,456	355,706	443,353	479,789	337,103	394,104	497,174	381,331	513,540	799,580	546,164	714,256	302,203	241,041	303,640	63,196	48,544
Amount of Dividend Paid (thousand TRY)	619,906	518,673	532,278	199,400	82,354	33,260	142,193	35,846	-	-	-	-	-	-	-	345,000	90,613	2	320,000	499,016
Amount of Tax Paid to the State (thousand TRY)	336,719	496,471	724,356	154,037	20,528	151,252	28,535	45,591	60,197	49,428	58,667	65,711	14,113	19,988	39,042	131,679	426,635	87,541	11,473	320,613
Donation-sponsorship-CSR budget (thousand TRY)	-	16,000	16,000	400	-	-	5,333	-	-	109	-	-	494	-	-	97	-	-	16,000	16,000
Significant Monetary Fines for Non-compliance with Legal Regulations (TRY)	For details, you can refer to the annual report under the heading "Provisions, Contingent Assets and Liabilities" (page 221).																			
<b>SOCIAL PERFORMANCE INDICATORS</b>																				
Employee Demography																				
Total Workforce (Number) (including all active workers)	21,801	21,485	22,589	3,383	3,468	3,691	4,113	4,328	4,610	3,061	3,068	3,350	7,534	7,199	7,349	2,556	2,609	2,635	813	954
Women	4,649	4,584	5,169	386	459	497	915	1,003	1,132	1,020	973	1,228	1,646	1,589	1,653	208	226	235	334	424
Men	17,152	16,901	17,420	2,997	3,009	3,194	3,198	3,325	3,478	2,041	2,095	2,122	5,888	5,610	5,696	2,348	2,383	2,400	479	530
Total Workforce by Contract Type (Number)	21,801	21,485	22,589	3,383	3,468	3,691	4,123	4,328	4,610	3,061	3,068	3,350	7,534	7,199	7,349	2,556	2,609	2,635	813	954
Permanent	21,118	21,122	21,631	3,348	3,307	3,603	4,073	4,258	4,435	3,047	3,021	2,914	6,945	7,165	7,152	2,556	2,576	2,579	795	948
Women	4,552	4,501	4,739	378	414	470	914	995	1,036	1,012	973	1,027	1,579	1,576	1,564	208	224	222	319	420
Men	16,566	16,621	16,892	2,970	2,893	3,133	3,159	3,263	3,399	2,035	2,048	1,887	5,366	5,589	5,588	2,348	2,352	2,357	476	528
Temporary	683	363	958	35	161	88	40	70	175	14	47	436	589	34	197	-	33	56	18	6
Women	97	74	430	8	45	27	1	8	96	8	0	201	67	13	89	-	2	13	6	4
Men	586	289	528	27	116	61	39	62	79	6	47	235	522	21	108	-	31	43	12	2
Total Workforce by Categories	21,801	21,485	22,589	3,383	3,468	3,691	4,113	4,328	4,610	3,059	3,068	3,350	7,534	7,199	7,349	2,556	2,609	2,635	813	954
Blue Collar	14,633	14,635	15,209	2,234	2,324	2,475	2,780	2,889	3,064	2,518	2,495	2,647	5,487	5,280	5,285	1,615	1,647	1,738	0	0
Women	2,565	2,582	2,960	149	202	233	519	536	623	834	781	988	1,027	1,016	1,046	40	47	70	0	0
Men	12,068	12,053	12,249	2,085	2,122	2,242	2,261	2,353	2,441	1,684	1,714	1,659	4,460	4,264	4,239	1,575	1,600	1,668	0	0
White Collar	7,168	6,850	7,380	1,149	1,144	1,216	1,333	1,439	1,546	541	573	703	2,047	1,919	2,064	941	962	897	813	954
Women	2,084	2,002	2,209	237	257	264	396	467	509	198	192	240	619	573	607	168	179	165	334	424
Men	5,084	4,848	5,171	912	887	952	937	972	1,037	343	381	463	1,428	1,346	1,457	773	783	732	479	530
Total Workforce by Employment Type (Number)	21,801	21,485	22,589	3,383	3,468	3,691	4,113	4,328	4,610	3,057	3,068	3,350	7,534	7,199	7,349	2,556	2,609	2,635	813	954
Full Time	21,755	21,448	22,543	3,381	3,468	3,691	4,113	4,328	4,608	3,041	3,060	3,344	7,506	7,174	7,338	2,556	2,609	2,619	809	943
Women	4,621	4,569	5,149	386	459	497	915	1,004	1,131	1,006	967	1,225	1,629	1,580	1,647	208	226	228	333	421
Men	17,134	16,879	17,394	2,995	3,009	3,194	3,198	3,324	3,477	2,035	2,093	2,119	5,877	5,594	5,691	2,348	2,383	2,391	476	522
Part Time	46	37	46	2	0	0	-	0	2	16	8	6	28	25	11	-	0	16	4	11
Women	28	16	20	-	0	0	-	0	1	10	6	3	17	9	6	-	0	7	1	3
Men	18	21	26	2	0	0	-	0	1	6	2	3	11	16	5	-	0	9	3	8



Performance Indicators	Şişecam Consolidated			Şişecam Flat Glass			Şişecam Glass Packaging			Şişecam Automotive			Şişecam Glassware			Şişecam Chemicals			Şişecam Headquarters	
	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2020	2021
Total Workforce by Education Level (Number)	21,801	21,485	22,589	3,383	3,468	3,691	4,113	4,328	4,610	3,061	3,068	3,350	7,534	7,199	7,349	2,556	2,609	2,635	813	954
Elementary and Below	2,638	3,341	2,875	365	254	213	586	601	364	428	808	924	1,237	1,455	1,185	146	214	176	9	13
High school	11,723	11,355	10,408	1,657	1,635	1,674	2,294	2,472	2,393	1,934	1,508	1,140	4,431	4,445	3,938	1,264	1,183	1,182	112	81
University and Higher	7,440	6,789	9,306	1,361	1,579	1,804	1,233	1,255	1,853	699	752	1,286	1,866	1,299	2,226	1,146	1,212	1,277	692	860
Total Workforce by Age Group (Number)	21,801	21,485	22,589	3,383	3,468	3,691	4,113	4,328	4,610	3,061	3,068	3,350	7,534	7,199	7,349	2,556	2,609	2,635	813	954
Under 30	4,029	3,659	3,851	617	631	625	784	668	780	590	637	644	1,575	1,283	1,240	323	333	398	107	164
30 - 50	15,844	15,593	16,683	2,511	2,532	2,778	3,011	3,230	3,440	1,964	1,968	2,254	5,542	5,312	5,567	1,914	1,914	1,906	637	738
Above 50	1,928	2,233	2,055	255	305	288	318	430	390	507	463	452	417	604	542	319	362	331	69	52
Number of Subcontracted Employees	15,708	11,146	8,257	1,374	1,558	1,770	1,480	1,370	1,539	709	1,120	1,096	1,880	3,775	1,765	1,374	1,336	1,408	617	679
Full Time	7,664	3,199	-	1,225	-	-	-	1,368	-	870	-	-	1,839	1,831	-	1,374	-	-	-	-
Part Time	190	2	-	149	-	-	-	2	-	-	-	-	41	-	-	-	-	-	-	-
Women	1,830	712	-	168	-	-	434	402	-	333	-	-	440	310	-	-	-	-	-	-
Men	6,024	7,233	-	1,206	1,558	-	1,046	968	-	376	1,120	-	1,440	1,634	-	-	1,336	-	617	-
Employee Seniority	21,801	21,485	22,589	3,383	3,468	3,691	4,113	4,328	4,610	3,061	3,068	3,350	7,534	7,199	7,349	2,556	2,609	2,635	813	954
Women Employees 0-5 Years	2,357	2,141	2,441	227	271	275	300	289	341	500	484	638	1,006	860	850	76	85	108	152	229
Women Employees 5-10 Years	952	1,113	1,371	77	108	131	226	273	340	200	281	306	327	354	484	36	37	20	60	90
Women Employees Over 10 Years	1,321	1,308	1,357	82	80	91	389	441	451	309	208	284	313	375	319	96	108	107	96	105
Men Employees 0-5 Years	5,751	5,409	5,024	995	1,369	844	1,000	986	1,062	883	840	777	2,146	1,564	1,565	543	495	574	155	202
Men Employees 5-10 Years	4,293	4,921	4,389	833	627	823	743	773	796	471	691	642	1,661	2,401	1,666	401	334	358	95	104
Men Employees Over 10 Years	7,127	6,593	8,007	1,169	1,013	1,527	1,455	1,566	1,620	698	564	703	2,081	1,645	2,465	1,404	1,550	1,468	255	224
Structure of Top Management	145	131	132	21	18	16	26	24	18	13	14	12	21	22	19	19	13	11	40	56
By Gender	-	-	-	-	-	-	-	-	-	-	-	-	-	22	19	-	13	11	40	56
Women	34	29	32	4	3	4	8	4	3	-	0	0	7	6	7	1	1	0	15	18
Men	111	102	100	17	15	12	18	20	15	13	14	12	14	16	12	18	12	11	25	38
By Age Group	-	-	-	-	-	-	-	-	-	-	-	-	-	15	15	-	4	7	31	47
Under 30	0	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-	0	0	0	0
30 - 50	92	87	100	12	11	10	16	16	14	11	10	7	15	15	15	8	4	7	31	47
Above 50	53	44	32	9	7	6	10	8	4	2	4	5	6	7	4	11	9	4	9	9
Nationality	-	-	-	-	-	-	-	-	-	-	-	-	-	22	19	-	12	11	40	56
Türkiye	128	112	118	19	13	15	17	18	12	9	9	7	21	20	17	17	12	11	40	56
Expatriate	17	18	14	2	5	1	9	6	6	4	5	5	-	2	2	2	0	0	0	0
Structure of Board of Directors	9	9	9	9	0	0	9	0	0	9	0	0	9	0	0	9	0	0	9	9
Women	4	3	2	4	0	0	4	0	0	4	0	0	4	0	0	4	0	0	3	2
Men	5	6	7	5	0	0	5	0	0	5	0	0	5	0	0	5	0	0	6	7
Structure of Executive Board (Number)	11	9	9	-	1	0	-	1	0	-	0	0	-	1	0	-	0	-	6	-
Women	3	2	4	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	2	4
Men	8	7	5	-	1	-	-	1	-	-	0	-	-	1	-	-	0	-	4	5
Mid-level Management (number)	428	447	463	87	84	86	89	81	82	53	60	58	88	96	89	46	60	60	66	88
By Gender	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Women	93	101	117	13	12	13	30	15	15	12	9	10	28	36	32	5	9	8	20	39
Men	335	346	346	74	72	73	59	66	67	41	51	48	60	60	57	41	51	52	46	49
By Age Group	428	447	463	87	84	86	89	81	82	53	60	58	88	96	89	46	60	60	66	88
Under 30	3	1	1	-	0	0	-	0	0	1	1	1	2	0	0	-	0	0	0	0

Performance Indicators	Şişecam Consolidated			Şişecam Flat Glass			Şişecam Glass Packaging			Şişecam Automotive			Şişecam Glassware			Şişecam Chemicals			Şişecam Headquarters	
	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2020	2021
30-50	331	350	376	66	64	67	70	62	60	44	52	52	64	70	68	36	48	51	54	78
Above 50	94	96	86	21	20	19	19	19	22	8	7	5	22	26	21	10	12	9	12	10
Nationality	428	447	463	87	84	86	89	81	82	53	60	58	88	96	89	46	60	60	66	88
Turkish	312	309	331	62	53	60	44	37	39	30	31	28	72	76	69	42	46	47	66	88
Expat	116	138	132	25	31	26	45	44	43	23	29	30	16	20	20	4	14	13	0	0
<b>EMPLOYEE TURNOVER RATE</b>																				
New Personnel (number)																				
By Gender (Number)	1,972	1,428	2,607	240	244	394	470	400	548	360	318	495	596	282	706	164	100	269	84	195
Women	634	477	842	52	83	116	124	105	126	127	132	225	229	96	227	31	22	41	39	107
Men	1,338	951	1,765	188	161	278	346	295	422	233	186	270	367	186	479	133	78	228	45	88
By Age Group	1,972	1,428	2,607	240	244	394	470	400	548	360	318	495	597	282	706	164	100	269	84	195
Under 30	936	677	1,439	106	129	225	245	179	325	143	136	212	286	124	366	113	70	194	39	117
30-50	924	661	1,056	116	107	159	216	200	209	190	149	253	264	132	287	50	30	74	43	74
Above 50	112	90	112	18	8	10	9	21	14	27	33	30	47	26	53	1	0	1	2	4
Leavers (Number)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
By Gender (Number)	2,209	1,773	2,060	290	285	321	441	344	428	541	372	403	705	601	583	116	98	198	73	127
Women	629	475	593	37	75	74	107	81	108	181	116	134	226	163	181	14	8	32	32	64
Men	1,580	1,298	1,467	253	210	247	334	263	320	360	256	269	479	438	402	102	90	166	41	63
By Age Group	2,209	1,773	2,060	290	285	323	441	344	426	541	372	403	705	601	583	116	98	198	73	127
Under 30	708	531	1,081	84	104	173	138	124	245	184	113	223	273	171	301	20	12	99	7	40
30-50	1,138	815	754	164	118	121	255	186	147	276	168	145	338	264	209	47	40	63	39	69
Above 50	363	427	225	42	63	29	48	34	34	81	91	35	94	166	73	49	46	36	27	18
<b>OCCUPATIONAL HEALTH AND SAFETY</b>																				
Number of accidents	551	437	550	127	94	71	104	71	92	54	46	52	214	151	253	85	75	66	0	-
Direct employees	493	375	494	127	66	52	104	67	76	54	42	49	214	148	251	85	52	66	-	-
Contracted	58	62	56		28	19		4	16		4	3	-	3	2	-	-	-	-	-
Number of Fatal Accidents	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Absence from work due to incident (Fatal or %60 or more disability incident*7500 days)	10,497	9,446	8,129	0	1,482	1,079	0	1,711	1,428	0	1,261	973	0	3,102	2,977	0	1,865	1,672	-	-
Incident Rate (IR)(Total number of accidents x 1,000,000)/Total hours worked	12	10	12	9	12	8	17	8	10	8	8	8	15	12	17	15	11	12	0	-
Lost Day Rate (LDR)(Total lost days x 1,000,000)/Total hours worked	269	262	205	-	249	174	-	213	179	-	235	157	-	289	227	-	341	327	-	-
<b>DIVERSITY AND INCLUSION</b>																				
Employees who took parental leave (number)	1,022	952	107	145	188	107	167	198	0	138	137	0	414	349	0	90	53	0	27	0
Women	356	456	19	15	42	19	56	87	-	80	108	-	150	204	-	8	5	-	10	-
Men	666	496	88	130	146	88	111	111	-	58	29	-	264	145	-	82	48	-	17	-
Employees returning from parental leave (number)	704	618	97	143	152	97	143	123	0	72	54	0	297	210	0	90	52	0	27	0
Women	141	143	10	13	6	10	30	35	-	18	23	-	49	65	-	8	4	-	10	-
Men	563	475	87	130	146	87	113	88	-	54	31	-	248	145	-	82	48	-	17	-
Return to Work Rate from Maternity Leave	-	85.85%	94.29%	-	58.1%	98.9%	-	92.8%	92.8%	-	92.5%	84.9%	-	91.30%	94.58%	-	99.0%	99.4%	56.9%	94.5%
Employees who were still employed after one year since	-	76.82%	46.94%	-	96.3%	47.6%	-	93.2%	52.7%	-	49.3%	59.6%	-	64.08%	40.63%	-	71.9%	45.9%	100.0%	32.7%
Workforce Falling Under Collective Bargaining (Number) (Unionized)	11,459	11,987	10,353	1,849	2,150	2,302	1,377	1,301	1,305	1,806	2,221	1,792	5,083	4,865	3,489	1,344	1,450	1,465	0	0

PERFORMANCE INDICATORS	Şişecam Consolidated			Şişecam Flat Glass			Şişecam Glass Packaging			Şişecam Automotive			Şişecam Glassware			Şişecam Chemicals			Şişecam Headquarters	
	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2020	2021
Women	1,811	2,099	-	-	222	-	15	18	-	514	762	-	1,071	1,034	-	50	63	-	0	-
Men	9,648	9,888	-	-	1,928	-	1,362	1,283	-	1,292	1,459	-	4,012	3,831	-	1,294	1,387	-	0	-
Salary difference between female and male employees (%)	-	-	106%	-	-	106%	-	-	81%	-	-	92%	-	-	105%	-	-	123%	-	84%
Senior Management (Group Vice President, Director, Factory Manager, General Manager, Deputy General Manager, Group Manager)	-	-	76%	-	-	82%	-	-	87%	-	-	-	-	-	69%	-	-	-	-	96%
Other White Collar	-	-	85%	-	-	78%	-	-	73%	-	-	73%	-	-	89%	-	-	95%	-	90%
Blue Collar	-	-	113%	-	-	109%	-	-	72%	-	-	127%	-	-	104%	-	-	86%	-	-
Number of Discrimination Cases Occurred During the Year (number)	2	1	0	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Number of disabled employees	524	502	435	72	79	37	77	76	73	63	60	52	169	162	161	125	107	97	18	15
Women	51	51	48	7	10	6	12	13	9	13	8	12	10	12	13	6	5	4	3	4
Men	473	451	387	65	69	31	65	63	64	50	52	40	159	150	148	119	102	93	15	11
EMPLOYEE DEVELOPMENT																				
Employee Trainings Given at Şişecam Academy (person*hour)	379,136	219,979	470,406	165,429	38,812	-	181,885	39,725	-	39,602	15,274	-	140,187	64,588	-	54,788	37,686	-	23,894	-
By Gender (Total)	379,136	200,385	470,406	165,429	34,919	62,110	181,886	31,252	201,930	39,602	17,419	37,900	140,187	61,420	100,154	54,789	25,801	45,921	29,573	22,391
Female	58,979	34,978	91,023	17,582	3,707	7,638	41,327	2,442	52,702	8,934	1,179	7,422	19,869	9,642	9,693	5,903	3,462	3,584	14,547	9,985
Male	320,157	165,406	379,383	147,847	31,211	54,472	140,559	28,810	149,228	30,668	16,240	30,477	120,318	51,778	90,462	48,886	22,339	42,337	15,026	12,407
By Business Category	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Blue Collar Woman	1,371	1,876	37,378	3,767	520	1,657	26,374	79	31,824	2,622	164	2,465	486	443	628	126	672	804	-	-
White Collar Woman	57,608	33,102	53,646	13,815	3,188	5,981	14,953	2,363	20,879	6,312	1,015	4,957	19,383	9,199	9,065	5,777	2,790	2,780	14,547	9,985
Blue Collar Man	155,316	76,090	240,087	73,735	14,768	29,719	85,798	14,364	103,084	16,394	12,429	18,256	74,902	29,725	64,543	19,332	4,806	24,485	-	-
White Collar Man	164,841	89,316	139,297	74,112	16,444	24,754	54,761	14,447	46,144	14,274	3,812	12,222	45,416	22,053	25,919	29,554	17,534	17,852	15,026	12,407
By Education Type (Total)	379,136	219,061	470,406	-	38,611	62,111	-	39,550	201,931	-	15,118	37,645	-	64,450	99,886	-	37,530	45,452	23,802	22,392
Skills Management	-	918	6,861	-	201	2,484	-	175	1,005	-	156	524	-	138	1,069	-	156	468	92	1,311
Personal Development	-	25,192	38,974	-	3,452	5,859	-	3,982	8,280	-	922	3,077	-	6,632	8,543	-	3,872	6,771	6,332	6,445
School/Certificate	-	6,072	14,894	-	533	1,878	-	581	4,180	-	163	1,237	-	1,219	4,268	-	475	781	3,101	2,551
Orientation	-	1,420	1,642	-	244	121	-	274	772	-	103	72	-	131	189	-	279	131	390	357
Technique	-	175,632	398,035	-	32,917	48,709	-	33,265	186,056	-	13,473	32,992	-	54,872	83,590	-	31,395	37,125	9,711	9,566
Foreign Language	-	10,745	10,001	-	1,465	3,060	-	1,448	1,640	-	458	267	-	1,597	2,228	-	1,509	644	4,267	2,162
Franchise/Contractor Trainings (personxhours)	-	433	5,566	-	433	5,566	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Budget of employee external trainings and Şişecam Academy trainings (TRY)	-	-	9,767,342	-	-	1,574,482	-	-	2,559,387	-	-	1,847,590	-	-	2,292,728	-	-	1,028,515	-	464,641
Employees Subject to Performance Review	7,702	6,835	7,122	1,618	1,119	1,165	2,463	1,429	1,506	2,081	618	658	0	1,926	2,005	1,295	965	882	778	906
Women	1,810	1,968	2,074	329	237	241	327	457	474	960	208	225	-	569	561	167	185	164	312	409



PERFORMANCE INDICATORS	Şişecam Consolidated			Şişecam Flat Glass			Şişecam Glass Packaging			Şişecam Automotive			Şişecam Glassware			Şişecam Chemicals			Şişecam Headquarters		
	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2020	2021	
Men	5,892	4,867	5,048	1,289	882	924	2,136	972	1,032	1,121	410	433	-	1,357	1,444	1,128	780	718	466	497	
Blue Collar	4,023	0	0	653	0	0	1,254	0	0	1,545	0	0	-	0	0	391	0	0	0	0	
White Collar	3,679	6,835	7,122	965	1,119	1,165	1,209	1,429	1,506	536	618	658	-	1,926	2,005	904	965	882	778	906	
Environmental training (personxhour)	20,392	1,959	3,589	1,411	341	743	5,239	366	743	1,826	80	163	10,081	217	972	1,835	839	751	116	217	
Direct employees	16,705	1,959	3,589	1,176	341	-	3,986	366	-	1,227	80	-	9,403	217	-	913	839	-	116	-	
Contractors	3,687	0	0	235	-	-	1,253	-	-	599	-	-	678	-	-	922	-	-	-	-	
OHS Training (personxhours)	347,983	107,195	304,800	53,110	21,448	39,595	110,342	18,256	69,519	24,423	7,510	40,842	137,046	38,315	111,483	23,062	14,712	42,161	6,954	1,200	
<b>R&amp;D</b>																					
R&D Budget (million TRY)	103,000,000	128,348,045	174,820,472	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	128,348,045	-
R&D Employees	686	164	176	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	164	176
Patent Applications	2	4	5	2	1	4	-	-	-	-	-	1	-	2	0	-	1	-	-	-	-
Patents	7	6	11	4	2	4	-	2	-	-	-	0	3	2	7	-	-	-	-	-	-
Number of successful Projects / Number of suggestions to NAR suggestion platform	29 / 93	38 / 534	108 / 833	0/253	16 / 166	53 / 283	-	5 / 86	15 / 96	21/807	14 / 37	33 / 50	9/21	2 / 104	5 / 98	-	1 / 33	1 / 21	0 / 108	1 / 177	
<b>SUPPLY CHAIN MANAGEMENT</b>																					
Number of active suppliers	12,120	10,538	10,324	2,746	2,552	2,627	3,132	2,907	2,928	2,318	2,228	2,405	2,683	2,375	2,661	2,554	2,334	2,396	486	751	
Number of local suppliers	8,909	9,322	9,159	2,359	2,347	2,405	2,957	2,741	2,767	1,969	1,869	1,934	2,473	2,207	2,423	2,338	2,131	2,219	454	693	
Share of local procurement	76%	76%	77%	81%	73%	76%	80%	86%	88%	63%	60%	36%	89%	83%	77%	55%	68%	72%	92%	99%	
Total supplied raw material	-	-	5,787,893,780			1,182,914,188			1,045,606,106			847,234			265,257,414			3,293,268,837			
Total locally sourced raw material	-	-	4,928,630,516			1,045,788,263			1,045,022,889			228,296			259,745,351			2,577,845,716			
Proportion of locally sourced raw materials	-	-	85%			88%			100%			27%			98%			78%			

PERFORMANCE INDICATORS	Şişecam Consolidated			Şişecam Flat Glass			Şişecam Glass Packaging			Şişecam Automotive			Şişecam Glassware			Şişecam Chemicals			Şişecam Headquarters	
	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2020	2021
ENVIRONMENTAL PERFORMANCE INDICATORS																				
Natural Resources																				
Amount of Raw Material Consumed (tons)	14,774,299	17,208,143	14,801,403	3,050,504	1,332,581	2,483,917	2,559,297	2,007,437	4,010,093	27,308,281 pieces, 9,521,323 m³	2,185	57,979	496,775	458,315	607,886	8,051,790	13,407,564	7,641,527	0	-
Renewable Materials	180,440	661,680	1,629,049	-	2,272	3,067	-	27,356	1,256,326	-	2,101	57,768	-	246,373	141,002	-	383,578	170,886	0	-
Cardboard and paper	180,440	479,179	1,092,023	-	823	849	-	5,256	894,522	-	672	27,857	-	240,332	140,183	-	232,097	28,612	-	-
Plastic	-	182,501	537,025	-	1,450	2,217	-	22,100	361,804	-	1,429	29,911	-	6,041	820	-	151,481	142,274	-	-
Non-Renewable Materials	1,4593,859	16,546,462	13,172,354	-	1,330,570	2,480,851	-	1,980,081	2,753,767	-	84	211	-	211,742	466,884	-	13,023,985	7,470,641	0	-
Mine	-	10,697,078	6,573,408	-	573,681	524,117	-	987,881	1,233,015	-	-	0	-	190,600	120,405	-	8,944,915	4,695,872	-	-
Mineral	-	3,568,838	3,806,022	-	736,215	1,816,770	-	201,649	1,071,346	-	-	0	-	20,931	306,618	-	2,610,043	611,288	-	-
Machine Oil	-	742,246	681,410	-	20,342	33	-	721,642	449,406	-	3	3	-	120	39,861	-	139	192,107	-	-
Other	-	1,538,301	2,111,514	-	332	139,931	-	68,909	0	-	81	208	-	91	0	-	1,468,888	1,971,375	-	-
Net production amount (glass and chemicals. tons. auto glass. m². units)	-	-	Given on the basis of production functions.	-	-	2,975,126			2,207,016											6,498,091
Gross production amount (glass and chemicals. tons. auto glass. m². units)		Given on the basis of production functions.	Given on the basis of production functions.	2,401,000	2,389,506	3,306,063	2,182,189	2,123,488	2,627,362	12,000,000 pieces, 10,957,775 m²	8,093,492 m²	7,919,899m², 10,102,234 pieces, 22,024.54 tonnes	355,742	383,012	389,581	2,141,047	5,455,556	6,500,668		-
Amount of Recycled/Recovered Raw Material Consumed (tonnes)	302,636	1,429,095	1,138,864	168	560,394	442,038	94,961	674,861	607,422	15,964	-	0.26	68,823	193,840	89,403	122,720	-	-	-	-
Total Water Withdrawal by Source (m³)	37,789,441	38,208,995	36,608,574	3,360,398	3,099,276	3,035,613	1,651,882	1,664,984	1,915,386	659,513	857,159	1,216,201	1,063,397	927,675	1,065,324	31,054,251	31,659,901	29,376,050	-	-
Network	1,883,255	2,253,221	3,242,560	573,413	391,463	873,837	407,582	456,818	459,264	59,674	332,917	628,067.2	714,487	574,623	722,733	128,099	497,400	558,658	-	-
Surface Water	19,736,566	22,438,725	17,462,067	1,079,598	86,124	-	18,019	12,823	0	-	-	0	-	-	0	18,638,949	22,339,778	17,462,067	-	-
Groundwater	13,638,828	12,528,057	15,744,451	1,682,390	1,683,397	2,060,538	1,226,281	1,195,343	1,400,180	599,839	524,242	586,673	348,670	302,550	341,735	9,781,648	8,822,526	11,355,325	-	-
Other	2,530,792	988,991	159,497	24,997	938,292	101,238	-	-	55,942	-	-	1461	240	50,502	856	2,505,555	197	0	-	-
Amount of Recovered and Reused Water (m³)	4,162,233	9,321,607	7,983,535	853,551	327,194	356,527	435,180	455,573	341,919	162,489	24,289	226,629	745,803	91,311	177,359	1,965,210	8,423,241	6,881,100	-	-
Total Wastewater Discharge by Target Medium (m³)	18,039,932	29,379,264	26,711,666	871,793	1,084,742	1,234,049	632,512	463,465	381,863	699,573	840,489	904,610	803,234	619,858	774,415	25,017,391	26,370,710	23,416,730	-	-
Natural Recipient Medium	16,623,179	17,867,729	24,781,997	452,359	34,999	577,413	284,051	436,370	101,433	495,883	-	199,517	394,970	573,293	501,229	14,995,916	16,823,067	23,402,405	-	-
Waste Water Channel	1,416,753	11,341,564	1,719,821	419,434	884,131	523,934	348,461	27,095	214,373	203,690	836,131	697,766	408,264	46,565	269,424	10,021,475	9,547,642	14,325	-	-
Other	-	169,970	209,848	-	165,612	132,702	-	-	66,057	-	4,358	7,327	-	-	3,762	-	-	-	-	-
Amount of Cullet Reused in Glass Production (tonnes)	1,147,927	1,262,966	1,282,022	421,676	503,581	440,734	536,265	674,861	697,360	-	-	-	189,986	147,887	143,928	-	-	-	-	-
Internal Cullet	915,273	1,049,421	1,002,599	421,676	486,766	432,414	303,611	415,514	429,052	-	-	-	189,986	147,142	141,133	-	-	-	-	-
External Cullet	232,654	276,908	279,423	-	16,816	8,320	232,654	259,347	268,309	-	-	-	-	745	2,795	-	-	-	-	-
Packaging Waste Recovery Ratio (%)	54%	55%	55%	54%	55%	55%	54%	55%	55%	62%	55%	55%	56%	55%	55%	56%	55%	-	-	-
Total Waste Amount (tons)	2,089,972	1,885,547	1,691,314	58,964	43,301	58,461	29,590	15,622	14,794	275,560	234,271	235,408	31,584	36,925	36,589	1,694,274	1,555,428	1,346,062	-	-
Total amount of hazardous waste by disposal method (tons)	73,751	113,580	41,361	45,380	9,209	1,329	4,067	3,379	3,745	17,865	9,260	11,058	1,540	4,343	2,797	4,900	87,389	22,433	-	-
Energy Recovery	3,338	1,615	28,275	3	183	804	1,320	833	1,964	1,453	31	5,908	512	476	353	51	92	19,246	-	-
Recovery	4,531	13,343	1,434	946	8,690	519	1,083	1,852	328	855	471	96	375	344	282	1,272	1,986	208	-	-
Waste Incineration	45,420	91,523	936	43,467	1	-	12	50	55	747	8,595	388	255	309	424	939	82,568	70	-	-

PERFORMANCE INDICATORS	Şişecam Consolidated			Şişecam Flat Glass			Şişecam Glass Packaging			Şişecam Automotive			Şişecam Glassware			Şişecam Chemicals			Şişecam Headquarters	
	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2020	2021
Landfilling	20,301	6,699	5,560	912	335	3	1,556	409	1,376	14,800	17	1,789	395	3,205	1,531	2,638	2,733	861	-	-
Other	161	400	5,156	52	-	3	96	235	20	10	146	2,877	3	9	207	-	10	2,048	-	-
Total amount of non-hazardous waste by disposal method (tons)	2,016,221	1,771,967	1,649,953	13,584	34,092	57,132	25,523	12,243	11,049	257,695	225,011	224,351	30,044	32,582	33,792	1,689,374	1,468,039	1,323,629	-	-
Energy Recovery	1,552	1,991	15,555	-	1,845	-	1,356	-	1,688	99	74	349	92	72	118	5	-	13,399	-	-
Recovery	173,352	198,874	209,221	8,980	31,546	55,184	17,451	9,765	6,518	121,387	120,192	113,237	22,568	28,497	31,623	2,966	8,874	2,658	-	-
Waste Incineration	1,798	5,194	75,403	64	1	-	-	-	3	1,754	5,176	75,392	-	-	0	-	17	8	-	-
Landfilling	1,806,523	1,550,920	1,313,430	1,034	669	1,947	5,496	2,478	2,839	112,644	87,325	757	945	1,300	323	1,686,403	1,459,148	1,307,565	-	-
Other	32,996	14,988	36,344	3,506	31	1	1,220	-	0	21,831	12,244	34,615	6,439	2,713	1,728	-	-	-	-	-
CLIMATE CHANGE AND ENERGY																				
Energy Consumption Amount (GJ)	76,093,332	78,395,606	84,010,315	22,516,033	22,028,137	25,305,778	17,448,421	15,760,790	25,305,778	1,578,015	714,069	887,047	7,358,382	6,569,100	7,615,066	27,162,689	33,323,509	31,965,513	-	28,923
Non-renewable resources	76,058,900	78,365,649	83,952,314	22,516,033	21,998,180	25,275,821	17,448,421	15,760,790	18,233,688	1,578,015	714,069	887,046	7,358,382	6,569,100	7,589,368	27,162,189	33,323,509	31,937,469	-	28,923
Natural Gas	58,207,552	53,538,047	64,222,489	21,078,788	20,423,558	23,345,444	14,665,593	13,177,631	15,399,812	850,479	39,927	71,930	6,260,060	5,596,315	6,455,823	15,352,632	14,300,617	18,925,889	-	23,591
Electricity	6,345,438	6,667,948	7,741,243	1,433,710	1,572,596	1,859,862	2,780,644	2,499,077	2,823,434	725,754	674,143	815,117	1,056,366	932,534	1,065,885	348,464	989,599	1,171,613	-	5,332
LPG	36,336	36,527	53,513	1,023	1	4,083	295	-	1,018	-	-	0	34,960	36,479	48,362	58	47	50	0	-
Acetylene	8,539	3,773	3,957	-	-	0	1,889	-	735	-	-	0	6,650	3,773	3,197	-	-	26	0	-
Anthracite / Coal	11,461,035	11,129,437	4,994,331	-	-	0	-	82,433	0	-	-	0	-	-	0	11,461,035	11,047,004	4,994,331	0	-
Other	4,640	6,989,916	6,936,782	2,512	2,025	66,432	-	1,648	8,689	1,782	-	0	346	-	16,101	-	6,986,242	6,845,560	0	-
Renewable resources	34,597	29,957	58,001	29,957	29,957	29,957	-	0	0	-	-	-	-	-	25,698	-	-	28,044	-	0
Solar	29,957	29,957	29,957	29,957	29,957	29,957	-	-	0	-	-	-	-	-	0	-	-	0	-	0
Hydrogen	0	0	0	-	-	0	-	-	0	-	-	-	-	-	25,698	-	-	0	-	0
Wind	0	0	0	-	-	0	-	-	0	-	-	-	-	-	0	-	-	0	0	0
Biofuel	0	0	0	-	-	0	0	0	0	-	-	-	-	-	0	-	-	0	-	0
Other (to be specified)	4,640	0	28,044	-	-	0	0	0	0	-	-	-	-	-	0	-	-	28,044	-	0
Resource distribution of renewable energy produced at the facility (Gjoule)	29,957	29,957	29,957	29,957	29,957	29,957			0			0			0			0		338
Solar	29,957	29,957	29,957	29,957	29,957	29,957			0		0	0		-	0			0	0	338
Hydrogen	-	0	0	0	-	0			0		0	0		-	0			0	0	0
Wind	-	0	0	0	-	0			0		0	0		-	0			0	0	0
Biofuel	-	0	0	0	-	0			0		0	0		-	0			0	0	0
Other (to be specified)	-	0	0	0	-	0			0		0	0		-	0			0	0	0
Energy Saving Amount (GJ) ****	734,038	263,028	599,932	472,942	208,003	86,219	152,470	49,009	355,899	1,832	3,828	347	14,480	564	155,704	92,314	1,625	1,625	0	-
Energy Saving Amount (TRY)	80,372,895	28,951,254	58,755,640	44,641,915	27,773,123	28,447,566	10,756,616	659,326	23,349,990	215,064	132,711	335,509	19,611,000	285,184	5,645,793	4,206,627	100,910	941,673		35,109
Specific energy density (Energy consumption amount (GJ) / Gross glass produced (tons))	Given on the basis of groups	Given on the basis of groups	Given on the basis of groups	9.37	10.01	7.65	7.99	6.85	6.94	It is not possible to give due to the variety of products.				2.26	19.56	It is not possible to give due to the variety of products.				
Scope 1 CO2 Emission Amount (tons)	5,294,159	5,380,093	4,714,195	1,428,208	1,147,868	1,818,279	1,122,697	1,217,535	1,216,478	2,548	6,367	4,938	402,669	345,621	420,146	2,338,037	2,662,702	1,254,353	-	-
Scope 2 CO2 Emission Amount (tons)	814,336	809,292	1,029,042	124,098	158,611	202,025	345,489	359,292	336,439	104	51,994	228,123	129,045	99,157	112,002	215,601	140,238	150,453	-	-
Greenhouse gas savings (tons CO <sub>2</sub> )	79,671	103,562	1,101,071	45,117	24,322	8,190	15,185	63,853	194,723	1,867	1,416	0	-	13,880	194,222	12,300	91	703,935	0.00	-
Scope 1	14,252	25,300	329,476	11,052	2,502	91	1,381	16,417	162,864	1,819	0	-	5,202	6,290	166,521	12,300	91	-	-	-



PERFORMANCE INDICATORS	Şişecam Consolidated			Şişecam Flat Glass			Şişecam Glass Packaging			Şişecam Automotive			Şişecam Glassware			Şişecam Chemicals			Şişecam Headquarters	
	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021	2020	2021
Scope 2	47,917	78,262	67,660	34,065	21,820	8,100	13,804	47,436	31,859	48	1,416	-	-	7,590	27,701	-	0	-	-	-
CO <sub>2</sub> concentration in glass production (tonnes CO <sub>2</sub> /net production)	0.73	0.80	0.62	0.62	0.60	0.72	0.50	0.73	0.70	0.00	-	1.52	1.49	1.16	1.89	2.10	0.02	0.01	-	-
NOx emissions (kg)	13,598,807	29,955,846	24,488,972	-	14,533,735	7,683,382	11,385,178	11,694,213	14,189,752	207	417,621	17,599	1,152,203	3,143,524	2,014,443	1,061,219	166,753	583,795	-	-
SOx emissions (kg)	1,431,960	4,087,915	4,358,086	-	2,384,251	1,201,241	1,413,224	1,121,230	1,298,301	-	22,489	22,230	18,736	26,684	42,690	-	533,261	1,793,623	-	-
VOC emissions (kg)	-	-	515,288	-	-	111,270	-	-	31,526	-	-	371,921	-	-	571	-	-	-	-	-
Executive Approach	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Environmental Expenditures (TRY)	163,851,199	141,887,077	280,653,119	35,587,885	22,378,721	30,842,931	6,338,332	2,008,757	5,403,629	10,537,376	4,812,524	5,811,835	7,239,098	3,235,638	14,180,966	104,148,508	109,451,437	224,413,758	-	-
Environmental Management Costs (TRY)	123,472,988	102,479,484	59,668,072	22,406,792	5,874,702	18,837,391	3,469,499	1,617,494	2,613,604	9,158,790	4,812,524	5,551,085	5,871,548	2,042,393	7,894,125	84,675,731	88,132,371	24,771,867	-	-
Environmental Investment Expenditure (TRY)	36,947,979	39,407,593	24,128,650	13,181,093	16,504,019	12,005,540	2,868,833	391,263	2,790,025	1,378,586	-	260,750	1,367,550	1,193,245	260,750	19,472,777	21,319,066	8,811,585	-	-
Total amount of environmental compliance fine paid in the reporting period (TRY)	There is no significant environmental penalty.																			
Environmental impact complaints in the zones of activity during the reporting period (number)	There is no significant environmental penalty.																			
Number of Saplings Planted	4,354	989	8,898	958	65	887	171	230	158	41	204	206	1,144	410	647	2,040	80	7,000	-	-

# ASSURANCE COMMITMENT

(Convenience translation of a sustainability report and non-financial independent assurance statements originally issued in Turkish)



Building a better  
working world

## Independent Assurance Statement

To the Management of Türkiye Şişe ve Cam Fabrikaları Anonim Şirketi  
Istanbul, Turkey

This Assurance Statement (hereinafter 'Statement') is intended solely for the Board of Directors of Türkiye Şişe ve Cam Fabrikaları Anonim Şirketi (hereinafter 'Şişecam' or 'the Company') with the purpose of reporting on the selected information in Şişecam's 2021 Sustainability Report (hereinafter 'the 2021 Sustainability Report') that has been prepared by the Company for the one-year period from January 1, 2021 to December 31, 2021.

### Subject Matter Information and Applicable Criteria

In line with the request of the Company, our responsibility is to provide limited assurance in accordance with indicators are listed below and take place in 'Performance Indicators' section in pages 60, 69 and between the pages 95 - 102 of the 2021 Sustainability Report.

### The Scope of Our Assurance

The scope of our assurance is limited to the indicators listed in the Selected Information shown below, which are reported as environmental indicators and social indicators in the pages 60, 69, 97, 99, 100 and 101 of the 2021 Sustainability Report, within the scope of the operations of the company's all legal businesses in and out of Turkey (21 facilities in Turkey and 22 facilities abroad), covers one-year period starting on January 01, 2021 and ending on December 31, 2021.

### Selected Environmental Indicators

- Energy Consumption Amount (GJ) (GRI 302-1)
- Total Water Drawn by Source (m<sup>3</sup>) (GRI 303-3)
- Amount of Recovered and Reused Water (m<sup>3</sup>) (GRI 303-3)
- The Rate of Use of Reused Cullet in Glass Production (inner/ outer) (%), (GRI 301-2)
- Scope 1 CO<sub>2</sub>e Emission Amount (tons CO<sub>2</sub>e) (GRI 305-1)
- Scope 2 CO<sub>2</sub>e Emissions Amount (tons CO<sub>2</sub>e) (GRI 305-2)

### Selected Social Indicators

- Incident Rate (IR) (Total number of accidents x 1,000,000/Total hours worked) (%) (GRI 403-2)
- OHS Training (person x hours), (GRI 403-5)
- The Ratio of Female Employees (%) (GRI 102-8)

No action has been taken based on information other than Selected Information and therefore no results have been reported.

### The Company's Responsibilities

The Company's management is responsible for the preparation, collection and presentation of the Selected Information. In addition, the Company's management is responsible for ensuring that the documentation provided to the practitioner is complete and accurate. The Company's management is also responsible for maintaining the internal control system that reasonably ensures that the documentation and information described above is free from material misstatements, whether due to fraud or error.

### Our Responsibilities

We conducted our assurance engagement in accordance with the International Assurance Standards, particularly International Standard on Assurance Engagements Other than Audits or Reviews of Historical Financial Information (ISAE 3000 (revised)) and the International Standard on Assurance Engagements on Greenhouse Gas Statements (ISAE 3410). These regulations require that we comply with the ethical standards and plan and perform our assurance engagement to obtain limited assurance about the Selected Information.

We comply with the independence and other ethical requirements of the IESBA Code of Ethics for Professional Accountants, which establishes the fundamental principles of integrity, objectivity, professional competence and due care, confidentiality, and professional behavior.

We apply the International Standard on Quality Control 1 (ISQC 1), and accordingly, we maintain a robust system of quality control, including policies and procedures documenting compliance with relevant ethical and professional standards and requirements of laws or regulations.

The assurance engagement performed represents a limited assurance engagement. The nature, timing and extent of procedures performed in a limited assurance engagement is limited compared with what is necessary in a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is lower.

The procedures selected depend on the practitioner's judgment. The procedures include, in particular, inquiry of the personnel responsible for collecting and reporting on the Selected Information and additional procedures aimed at obtaining evidence about the Selected Information.

### Procedures Applied

In respect of the Selected Information mentioned above the procedures performed include the following procedures:

1. Interviewed select key senior personnel of the Company to understand the current processes in place for capturing the Selected Information pertaining to the reporting period;
2. Reviewed Selected Information gathered by site visiting, interviews with the relevant responsible face-to-face or via online meetings, covering domestic locations; Şişecam Flat Glass Mersin Factory, Şişecam Glassware Eskişehir Factory, Şişecam Glass Packaging Mersin Factory and Şişecam Chemicals Mersin Soda Factory, and abroad locations; Trakya Glass Bulgaria EAD Flat Glass Factory, Siseecam Flat Glass Italy S.R.L., Siseecam Flat Glass South Italy S.R.L., Siseecam Automotive Bulgaria EAD Automotive Glass Factory, Pasabehce Bulgaria EAD OOO and Ruscam Glass Packaging Holding - Kirishi Factory; as well as reviewed pertaining to the Company's other locations, against evidence, on a sample basis;
3. Undertook substantive testing, on a sample basis, of the Selected Information;
4. Used the Company's internal documentation to evaluate and measure the Selected Information;
5. Evaluated the design and implementation of key processes and controls over the Selected Information;
6. Re-performed, on a sample basis, calculations used to prepare the Selected Information for the reporting period.
7. Evaluated the disclosure and presentation of the Selected Information in the Report.

### Our conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the Selected Information reviewed for the year ended December 31, 2021 has not meet, in all material respects, in accordance with the relevant requirements of the Core Principles of the GRI Standards.

### Limitations

We permit this report to be disclosed in Türkiye Şişe ve Cam Fabrikaları A.Ş.'s Sustainability Report for the year ended December 31, 2021, to enable the Board of Directors of Türkiye Şişe ve Cam Fabrikaları Anonim Şirketi to show they have addressed their governance responsibilities by obtaining an independent assurance report in connection with the Selected Information. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Board of Directors as a body and Türkiye Şişe ve Cam Fabrikaları Anonim Şirketi for our work or this Statement except where terms are expressly agreed between us in writing.

for Güney-Bağımsız Denetim ve Serbest Muhasebeci Mali Müşavirlik A.Ş.  
A member firm of Ernst & Young Global Limited

Zeynep Okuyan Özdemir, BSMML  
Partner  
Istanbul, May 27, 2022

# GRI CONTENT INDEX

This report has been prepared in accordance with the GRI Standards: Core option. For the Materiality Disclosures Service, GRI Services reviewed that the GRI content index is clearly presented and the references for Disclosures 102-40 to 102-49 align with appropriate sections in the body of the report. The service was performed on the Turkish version of the report.



GRI 101: Foundation 2016			
GRI 102: General Disclosures 2016	Disclosures		Direct Answers, Page Numbers or Omissions
Organizational Profile	102-1	Name of the organization	3
	102-2	Activities, brands, products, and services	11
	102-3	Location of headquarters	İstanbul, Türkiye
	102-4	Location of operations	13
	102-5	Ownership and legal form	3
	102-6	Markets served	13
	102-7	Scale of the organization	13
	102-8	Information on employees and other workers	95-98
	102-9	Supply chain	Our supply chain is shaped in line with the needs arising from the content required by our products and services.
	102-10	Significant changes to the organization and its supply chain	3
	102-11	Precautionary Principle or approach	27
	102-12	External initiatives	17
	102-13	Membership of associations	25
Strategy	102-14	Statement from senior decision-maker	4-10
	102-15	Key impacts, risks, and opportunities	35
Ethics and Integrity	102-16	Values, principles, standards, and norms of behavior	11
	102-17	Mechanisms for advice and concerns about ethics	27
Governance	102-18	Governance structure	16
	102-19	Delegating authority	16
	102-20	Executive-level responsibility for economic, environmental, and social topics	16
		Consulting stakeholders on economic, environmental, and social topics	24
	102-29	Identifying and managing economic, environmental, and social impacts	35
	102-30	Effectiveness of risk management processes	33
	102-31	Review of economic, environmental, and social topics	33
	102-32	Highest governance body's role in sustainability reporting	16
Stakeholder Engagement	102-40	List of stakeholder groups	24
	102-41	Collective bargaining agreements	95
	102-42	Identifying and selecting stakeholders	24
	102-43	Approach to stakeholder engagement	24
	102-44	Key topics and concerns raised	19



Reporting Practice	102-45	Entities included in the consolidated financial statements	3
	102-46	Defining report content and topic Boundaries	3
	102-47	List of material topics	18
	102-48	Restatements of information	None.
	102-49	Changes in reporting	3
	102-50	Reporting period	3
	102-51	Date of most recent report	<a href="http://www.sisecam.com.tr/en/sustainability/reporting/sustainability-report">www.sisecam.com.tr/en/sustainability/reporting/sustainability-report</a>
	102-52	Reporting cycle	Yearly
	102-53	Contact point for questions regarding the report	110
	102-54	Claims of reporting in accordance with the GRI Standards	104
	102-55	GRI content index	104
102-56	External assurance	103	
<b>GRI 200: Economic</b>			<b>Direct Answers, Page Numbers or Omissions</b>
<b>GRI 201: GRI 201: Economic Performance 2016</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundaries	17-18
	103-2	The management approach and its components	16
	103-3	Evaluation of the management approach	18
GRI 201: Ekonomik Performance 2016	201-1	Direct economic value generated and distributed	12-13
	201-2	Financial implications and other risks and opportunities due to climate change	25
<b>GRI 202: Market Presence</b>			
GRI 103: Yönetim Yaklaşımı 2016	103-1	Explanation of the material topic and its Boundaries	17-18
	103-2	The management approach and its components	16
	103-3	Evaluation of the management approach	18
GRI 202: Market Presence 2016	202-2	Proportion of senior management hired from the local community	95
<b>GRI 205: Anti - Corruption 2016</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundaries	17-18
	103-2	The management approach and its components	16
	103-3	Evaluation of the management approach	18
GRI 205: Anti - Corruption 2016	205-1	Operations assessed for risks related to corruption	27
	205-2	Communication and training about anti-corruption policies and procedures	27

GRI 300: Environmental			Direct Answers, Page Numbers or Omissions
<b>GRI 301: Materials 2016</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundaries	17-18
	103-2	The management approach and its components	16
	103-3	Evaluation of the management approach	18
GRI 301: Materials 2016	301-1	Materials used by weight or volume	95
	301-2	Recycled input materials used	48
	301-3	Reclaimed products and their packaging materials	99
<b>GRI 302: Energy 2016</b>			
GRI 103: Management Approach 2016	103-1	The management approach and its components	17-18
	103-2	Evaluation of the management approach	16
	103-3	Energy consumption within the organization	18
GRI 302: Energy 2016	302-1	Energy intensity	100
	302-3	Reduction of energy consumption	100
	302-4	Reductions in energy requirements of products and services	100
	302-5	Reduction in Energy Consumption of Products and Services	0
<b>GRI 303: Water and Effluents 2018</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundaries	17-18
	103-2	The management approach and its components	16
	103-3	Evaluation of the management approach	18
GRI 303: Water and Effluents 2018	303-1	Interactions with water as a shared resource	41
	303-2	Management of water discharge- related impacts	21
	303-3	Water withdrawal	99
	303-4	Water discharge	99
	303-5	Water consumption	99
<b>GRI 304: Biodiversity 2016</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundaries	17-18
	103-2	The management approach and its components	16
	103-3	Evaluation of the management approach	18
GRI 304: Biodiversity 2016	304-3	Habitats protected or restored	37
<b>GRI 305: Emissions 2016</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundaries	17-18
	103-2	The management approach and its components	16
	103-3	Evaluation of the management approach	18

GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	100
	305-2	Energy indirect (Scope 2) GHG emissions	100
	305-3	Other indirect (Scope 3) GHG emissions	100
	305-4	GHG emission intensity	100
	305-5	Reduction of GHG emissions	100
	305-6	Emissions of ozone-depleting substances (ODS)	100
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	100
<b>GRI 306: Waste 2020</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundaries	17-18
	103-2	The management approach and its components	16
	103-3	Evaluation of the management approach	18
GRI 306: Waste 2020	306-1	Waste generation and significant waste-related impacts	44-48
	306-2	Management of significant waste- related impacts	44-48
	306-3	Waste generated	44-48
	306-4	Waste diverted from disposal	99-100
	306-5	Waste directed to disposal	99-100
<b>GRI 307: Environmental Compliance 2016</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundaries	17-18
	103-2	The management approach and its components	16
	103-3	Evaluation of the management approach	18
GRI 307: Environmental Compliance 2016	307-1	Non-compliance with environmental laws and regulations	95
<b>GRI 308: Supplier Environmental</b>			
GRI 308: Supplier Environmental	103-1	Explanation of the material topic and its Boundaries	17-18
	103-2	The management approach and its components	16
	103-3	Evaluation of the management approach	18
"GRI 308: Supplier Environmental Assessment 2016"	308-1	New suppliers that were screened using environmental criteria	95
	308-2	Negative environmental impacts in the supply chain and actions taken	95
<b>GRI 400: Social 2016</b>			<b>Direct Answers, Page Numbers or Omissions</b>
<b>GRI 401: Employment 2016</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundaries	17-18
	103-2	The management approach and its components	16
	103-3	Evaluation of the management approach	18
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	95-97
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	58-62
	401-3	Parental leave	95
<b>GRI 403: Occupational Health and Safety 2018</b>			



GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundaries	17-18
	103-2	The management approach and its components	16
	103-3	Evaluation of the management approach	18
GRI 403: Occupational Health and Safety	403-1	Occupational health and safety management system	68-69
	403-2	Hazard identification, risk assessment, and incident investigation	68-69
	403-5	Worker training on occupational health and safety	95
	403-6	Promotion of worker health	70-71
	403-9	Work-related injuries	97
<b>GRI 404: Training and Education 2016</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundaries	17-18
	103-2	The management approach and its components	16
	103-3	Evaluation of the management approach	18
GRI 404: Training and Education 2016	404-1	Average hours of training per year per employee	98
	404-2	Programs for upgrading employee skills and transition assistance programs	61-66
	404-3	Percentage of employees receiving regular performance and career development reviews	95
<b>GRI 405: Diversity and Equal Opportunity 2016</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundaries	17-18
	103-2	The management approach and its components	16
	103-3	Evaluation of the management approach	18
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	95-96
	405-2	Ratio of basic salary and remuneration of women to men	95
<b>GRI 406: Non-discrimination 2016</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundaries	17-18
	103-2	The management approach and its components	16
	103-3	Evaluation of the management approach	27, 58, 76
GRI 406: Non-discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	27
<b>GRI 408: Child Labor 2016</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundaries	17-18
	103-2	The management approach and its components	16
	103-3	Evaluation of the management approach	27, 76
GRI 408: Child Labor 2016	408-1	Operations and suppliers at significant risk for incidents of child labor	27, 76
<b>GRI 409: Forced or Compulsory Labor 2016</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundaries	17-18
	103-2	The management approach and its components	16
	103-3	Evaluation of the management approach	27, 76
GRI 409: Forced or Compulsory Labor 2016	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	27, 76

<b>GRI 412: Human Rights Assessment 2016</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundaries	17-18
	103-2	The management approach and its components	16
	103-3	Evaluation of the management approach	18
GRI 412: Human Rights Assessment 2016	412-1	Operations that have been subject to human rights reviews or impact assessments	27
	412-2	Employee training on human rights policies or procedures	95
<b>GRI 416: Customer Health and Safety 2016</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundaries	17-18
	103-2	The management approach and its components	16
	103-3	Evaluation of the management approach	31,87
GRI 416: Customer Health and Safety 2016	416-1	"Assessment of the health and safety impacts of product and service categories"	31,87
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	31,87
<b>GRI 417: Marketing and Labeling 2016</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundaries	17-18
	103-2	The management approach and its components	16
	103-3	Evaluation of the management approach	29,85
GRI 417: Marketing and Labeling 2016	417-1	Requirements for product and service information and labeling	29,85
	417-2	Incidents of non-compliance concerning product and service information and labeling	None.
<b>GRI 419: Socioeconomic Compliance 2016</b>			
GRI 103: Management Approach 2016	103-1	Explanation of the material topic and its Boundaries	17-18
	103-2	The management approach and its components	16
	103-3	Evaluation of the management approach	18
GRI 419: Socioeconomic Compliance 2016	419-1	Non-compliance with laws and regulations in the social and economic area	None.

**TÜRKİYE ŞİŞE VE CAM FABRİKALARI A.Ş.**

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