



TÜRKİYE ŞİŞE VE CAM FABRİKALARI A.Ş.  
2016 SUSTAINABILITY REPORT



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**BECOMING ONE OF THE TOP 3 PLAYERS IN THE GLOBAL MARKET**

- DYNAMIC STRUCTURE
- OPERATIONAL EXCELLENCE
- DIGITALIZATION
- INNOVATION

**GLOBAL PRESENCE**

- FINANCIAL STABILITY
- SUSTAINABLE ENERGY
- SUSTAINABLE ENVIRONMENT
- SOCIAL RESPONSIBILITY

**ONE GLOBAL FAMILY**

- EMPLOYEE HEALTH AND SAFETY
- RESPECTING DIFFERENCES
- PROVIDING DECENT WORK

## About the Report

Türkiye Şişe ve Cam Fabrikaları A.Ş. (hereinafter referred to as "Şişecam Group", "Group" or "Şişecam") presents its stakeholders with its sustainability performance for the period between January 1<sup>st</sup> and December 31<sup>st</sup> 2016, in this fourth Sustainability Report prepared according to the "core" option of GRI G4 Sustainability Reporting Guidelines.

The economic indicators included in the report involve all its legal operations in Turkey and abroad in order to be compatible with the consolidate data in the financial reports of Şişecam, while all other indicators related to environmental and social impacts involve its operations in Turkey. Şişecam aims to expand the scope of its sustainability reporting to its overseas operations in the forthcoming periods.

Stakeholder feedbacks are vital for us in terms of improving both our operations and our reporting process. All views and suggestions received from our stakeholders are closely examined and used to improve our operations.

We invite our stakeholders to forward any opinions, suggestions, and complaints to:

**Dilek Bolcan**

**Environmental Manager**

**Corporate Development and Sustainability Department**

dbolcan@sisecam.com

+90 850 206 3968

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Şişecam Group manages operations sustainably with the awareness of our social, environmental and financial responsibilities. We will continue creating difference in the industry with our research and development activities and our value added product portfolio.

## Message from the Chairman

**Şişecam Group, one of the oldest manufacturing company in the business fields of flat glass, glassware, glass packaging, and chemicals was established 81 years ago by the Turkish Republic. Şişecam Group's continues its journey with its nearly 22 thousand employees at a total of 44 production plants in 13 countries. Şişecam Group's goal of becoming one of the top three players within the context of global competition is one of the most significant determining components for our sustainability approach..**

Şişecam Group manages operations sustainably with the awareness of our social, environmental and financial responsibilities. We will continue creating difference in the industry with our research and development activities and our value added product portfolio while also enhancing our environmental performance, productivity and quality standards in all our business processes within the context of operational excellence and our goals to create sustainable growth. Investments are made to enhance our employees' competencies, create a safe working environment where differences are respected, digitalize our business processes by ensuring the integration of latest technology in production, and actualizing projects by adapting to the cultural and local conditions of our operational geographies.

As Şişecam Group, we will create permanent value by closely following global developments, while continue to draw our power from the synergies created with our stakeholders and our employees to ensure a sustainable future for the next. On occasion of this report, I extend my thanks once again to all our stakeholders who have contributed to our successes to this day.

**Adnan Bali**  
Chairman of the Board of Directors

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Our pathway to become one of the top three in the Global Market, is through mainstreaming, evaluating and prioritizing our business strategy in line with sustainability principles while adding value we create for our stakeholders.

## Message from the CEO

**I am glad to present you with our fourth Sustainability Report, which we, as Şişecam Group, prepared in line the principles of transparency and accountability. The Report was prepared based on the internationally acclaimed sustainability reporting guidelines (GRI G4) of the Global Reporting Initiative as part of the requirements of a responsible business understanding.**

2030 Sustainable Development Agenda is a universal call to action to end poverty, protect our planet and ensure the peace and prosperity of all people through 17 Global Goals. As a global, reputable, financially stable company with a transparent understanding of governance, Şişecam Group adopts the United Nations Sustainable Development Goals (SDG) in accordance with its sustainable growth model, while supporting and adding value to goals of gender equality (SDG5), clean water (SDG6), clean energy (SDG7), innovation (SDG9), responsible production (SDG12), and climate action (SDG13).

Our pathway to become one of the top three in the Global Market, is through mainstreaming, evaluating and prioritizing our business strategy in line with sustainability principles while adding value we create for our stakeholders. Being listed on the Istanbul Stock Exchange Sustainability Index in the 2016-2017 period is regarded as an important indicator of our high performance in this scope.

Our Group, which successfully maintains its activities while sustaining its competitive advantages, produced 4.6 million tons of glass, increased consolidated net sales by 14% reaching to TRY 8.4 billion, domestic sales by 46% and international sales by 54% as of 2016 yearend. In the soda production, being the top producer globally, 2.3 million tons of soda and 3.8 million tons of industrial raw material was produced in the year of 2016.

Pursuing its investments with a view to reinforce both its operations and its market positions, our Group made TL 1.2 billion worth of investment as of yearend. In line with our value creating sustainable growth strategy were also reflected on our financial results in 2016. EBITDA volume was TL 2.1 billion, while our EBITDA margin was 25.2% with a 1.4-point increase. Our Group shares performed well above the averages of BIST Holding, BIST 100 and BIST 30 indexes gaining 34% in nominal value, while the share of corporate foreign investors among our publicly traded shares reached a high level of 46.5%.

As a Group operating in energy intense industries, the efficient use of energy, access to effectively continuous energy supply, and the continuous review of energy related risk and opportunities plays an important role for our sustainable operations.



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On this basis, the energy consumption of our operations, which are managed according to the international energy management standards, is systematically monitored and energy efficiency projects are implemented to ensure a continuous energy consumption reduction. A total of 590,700 GJ of energy saving was achieved and 25,800 tCO<sub>2</sub> of GHG emission was prevented by means of the energy efficiency projects we carried out in the reporting period.

As part of renewable energy solutions, Şişecam installed 6 MW solar power panel for its flat glass plant in Mersin which is one of the seventh largest roof type solar power generators in the world.

Another development achieved by our Group in 2016 was the establishment of Şişecam Çevre Sistemleri A.Ş. (Şişecam Environmental Systems Inc.) in cooperation with the European Bank for Reconstruction and Development. This strong cooperation, which is a first in the world and aims to accelerate the modernization of the leading glass recollection and recovery companies of Turkey, seeks to provide know-how transfer support for the companies besides long-running financing opportunities on easy terms. Şişecam Çevre Sistemleri A.Ş., which aims to increase the rate of recycled glass from 19% to 45% within five years, pioneers the establishment of a sustainable glass recycling infrastructure, regarding both the mitigation of greenhouse gas emissions and contributing to the national economy by means of the energy savings achieved being also an important contributor of its social responsibilities.

A significant component of our global competitive power is value added innovative products and the research studies lead by Research and Technological Development Unit. Şişecam Research and Technology Development Center is ranked 8<sup>th</sup> among 127 R&D Centers according to the 2016 R&D Performance Index rating prepared by the Turkish Ministry of Science, Industry and Technology. As part of the studies in the reporting period, participation and applications to internationally and nationally supported projects were ensured, four patent registrations were realized and 29 patent applications were filed.

Şişecam Group internalizes integrated industry technologies and adopts information technology in all its processes and business models to conform to the age of innovation and virtual realities. In this regard, leading culture was adopted

to accelerate digital technologies in business processes; all the digital assets of our Group is being managed with a holistic and strategic approach through the Digital Transformation Project. Our digital assets were renewed with design and contents focused on user experience in parallel with current trends alongside our restructured brand architecture.

We continued promoting the transition to a recycling society by generating social behavioral change through one of the most comprehensive sustainability and social responsibility projects of Turkey, the "Glass and Glass Again" Project which we have been carrying out since 2011. Since the start of the project, trainings regarding recycling were provided to a total of 233,000 primary school students, 17,400 glass banks were donated and 740,000 tons of glass packaging waste was recycled.

Besides the social responsibility projects, we continued actualizing significant studies with the responsibility of sustaining our cultural heritage in the field of glass with Serçe Harbor Glass Wreck Documentary, Antique Glass Works Collection and History-Culture-Glass themed product portfolio.

Şişecam Group also maintained its pioneering position in the field of education, starting the first Glass Science and Technology Master's Program of Turkey with university cooperation in order to meet the qualified human resource need of the glass sector. We believe this program, which is exemplary in terms of Industry-University partnership, will make valuable contributions to the sustainability of human resource competence in the glass industry.

We are a global family among the most prominent industrial institutions of the world with our nearly 22,000 employees in 13 countries. We continue our practices aiming to create a safe working environment while respecting differences, respecting our employees to ensure their happiness, productivity and efficiency, which we regard as the most important component to sustain the global value we create.

On the occasion of this Report, let me take this opportunity to extend my thanks and pay my respects to all our shareholders who have greatly contributed to achievements and sustainability of the value we create as a global company in today's highly competitive business world.

**Prof. Dr. Ahmet Kirman**  
Vice Chairman and CEO

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# About Şişecam

Şişecam Group is a global industrial group, which pursues its production operations in 13 countries with its nearly 22,000 employees and exports its products to 150 countries, operating in the main business fields of flat glass, glassware, glass packaging, and chemicals.

Founded in 1935 by Türkiye İş Bankası upon the directive of Atatürk, Şişecam is one of the most established industrial organizations in Turkey with its 80 some years of history and among the most prestigious glass manufacturers of the world thanks to its highly specialized and competitive operations.

The Group is the third largest producer of household glassware, the fifth largest producer of glass packaging and flatglass in the world; it is the world leader in chromium chemicals soda production and among the top ten soda producers globally.

**In light of its mission, vision, and values, Şişecam Group aims to become one of the top three globally, to expand its global presence, and to create sustainable value on a global scale with its individual and environment conscious approach in its operations as a global family.**

## ŞİŞECAM VALUES



**We derive strength from our traditions and support each other.**



**We thrive and develop one another**



**We Adopt a Fair and Transparent Management Approach**



**We Care for Our Environment**



**We Respect Differences**

## VISION

To be a global company pioneering the future of glass and other business fields, producing creative solutions together with its business partners, creating difference with its technologies and brands, respectful of the individual and the environment

## MISION

To be a company that adds value to life with its high-quality products offering comfort and respects people, nature, and the law

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**FLATGLASS**

Operating in the field of flat glass within Şişecam Group, Şişecam Flat Glass ranks fifth in the world and first in Europe in its sector in terms of production capacity. The group maintains its operations in four main business fields, namely architectural glasses (flat glass, opal glass, mirror, laminated glass, and coated glass), auto glass, encapsulated glass and glass for other vehicles, solar energy glass, and glass for home appliances.



**GLASS PACKAGING**

Şişecam Glass Packaging, which produces specially designed glass packaging with various volumes and colors for the food, beverages, pharmaceuticals, and cosmetics sectors, is the largest glass packaging producer in Turkey, and the fifth largest in Europe and the world with its total production capacity of 2.3 million tons/year.

**GLASSWARE**

The first company to be founded by Şişecam Group, Paşabahçe, which carries out production, design and marketing operations in three different segments, namely household, catering and industry, is today the third largest in the world and second in Europe in the glassware sector.

**CHEMICALS**

Creating global solutions for its customers with environmentally friendly technologies, Şişecam Chemicals, which operates in the fields of soda, chromium chemicals, glass fiber, industrial raw material, vitamin K3 derivatives, and sodium metabisulphite, ranks fourth in Europe and 10<sup>th</sup> in the world in soda production, first in the world in sodium dichromate and basic chromium sulfate, and fourth in the world in chromic acid production.

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## OUR CORPORATE MEMBERSHIPS

### INTERNATIONAL

German Society of Glass Technology
European Container Glass Federation – Container Glass and Glassware Committees
European Society for Glass Science and Technology
Glass Alliance Europe
European Glass Fiber Producers Association
European Domestic Glass Committee
Glass for Europe
European Physical Society
European Physical Society (Working Group)
European Chemicals Agency
European Soda Ash Producers Association
European Renewable Energies Association
International Partnership for Glass Research
Celsian (Glass Trends Association)
EUREKA Cluster for Low Carbon Technologies (EUROGIA)
International Commission on Glass
International Crystal Federation
International Chromium Development Association

### NATIONAL

Packaging Manufacturers Association of Turkey
R&D Centers Communications Platform
Environmental Protection and Packaging Waste Recovery and Recycling Foundation
Electricity Producers Association
Food Safety Association
Association of Solar Energy Industry in Turkey
İSO Teknoparklar Komisyonu
Istanbul Chamber of Industry (Environment Specialization Committee)
Carton Board Packaging Manufacturers Association
Turkish Composite Manufacturers Association
Enterprise Risk Management Association
Corrugated Packing Manufacturers Association
Ceramic, Glass and Cement Raw Materials Manufacturers Association
Turkish Glassware Association
Turkish Construction Material Producers Association
Turkish Foundation for Quality
Turkish Chemical Manufacturers Association
Cogeneration and Clean Energy Association Turkey
Corporate Governance Association of Turkey
Turkish Miners Association
Union of Chambers and Commodity Exchanges of Turkey, Working Groups



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**2016 PERFORMANCE**



IN **13** COUNTRIES  
 PRODUCTION OPERATIONS



**44**  
 PRODUCTION PLANTS



SALES IN **150**  
 COUNTRIES



**21,715**  
 EMPLOYEES



USD **1.5** BILLION \$  
 INTERNATIONAL SALES



**4,6 million tons**  
 OF GLASS PRODUCTION



**2.3 million tons**  
 OF SODA PRODUCTION



**3.8 million tons**  
 OF INDUSTRIAL RAW MATERIAL PRODUCTION

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**ŞİŞECAM GROUP'S PRODUCTION FACILITIES IN TURKEY**

**FLAT GLASS**

- TRAKYA CAM SANAYİİ A.Ş.**
- TRAKYA PLANT
  - MERSİN PLANT
- TRAKYA YENİŞEHİR CAM SANAYİİ A.Ş.**
- YENİŞEHİR PLANT
- TRAKYA POLATLI CAM SANAYİİ A.Ş.**
- POLATLI PLANT
- ŞİŞECAM OTOMOTİV A.Ş.**
- ŞİŞECAM AUTOMATIVE PLANT

**GLASSWARE**

- PAŞABAĞÇE CAM SAN. VE TİC. A.Ş.**
- KIRKLARELİ PLANT
  - ESKİŞEHİR PLANT
- DENİZLİ CAM SAN. VE TİC. A.Ş.**
- DENİZLİ PLANT
- CAMIŞ AMBALAJ SANAYİİ A.Ş.**
- TUZLA PLANT
  - ESKİŞEHİR PLANT

**GLASS PACKAGING**

- ANADOLU CAM SAN. A.Ş.**
- MERSİN PLANT
- ANADOLU CAM YENİŞEHİR SAN. A.Ş.**
- YENİŞEHİR PLANT
- ANADOLU CAM ESKİŞEHİR SANAYİ A.Ş.**
- ESKİŞEHİR PLANT
- OMCO-İSTANBUL KALIP SAN. VE TİC. A.Ş.**
- GEBZE PLANT

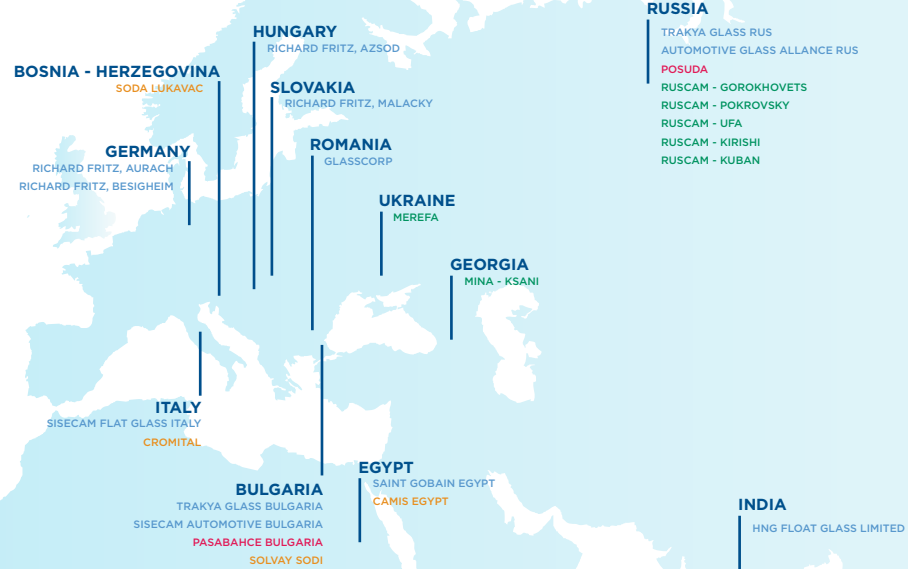
**CHEMICALS**

- SODA SAN. A.Ş.**
- SODA PLANT
  - KROMSAN CHROMIUM COMPOUNDS PLANT
- CAMIŞ MADENCİLİK A.Ş.**
- 19 MINERAL PROCESSING PLANT AND 70 LICENSED MINING FIELDS
- CAM ELYAF SAN. A.Ş.**
- GEBZE PLANT
- OXYVİT KİMYA SAN. VE TİC. A.Ş.**
- MERSİN PLANT

**CAMIŞ ELEKTRİK A.Ş.**

- TRAKYA FACILITY

**ŞİŞECAM GROUP'S PRODUCTION FACILITIES ABROAD**



# Our Sustainability Approach

**Our sustainability approach is based on creating value added for financial stability, reducing our environmental impact and generating permanent values for our stakeholders. In this regard, ensuring the sustainability of the value we create for all our stakeholders, evaluating all the processes of our business from a sustainability perspective and improving relevant processes, and minimizing the environmental impact we generate are the key elements of our sustainability approach. Our organizational structure, where sustainability management is represented at the highest level, greatly contributes to the evaluation of all our business strategies and objectives from a sustainability perspective, adding a strong administrative dimension to our sustainability approach.**

## Sustainability Management

At Şişecam, sustainability is managed within the body of the Corporate Development and Sustainability Presidency in order to develop efficient and effective decision making capabilities in line with the vision and strategies of the Group and to govern the long-established structure of our Group more efficiently in the competitive landscape of our day. Contributing to and following up the strategies and policies of the Group in line with sustainability principles and drawing the roadmap for and implementing sustainability solutions in the fields of energy, environment, human resources, procurement, processes, production, capacity building and international relations, while designing and implementing procedures and standards for the central administration of quality systems are included within the scope of the sustainability function.

Established in 2015, Şişecam Sustainability Committee consists of the Chief Corporate Development and Sustainability Officer, Production Vice-Presidents

of Businesses, Sustainability Director, Human Resources President, Corporate Communication Director, and Industrial Relations Director. The working groups within the scope of the Committee are responsible for conducting activities related to the subjects of Environment, Energy, Occupational Health and Safety, Innovation and Social Responsibility.

Risk and opportunities regarding sustainability issues are determined by the Sustainability Directorate in essence and offered to the Sustainability Committee to be evaluated. The Chief Corporate Development and Sustainability Officer, who is also a member of Şişecam Executive Board, offers the issues to the views of the Executive Board at monthly meetings and ensures necessary decisions are made. A similar process is also carried out at monthly Board of Director meetings by the Chief Executive Officer.

Şişecam periodically reviews its sustainability priorities with the contribution of this robust sustainability management structure.



## Şişecam Group listed on the “BIST Sustainability Index” of Istanbul Stock Exchange

Şişecam Group is listed on the “BIST Sustainability Index”, which includes companies traded on Istanbul Stock Exchange with a high sustainability performance and is aimed at enhancing sustainability understanding, knowledge and practices among Istanbul Stock Exchange companies in Turkey.

We present a powerful management approach by evaluating our sustainability approach along with vision, business strategies and targets while we ensure a high-level representation of sustainability management.

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**MATERIAL SUSTAINABILITY ISSUES**



***Becoming One of the Top Three Players in the Global Market***

- R&D\*
- Innovative products\*
- Business ethics\*
- Business continuity\*
- Customer satisfaction\*
- Marketing communication
- Risk management\*
- Working conditions in the supply chain
- Product information
- Product responsibility and safety\*
- Increasing generated economic value\*
- Legal compliance\*
- Local purchasing
- Fight against corruption\*



***Global Presence***

- Waste management\*
- Energy efficient and Environmentally friendly products\*
- Emission management\*
- Industrial collaborations\*
- Energy management\*
- Combating climate change\*
- Efficient use of resources\*
- Water management
- Environmental management in the supply chain
- Contribution to community development



***One Global Family***

- Fair working conditions\*
- Employee rights\*
- Employee engagement\*
- Equality at work
- Occupational health and safety\*
- Talent management\*

*The aspects marked with asterisk (\*) are material within and outside of (throughout various stages of business chain) our organization, while the other aspects are only material within our organization.*

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Goals identified in relation to sustainability priorities and furthering its performance in relation to these targets are issues of significance for Şişecam. In this regard, sustainability performance is monitored in accordance with the determined key performance indicators, while relevant standards are closely followed, , while the views of all stakeholder groups are actively taken into consideration. The realization in the reporting period of the targets set in this regard and the targets set for the forthcoming period are as follows:

Our Strategic Targets	Our Achievements in 2016	Our Targets for 2017
Ensuring market penetration and sustainable profitability abroad	We started production operations in the field of flat glass with the purpose of developing our operations in the EU economic market.	We plan to expand our operations in the region of North Africa.
Compliance with sustainability principles	We established Environment, Energy, CSR, OHS and Innovation subcommittees within the body of the Sustainability Committee, made action plans, and started implementation.	We will determine Sustainability Strategies correlated with the UN Sustainable Development Goals for Business Units.
Optimizing energy and natural resource consumption	We reduced specific energy consumption by 1% in all glass furnaces. Actions taken for energy efficiency are listed in the Sustainable Energy section of the Report.	We will reduce the specific energy consumption of all glass furnaces by 1% as against the 2016 index.
Improving environmental and waste management process	We maintained our works for recovering cullet within the scope of the Glass and Glass Again Project. Detailed information is provided in the Sustainable Environment section of the Report.	We will increase the rate of recycled glass from 19% to 45% in the following five-year period.
	Climate Change and Water Risks were assessed.	We will establish a system aimed at the on-line monitoring on Water Consumption.
	On-line monitoring system was established for NOx emissions of glass ovens.	We will start remedial works for reducing the NOx emissions of glass ovens.
Strengthening corporate and brand image	Çevre Sistemleri A.Ş. was founded to support the glass recycling industry.	We will establish the web-based Environmental Data Registry System.
	We renewed Group websites. Detailed information is provided in the Digitalization section of the Report.	We will complete the second phase of the Digital Transformation Project.
Enhancing employee satisfaction	We carried out several projects to ensure a social, comfortable and sustainable environment on the new Şişecam campus. Detailed information is provided in the One Global Family section of the Report.	We will conduct an employee satisfaction/ engagement survey, which is renewed every two years.
Preserving and improving the value of our corporate culture	Şişecam Academy was founded and our Glass Works Collection was rearranged to be publicly exhibited on the new campus. Detailed information is provided in the Employee Development section of the Report.	We will develop training programs within the scope of our Sustainability Approach
Improving production technologies and productivity by increasing national/international activity	In the reporting period, we cooperated with 19 universities and research institutions domestically and 12 internationally. Detailed information is provided in the Innovation section of the Report.	Increase our cooperation with universities and research institutions by 10% as against the 2016 index.



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## Stakeholder Engagement

We regularly share our performance regarding the sustainability priorities through our sustainability report. The feedbacks we receive are among the most important tools we rely on to further improve our performance. We maintain our dialogue with our stakeholders on different platforms and at varying frequencies as required by the communication type. In addition to these, all our stakeholders can communicate with us through all communication channels indicated on the corporate web site.

Our stakeholders vary among the Group companies. Yet, in consideration of our mutual interactions, our prioritized stakeholder group are employees, suppliers, customers, and public institutions.

### KEY STAKEHOLDER GROUPS AND ENGAGEMENT PLATFORMS

INTERNAL STAKEHOLDERS			
Stakeholder Group	Engagement Platforms	Frequency of Stakeholder Engagement	Evaluation of Engagement in the Reporting Period
Senior management	• Executive Board Meetings • Email communication	At least once a month	The Executive Board, including the Chief Corporate Development and Sustainability Officer, regularly meets throughout the year to assess various sustainability issues and opportunities. The strategic roadmap in sustainability issues and relevant activities are carried out under the leadership of the Chief Corporate Development and Sustainability Officer. Sustainability Committee is responsible for the implementation of works in relation to the determined sustainability priorities.
Employees	• Employee Satisfaction Survey • Suggestion and Idea Sharing Platforms • Employee Interviews • Seniority Incentive Award • Recognition and Reward System	Varies depending on the type of engagement	The most important asset of Şişecam is its employees. Şişecam companies are leading in their industry with regards to training and supporting their human resource.
Shareholders, analysts and investors	• General Assembly Meetings • Meetings with analysts and investors • Phone calls/teleconferences and email communication with investors • Periodically published informative reports (e.g. Annual Reports, CDP reports, earning and interim reports) • Social media • Investor feedbacks	Varies depending on the type of engagement	The Company, who is in constant communication with its shareholders and investors, fulfilled all requirements of Turkish laws during the reporting period.

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- DIGITALIZATION
- INNOVATION

**GLOBAL PRESENCE**

- FINANCIAL STABILITY
- SUSTAINABLE ENERGY
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**KEY STAKEHOLDER GROUPS AND ENGAGEMENT PLATFORMS**

EXTERNAL STAKEHOLDERS			
Stakeholder Group	Engagement Platforms	Frequency of Stakeholder Engagement	Evaluation of Engagement in the Reporting Period
Customers	Şişecam engages with its customers on the level of its business lines. Detailed information regarding customer engagement platforms can be found in the 2016 sustainability reports of Şişecam Group companies. However, the main tools of customer engagement include customer satisfaction surveys, social media, meetings and conferences, and feedbacks received via phone and email.	Continuous interaction by email, social media and phone, Unplanned meetings held as required	Şişecam is in constant communication with its customers as part of its business activities. There are several channels for customers to provide feedback regarding the environmental and social performance of the Company. Please refer to 2016 Sustainability Reports prepared for Şişecam Group companies for information regarding the stakeholder engagement approach in different business lines.
Public institutions / Other regulatory institutions	• Regular reporting • Meetings, forums and conferences • Press releases • One-on-one meetings	Continuous within the general course of regular business (e.g. communication by email, phone, or in person) or as required specifically	Şişecam places great emphasis on complying fully with laws and regulations in all its operations. For information regarding Corporate Governance at Şişecam please refer to the Corporate Governance section of the Sustainability Report.
Suppliers	The main suppliers of Şişecam are those providing services (such as electricity, water supply and cleaning works) for the Headquarters building in Istanbul. Besides, Şişecam Group companies have many different suppliers in relation to their production operations. Typical engagement methods with suppliers include • Daily workflow • Meetings • Email communication	Continuous within the general course of regular business (e.g. communication by email, phone, or in person) or as required specifically	Please refer to 2016 Sustainability Reports for Şişecam Group companies for information regarding the stakeholder engagement approach in different business lines.
Nongovernmental organizations	• Strategic collaborations • Events • Regular Meetings	At least once a month	Nongovernmental organizations are supported through joint projects conducted in social, economic and environmental issues.
Media	• Press conferences • Press releases • Interviews	At least once a month	Şişecam Group maintains regular communication with national and international media in order to raise awareness about the Company and deal with any queries.
Society	• Media	Varies depending on the type of engagement	Şişecam announces all of its activities through the media.

The expectations of our stakeholders regarding our major sustainability priorities for the reporting period are as follows:

CRITICAL CONCERN	STAKEHOLDER GROUP RAISING THE CONCERN	INFORMATION SOURCE REGARDING THE ACTION TAKEN
To report on our environmental impacts and performance	Customers, employees, investors, public institutions	Sustainability Reporting, Reports prepared for investors and financial institutions (IFC, EBRD), Environmental permits and reports
To report on carbon emissions	Customers, NGOs, investors	CDP reporting
To report on financial performance	Shareholders	Annual Report
To enhance employee motivation	Employees	"ŞİMDİ" ("NOW")social activity club events



# ***Becoming One of the Top 3 Players in the Global Market***



**BECOMING ONE OF THE TOP 3 PLAYERS IN THE GLOBAL MARKET**

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**We took the first steps towards becoming a global player with the visionary perspective adopted at our foundation. Following our focus on the global market and with the “The world is our market” vision that is adopted in 1960s, through investments expansion with overseas markets orientation, and production at world standards, we become the regional leader. Şişecam A.Ş.’s new target is to become one of the top three players in the global market.**

As of today, we rank third in glassware, fifth in glass packaging and flat glass, fourth in chromium acid production, and first in sodium dichromate and basic chromium sulfate. As of 2016, we are ranked as the first in flat glass, second in glassware and fifth in glass packaging production in Europe.

We ensure the sustainability of our success by combining robust corporate governance practices with modern systems. We ensure the efficiency of our operations by integrating our stakeholders in our operational geographies in our decision making processes. Additionally, we strive to further enhance our economical, social, and environmental performance on a global scale.

Operational excellence mainstreamed according with sustainability principles, constitutes the focal point of our business processes. Keeping our productivity at highest level by effectively managing our business processes with a flexible and solution-oriented structure, constitutes the basis of our understanding of sustainable growth. With this approach, the most significant requirements of today’s business world and competitiveness, namely digitalization and innovation, are among the key managerial approaches upon which we base our goal of becoming one of the top three players in the global market.

### **Dynamic Structure**

At Şişecam Group, strong corporate management practices are brought together with sustainable practices and systems and processes are tackled with the dynamics of risk management. All our operations are conducted in light of our Code of Conduct. The expectations of our stakeholders are collected through various communication channels and internalized in our decision making processes. By doing so we continuously monitor the economic, social and environmental sustainability of all Group operations and strive to enhance performance.



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## Transparent and Integrated Management

Transparency and accountability based management is among the most significant values adopted and implemented by our company, which also defines our business manner. All of our practices are transparently shared for the views of our stakeholders annually through the “Corporate Governance Principles Compliance Report” which is prepared within the scope of relevant Capital Market Board (CMB) regulations.

Şişecam emphasizes corporate governance principles and continuously and dynamically manages related processes. Our Corporate Governance Score of 2016 was evaluated as 94.41, which is corresponds almost 1% improvement compared to the 2015 score, which was 93.53. In order to further improve this success maintaining and advancing within the principles of honesty, transparency, objectivity, and compliance with laws and regulations are among our immutable objectives as Şişecam Group.



The “Corporate Governance Rating Report” of Türkiye Şişe ve Cam Fabrikaları A.Ş. can be found in the Investor Relations section on our corporate website.

Şişecam Board of Directors, which was formed in conformity with the Corporate Governance Principles, is composed of nine members. The board of directors appropriately maintains the balance of risk, growth, and revenue, primarily looks after the long-termed interests of the company, and manages and represents the company with these principles. Nonexecutive members constitute the majority of the members of the Board of Directors. The General Manager participates in the Board of Directors as Executive Member. The offices of the Chairman of the Board of Directors and the General Manager are conducted by different individuals. The Board of

Directors includes three independent members in compliance with the criteria of independency prescribed by the Capital Markets Board Corporate Governance Principles.



You can access detailed information regarding the Board of Directors Committees and Their Working Principles in the Investor Relations section on our corporate website.

## Risk Management and Internal Audit

Şişecam Group has structured its risk management and internal audit activities under the Parent Company in order to provide adequate risk assurance for its stakeholders. The activities are conducted under the Parent Company Board of Directors in coordination with CEOs who is responsible to manage the core operational areas of the Group; the results of the regular and planned meetings held by the “Committee for the Early Determination of Risk”, “Audit Committee”, and “Corporate Governance Committee” are reported to the Boards of Directors in line with corporate regulations. The meeting agendas of the “Committee for the Early Determination of Risk” covers matters related to “the early determination and management of internal and external risks that might endanger corporate operations and the revision of risk management systems” in minimum.

At Şişecam Group, preparedness for situations that might interrupt operations, minimization of the losses of customers, employees, suppliers, and other stakeholders, and protection of the tangible and intangible assets and reputation of the Group, as well as the environment are among fundamental priorities for risks analysis. Policies and procedures formed in line with the mentioned principles, aiming at maintaining the continuity of business processes, were announced across the Group.



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At Şişecam Group, risk management activities are pursued based on corporate risk management principles and approached from a holistic and proactive perspective. In 2016, the Group focused on enhancing the efficiency of its risk management processes, in order to effectively manage the uncertainties created by global developments, and extend the risk assurance for its stakeholders in the challenging domestic and international competition environments emerging in consequence of said developments. The scope of the integrated risk management platform MicroScope, was extended allowing effective coordination between the risk management and insurance functions. Additional efforts on-site was implemented to improve effective risk management and to internalize of risk culture at corporate and field operations levels.

### Business Ethics

The “Code of Conduct” is the guideline for responsible business manner at Şişecam Group. Şişecam Group’s Code of Conduct, institutionalized in 2010, was evaluated in accordance with corporate needs and updated in 2013. The Code of Conduct structured within the context of the main principles of honesty, transparency, impartiality, confidentiality, and compliance with laws and regulations, is the guideline that directs the relations of all Group employees with customers, suppliers, shareholders, and other stakeholders.

In 2014, an “Ethics Board” was established with the purpose of ensuring the compliance of the Group operations with the Code of Conduct, evaluating practices inconsistent with the Code of Conduct, generalizing the culture of ethics across the Group, and enhancing the level of awareness and consciousness in this regard. The Ethics Board works under the Corporate Management Committee.

Responsibilities of the senior management, managers, and all employees in relation to the effective implementation of the code across the Group have been determined within the scope of Şişecam Group Code of Conduct. The Code of Conduct also sets forth principles regarding the use of the Group resources and information, conflicts of interest, and relations with other organizations. As part of the Code of Conduct, it details implementation

modalities of the Group regulations, procedures, and instructions. The Code of Conduct is essential to manage and providing guiding principles to administer the sanctions that may be imposed in cases of disorderly conduct, including cancellation of labor contract etc.

The corporate governance practices of the company are structured to allow for all stakeholders, primarily employees, to convey their concerns regarding processes that are legally or ethically inappropriate to the management. Employees can communicate processes that are against the legislation and ethically inappropriate to the Audit Committee and the Internal Audit Unit. An ethics report line was formed for stakeholders to convey processes deemed to be conflicting with laws or the company’s ethical values to the Audit Committee. Related complaints can also be emailed to etik@sisecam.com.



You can access detailed information regarding the Code of Conduct under the Corporate Governance tab of the Investor Relations section of our corporate website.

### Fight Against Corruption

The “Anti-Bribery and Corruption Policy” aims at clearly and transparently presenting the commitments of Şişecam Group in the fight against bribery and corruption and its position on this subject, as well as protecting the corporate image. This policy, which is an integral part of the Group’s Code of Conduct, is intended to provide the necessary information for the prevention of bribery and corruption in all Group operations and to determine responsibilities and rules in this subject.



You can access detailed information regarding our Anti-Bribery and Corruption Policy under the Corporate Governance tab of the Investor Relations section on our corporate website.

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## Operational Excellence

**Operational excellence constitutes the focal point of our business processes. Keeping our productivity at the highest levels, by effectively managing our business processes with a flexible and solution oriented structure, constitutes the basis of our understanding of sustainable growth. In this regard, ensuring that our products and services meet the expectations of our stakeholders, acting with the awareness of our responsibilities across our value chain without conceding on quality, and expanding the value we create throughout our value chain are the main components of our operational excellence approach.**



### TSE and ŞİŞECAM Cooperation

With the protocol signed between Turkish Standards Institute (TSE) and Şişecam Group in 2016, besides the mutual sharing of Şişecam accumulation and TSE competence, all laboratories within the body of Şişecam, primarily Şişecam Science and Technology Center in Gebze, will be opened to the use of TSE. The standardization studies of TSE in this field will be supported with the knowhow we possess in the glass industry. Also, various panels, seminars and conferences will be organized together with TSE in order to promote the use of standards in the industry.

Manufacturing our products according to national and international standards and ensuring to meet the expectations of our customers are the most important components of our operational excellence approach. In this scope, our products are offered to our customers in compliance with all relevant health and safety standards and labeled in accordance with legal regulations.

While conducting our activities in different channels, we also inform our customers regarding our products and issues related to our products as well. In addition to the product information on the webpages of our Group companies, we extensively inform our customers and related stakeholder about our products through various engagement channels such as social media, digital channels, strategic partnerships, one-to-one interviews, conferences, seminars, workshops, focus group studies, surveys, and similar platforms. Beside providing information through different channels, stakeholder expectations and views are also collected through various channels and actively used to develop our products.

**Keeping our productivity at the highest levels, by effectively managing our business processes with a flexible and solution oriented structure, constitutes the basis of our understanding of sustainable growth.**

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Manufacturing our products according to national and international standards and ensuring they meet the expectations of our customers are the most important components of our operational excellence approach.

**Management Systems of Operations in Turkey**

ŞİŞECAM FLAT GLASS					
	ISO 9001	ISO 14001	ISO 50001	OHSAS 18001	OTHERS
Trakya Cam Sanayi A.Ş. Trakya Plant	✓	✓	✓	✓	ISO 27001
Trakya Cam Sanayi A.Ş. Mersin Plant	✓	✓	✓	✓	ISO 27001
Trakya Cam Sanayi A.Ş. Otocam Plant	✓	✓	✓	✓	ISO 27001, ISO 16949
Trakya Yenişehir Cam Sanayi A.Ş.	✓	✓	✓	✓	
Trakya Polatlı Cam Sanayi A.Ş.	✓	✓	✓	✓	
ŞİŞECAM GLASSWARE					
	ISO 9001	ISO 14001	ISO 50001	OHSAS 18001	OTHERS
Paşabahçe Cam Sanayi A.Ş. Kırklareli Plant	✓	✓	✓	✓	ISO 27001
Paşabahçe Cam Sanayi A.Ş. Mersin Plant	✓	✓	✓	✓	ISO 27001, ISO 22001
Paşabahçe Cam Sanayi A.Ş. Eskişehir Plant	✓	✓	✓	✓	ISO 27001, ISO 22001
Denizli Cam Sanayi A.Ş.	✓	✓		✓	ISO 27001
Camiş Ambalaj Sanayi A.Ş. Tuzla Plant	✓	✓	✓	✓	BRC 6, ISO 12647-8
ŞİŞECAM GLASS PACKAGING					
	ISO 9001	ISO 14001	ISO 50001	OHSAS 18001	OTHERS
Anadolu Cam Sanayii A.Ş. Mersin Plant	✓	✓	✓	✓	FSSC 22000, ISO 27001
Anadolu Cam Yenişehir Sanayi A.Ş.	✓	✓	✓	✓	FSSC 22000, ISO 27001
Anadolu Cam Eskişehir Sanayi A.Ş.	✓	✓	✓	✓	ISO 15378, ISO 10002
ŞİŞECAM CHEMICALS					
	ISO 9001	ISO 14001	ISO 50001	OHSAS 18001	OTHERS
Soda Sanayii A.Ş. Soda Plant	✓	✓	✓	✓	ISO 22000, ISO 10002
Soda Sanayii A.Ş. Kromsan Plant	✓	✓	✓	✓	ISO 22000, ISO 10002
Cam Elyaf Sanayi A.Ş.	✓	✓	✓	✓	
Camiş Madencilik A.Ş.	✓	✓	✓	✓	
CAMIŞ ELEKTRİK A.Ş.					
	ISO 9001	ISO 14001	ISO 50001	OHSAS 18001	OTHERS
Trakya Plant	✓	✓	✓	✓	

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## Informative Practices on Product and Product Selection



**Glass Consultancy-** Şişecam Flat Glass develops recommendations, with its experienced teams, in terms of project needs by providing glass consultancy for project decision makers, such as architects, siding consultants, investors

and contractors in line with projects. In 2016, 1,700 sector representatives were informed regarding 2,500 projects, 1,200 interviews made with architectural offices, construction and siding companies to promote our new products and recommendations were made to strengthen their projects as well.



**Performance Calculator-** In order to choose the right glass for the projects, industry professionals (architects, engineers, construction companies, verification companies, Isicam Authorized Manufacturers) should have a right information

on the performance values of our products. In order to ensure rapid and easy access to the mentioned performance values, the Performance Calculator is made publicly available on Şişecam Flat Glass website both in Turkish and in English. In 2016, the performance calculator was also made available in Russian and Bulgarian to expand its use in the Russian and Bulgarian markets.



**Mobile Application - Isicam Selection Wizard-** "Isicam Selection Wizard" application was launched for the use of end users, decision makers and influencers playing an active role in glass selection processes. With the application, that can

be downloaded for iOS, Android applications, or online use, users can select the most convenient Isicam product for their location and needs by answering a few simple questions about their expectations from the product. The application was downloaded 10,000 times in 2016.

## Productivity

Global competition gives more emphasis on productivity each day. In this regard, as Şişecam Group, we work to implement practices that will increase the productivity of our businesses, and processes to transform these practices into a business culture.

"Lean Transformation Program", a cultural and managerial change program, was launched in 2016 with the slogan "human first" with the purpose of minimizing sources of loss with no value for our customers from our processes, thereby reducing the total flow time. The program is designed and developed in relation with the initiatives of Developing Lean Management Processes and Lean Management Culture, which are also part of Şişecam Group Strategy Map.

Our objective of the lean transformation journey is to constantly enhance our lean development level in the areas of learning organization, team work - problem solving, standard work, visual management - 5S, on-site quality, autonomous management, constant flow and pull system, organizational leanness, lean support processes, product-process development and value chain management.

Lean Transformation requires a continuous improvement approach in line with balanced targets aligned with human, quality, delivery speed and cost perspectives in all processes. Actions taken in relation to targets are reviewed in weekly and monthly management cockpit meetings, monitored their impact.

Lean 6 Sigma practices, which is a data-based analytical decision making and problem solving methodology developed to eliminate the error rate in processes, increase productivity, identify factors impacting the business process, ensure rapid improvement, and maximize customer satisfaction, are also actively used within the Group as a productivity enhancing process.

**Our Targets: Zero work accident, timely, accurate, zero stop first time...**

**How? 5S, kaizen, continuous flow with the pull principle, autonomous team structure, fighting dissipation...**

**Results: Reduction in costs and stocks, speed and flexibility, improvement in cash flow...**

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**Şişecam Project Management Office**

While Şişecam Group business units continue managing their projects with teams within their own units, in 2016 the Project Management Office (PYO) was established to centrally manage project portfolios. This entitles projects or programs to be managed in line with business units' requirements, as well as to provide in-house project management consultancy. Project management flow and competence matrix were formed with Şişecam Project Management Methodology, which was prepared on the basis of PMI (Project Management Institute) standards. In 2016, Şişecam Group Project Management System PROJEM was launched.

It is projected for all project requests of Şişecam Group to be collected through PROJEM to ensure integration and synergy with other units, such as the human resources performance management system to be completed by the end of 2017. Also, it is planned for all Şişecam Group employees to participate in project cycle management by the end of 2018.

**Supply Chain Management**

We regard productivity as an important element of sustainable value generation not only as a part of our processes but also the most important component of our value chain, primarily supply chain. In this regard, we expect our values and sustainability approach to be shared and adopted by our supply chain. We monitor the social, economic, and environmental performance of our suppliers in this regard and expect them to carry their performance further through practices.

At Şişecam Group, supply chain projects are centrally managed and the projects aim to increase financial transparency and traceability. Supply Chain Cockpit System, an application developed in this context, allows for analyzing the supply chain costs of Şişecam Business Units' companies and for the integrated management of corporate resource planning. Supply Chain supervisors apply their SCOR (Supply Chain Operations Reference) based performance metrics on the Cockpit Platform. With this centralized tool cost minimization, logistics savings and communication within the Group is enhanced.

The target of efficiency projects in the supply chain is to reduce environmental impacts and ensure more efficient use of raw materials, in addition to financial gains. As part of the "Corporate Transportation Project" actualized in this direction, our four business units' overseas trailer truck, container and container preliminary shipments from Turkey were based on a common contract in order to benefit from the economic of scale, while their consolidation and purchase by joint tender was performed in the reporting period. In 2016, 6.5% transportation saving was achieved that resulted in GHG emission reduction.



In the reporting period, technical support was provided for the trial production of frits used in colored glass production at Denizli Glass Plant; frit production trials were performed with local suppliers with the objective to identify alternatives for product diversity, production efficiency and reducing stocking costs. Once the laboratory tests trial of the frit procured is will be accepted, the approach will be implemented performed under real life working conditions.



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## Digitalization

**As Şişecam Group, we internalize technology in all of our processes and business manners while befitting the requirements of the time. Thus, we ensure the integration of industry and informational technologies, while taking robust steps in line with the understanding of continuous development. In this regard, we have also launched several projects in the reporting period.**

Information Technologies, which prioritizes the creation of value within the Group, identified its strategic focus areas and continued actualizing its portfolio befitting the expectations and requirements of Business Units and compatible with Şişecam and Information Technologies strategies, in 2016. In the reporting period, a study was engaged in order to determine the Technology Strategy of Şişecam Group. International technological trends, innovations, expectations and requirements of Groups' were examined to outline the Şişecam Technology Strategy Roadmap. As a result of the studies, "Smart, Digital, Productive" and "IT 2.0" Technology Strategies were

established for Şişecam Group and IT, respectively. They were shared with the executive management, and "Information Technologies 2017-2021 Strategies" were presented.

The "Smart Şişecam" approach aims the collection, analysis and efficient storage of qualified data, whose ownership is identified, in the desired data pattern and for estimation and modelling for the future. Through the Group Strategic Performance Indicators study that was conducted in this context Group Financial KPI performances are monitored on a single cockpit system. With the Generalization of Business Intelligence Practices, detailed reports were prepared to business units through a visual interface.

The "Digital Şişecam" approach aims the real-time digitalization of sales, supply, production, delivery, financial, and quality processes and Şişecam with the Industry 4.0 vision is realized. In the scope of the practice, a wide ranged roadmap, from driverless forklifts to smart robots, from augmented reality

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## Şişecam Group Digital Transformation Project

With the project, all assets within the body of the Group were managed with an integrated and strategic approach. In this regard, the first initiative to be managed in terms of customer reach out and user experience was the update of Group websites with user experience oriented designs and contents in parallel with current trends. As part of the 46-week project that was completed in 2016, 54 websites within the Group were consolidated under 15 websites. Thus, it ensured that the websites have the most appropriate content and an optimized interaction design. Websites achieved an innovative and functional structure with modern design styles keeping up with the trends and an SEO compatible development approach. As part of the program, 11 different language options were offered including Turkish, English, German, Russian, Italian, Bulgarian, Bosnian, Slovak, Georgian, Hungarian, and Chinese.

applications to preventive care, from Internet of Things to product simulations, was targeted. In 2016, studies in this regard were engaged with the support of senior management, projects and processes selected according to resources and priorities were carried to the digital environment.

The “Productive Şişecam” approach aims for a value oriented productivity, where the needs of business units are more closely monitored, services are offered continuously, infrastructure and practices are consolidated through lean

processes, and information is accessible through user friendly, flexible and easy to use interfaces. In this context, various projects were managed in production environment in 2016, while project developments in terms of innovation are continued.

The “IT 2.0” strategy aims the expanding of the ‘possible’ culture , a second generation of Information Technologies that engages in Technology and IT communication through the IT Communication Program, which is more rapid and flexible, establishes closer relations with our stakeholders. It measures business unit satisfaction and user experience closely, emphasizes continuous service and business continuity through mobile solutions, ensures cybersecurity with its Bi-Modal IT approach, actualized for sharing technology and IT performance with business units which brings the contribution of IT to the group, and creates value for business units. In this regard, various projects were actualized in 2016 and the IT 2.0 transition will be effectively evident within the context of the 2017-2021 Strategic Roadmap.

Another concept that needs to be managed actively together with the concept of digitalization is information confidentiality. The security of both customer information and Group information are selectively managed by Şişecam Group within the context of digitalization. In this regard, we continuously enhance our employees’ level of awareness and practice by organizing trainings aimed at protecting both corporate and customer information. Besides, studies in relation to ISO 27001 Information Security Management System at our plants were completed in order to ensure the security of informational assets and the business continuity in our operations, in 2016. In the reporting period, there was no complaints conveyed to us regarding any incidents of customer confidentiality violation.

**The “Digital Şişecam” approach aims the real-time digitalization of sales, supply, production, delivery, financial, and quality processes and Şişecam with the Industry 4.0 vision is realized.**

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## Innovation

Research and Technological Development (R&TD) studies and value added innovative products are important components of the global competitive power of Şişecam. Thanks to the practices implemented and products produced in this context, Şişecam is a significant, globally competitive player.

Corporate R&TD activities are conducted together with regional laboratories and Business Groups around Şişecam Science and Technology Center. Şişecam Science and Technology Center is the largest and most competent glass science and technology laboratory in Turkey and among numbered laboratories in this field in Europe. The Center actively benefits from "R&D Center" incentives within the context of the law numbered 5746. At the center, 151 competent researchers, of which 37% hold graduate degrees, work in 27 specialized laboratories and offices, whose equipment is constantly updated and reinforced. Şişecam Science and Technology Center was ranked 8<sup>th</sup> among 127 R&D Centers in the R&D Performance Index ranking, prepared by the Turkish Ministry of Science, Industry and Technology in 2016. The

center actively pursues participation and applications for internationally and nationally supported projects as part of its works. In 2016, four patents were registered and 29 patent applications were filed.

In 2016, 147 Şişecam-supported projects were carried out within the body of the Chief of Research and Technological Development, while 126 of these were completed. In the reporting period, cooperation with 19 universities and research institutions domestically and 12 internationally is managed. In addition, Şişecam started the "Glass Science and Technology Master's Program" through industry-university cooperation for the first time in our country together with Gebze Technical University in order to supply qualified human resource for the glass industry. 44 papers were presented at national and international events and three articles were published in the international peer-reviewed Journal of Sol-Gel Science and Technology, Kanch, and Energy Procedia. "Şişecam Panels" were held at 4 national congresses and conferences; a total of 22 presentations were made.



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**Innovation Week**

Şişecam Group offered its innovative products developed with the latest technologies to the views of visitors at the Turkish Innovation Week held for the fifth time at Istanbul Congress Center, organized by the Turkish Exporters' Assembly. Attendants were also informed in various subjects, such as characteristics that make glass packaging unique, safe packaging and glass packaging manufacturing techniques.

**Innovative Products**

The high performance "Tempered Solar Low-E Glass" product, which provides heat insulation and sunlight control, to be used at the new airport project in Istanbul, and the "Tempered Solar Glass" product, which provide active sunlight control; to be used in areas, such as offices, malls, museums, roof skylights, in warm climate regions; were developed.

The new "Privacy" product, which allows the control of the heat and light entering vehicles, was developed for the automotive sector; studies for developing

hydrophobic and color changing electrochromic glasses were successfully continued.

Colored Organic Dyed Bottle production, which is manufactured with transparent organic dye technology that supports the durability of pasteurized products, also took its place among our environmentally friendly glass packaging technologies.

The special dyes developed by Şişecam Science and Technology Center directed the pattern designs made this year. The After Glow collection, which was developed by using special phosphorescent dyes, collects daylight to glow in blue and green in dark environments.

"Colored veined, marble effect" product trial production for pyrex was successfully performed and a patent application was filed was for the "snow effect red" which has already been introduced to the market.

Experimental studies as well as pilot production studies are pursued for "transparent glass ceramic" that can be directly exposed to fire.

Within the context of the special dye systems developed by Şişecam Science and Technology Center, Midas tea cups, which have patterns that change color when filled with a dark colored drink, were produced and commercialized. Domestic and international patent applications were filed for this discovery, which is a first in the world. It was exhibited at Ambiente 2017, one of the most important fairs of the industry, and attracted great attention. In addition, "Midas", "Thermo", "Insert Glass", "Glassify", "Light'n Motion", "Pyrex with Silicone" and "Tumbler with Silicone", "Afterglow" products were exhibited in the "Innovation Zone".



# *Global Presence*





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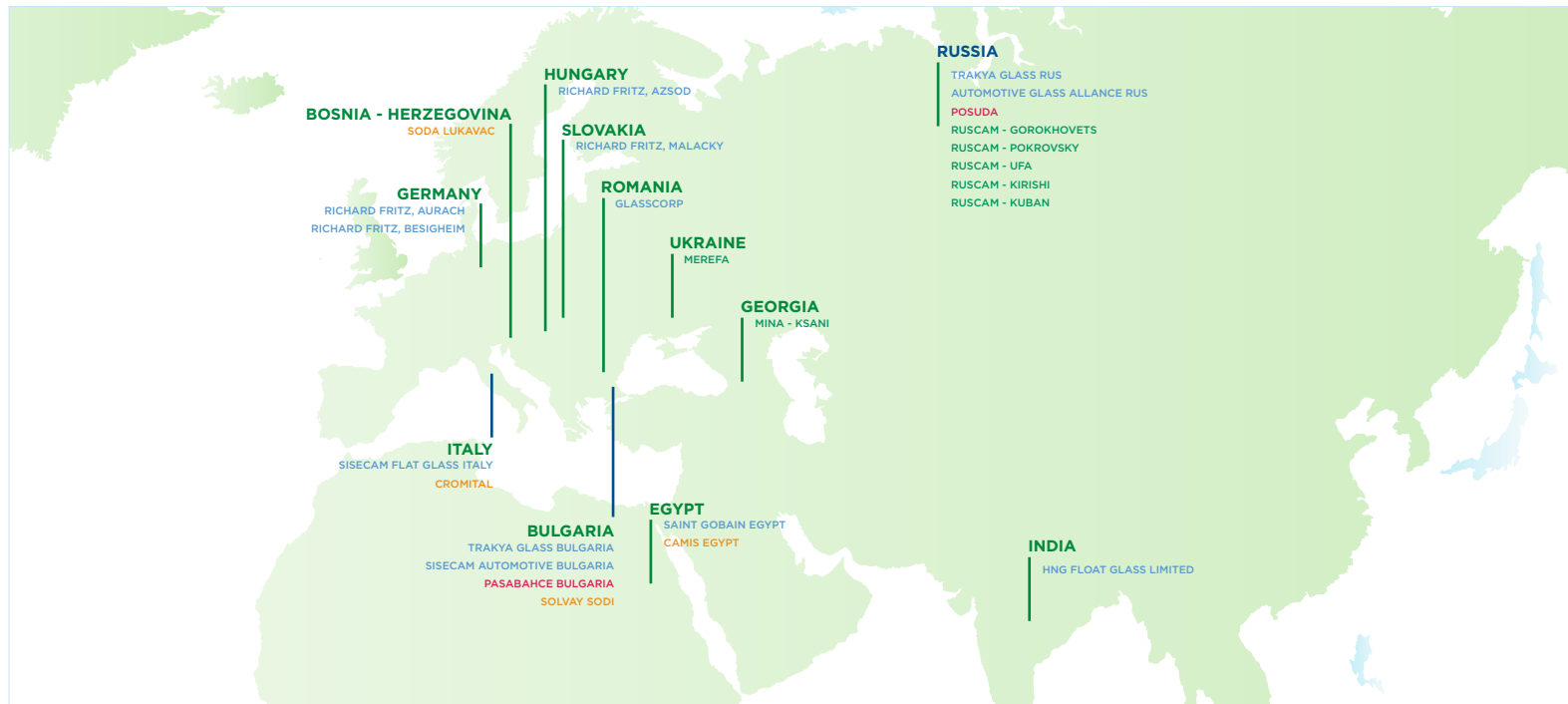
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**We are a Group of international scale with 44 production facilities in 13 countries and sales reaching out to 150 countries.**

Sustainable profitability is of critical importance for the increasing maintenance of the value we create with our products. For this reason, as Şişecam Group, we aim to continue implementing investor relations and corporate governance practices at international standards with the vision and responsibility of being a global company and to consistently increase share values. In this regard, we engage in transparent, proactive, rapid sharing with our investors and we organize activities to introduce our Group to relevant stakeholder groups.

As a global player, we act with the awareness of our share of the responsibility in relation to the common problems of our world. Since we

operate in an energy intense industry, we give special emphasis on the issues of combating climate change and efficient use of natural resources. We manage our operations and carry out projects with the awareness of the environmental impacts generated as a result of our processes and by actualizing practices to limit this impact . In this context, we apply national and international environmental management standards, we maintain our operations with the understanding of full compliance with legal regulations. We strive to enhance the value we create to global levels by ensuring the distribution of the value we create to our Group companies.

As required by our understanding of corporate citizenship, we strive to extend the value we create by carrying out social responsibility projects in many fields in order to add value to social life in the geographies we operate globally.

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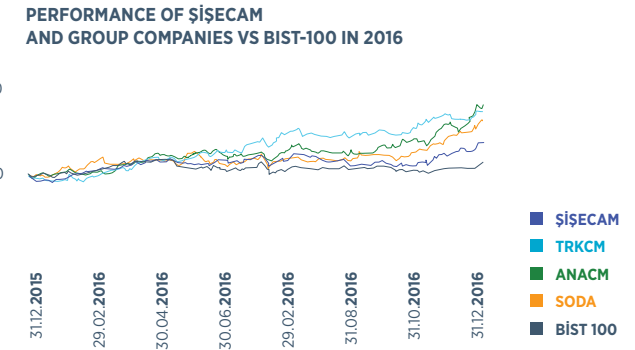
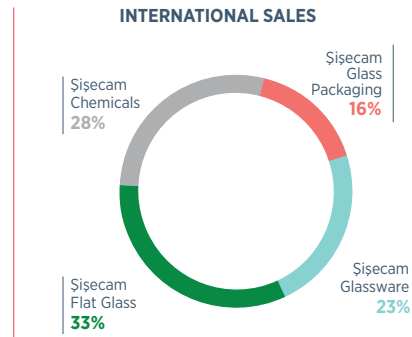
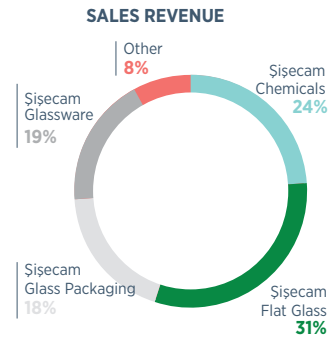
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# Financial Stability

**As a global player, Şişecam Group aims for the financial value it creates to increase sustainably and continuously through the robust corporate governance practices.**

In 2016, BIST Holding Index increased in value by 13%, BIST 100 Index by 9% and BIST 30 Index by 7%. In the same period, Şişecam shares increased by 34%, which is above the market.

INVESTMENTS (TRY M)	PROFIT FOR THE PERIOD (TRY M)	TOTAL ASSETS (TRY M)	EQUITY (TRY M)	ABITDA (TRY M)
2014 1,156	2014 420	2014 12,350	2014 7,239	2014 1,365
2015 1,106	2015 805	2015 15,663	2015 9,503	2015 1,764
2016 1,158	2016 1,040	2016 19,152	2016 11,330	2016 2,120



In the reporting period, more than 300 meetings were held with investors through telephone, one-on-one meetings, roadshow, and conferences, while nearly 90 analyst reports were published with analysts reporting on publicly traded companies.

While creating sustainable value for our stakeholders with our operations, with our strong financial structure we aim to

- Consolidate leadership in its business units in Turkey and other operational regions,
  - Ensure sustainable growth and profitability through consistent strategies aimed at increasing share value,
  - Increase resilience against economic fluctuations and probable risks through a balance product portfolio and operations in different regions,
  - Maintain results befitting its 81-year of history and experience filled with success through organic and inorganic growth, restructuring and collaborations with international companies.
- for investors.



## Export Champions Award

Şişecam Group was presented the “Export Leader” award in the “Cement, Glass, Ceramic and Soil Products” category at the 23<sup>rd</sup> Regular General Assembly and Export Champions Award Ceremony of the Turkish Exporters’ Assembly.

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## Sustainable Energy

**As Şişecam Group, we operate in energy intensive sectors. For this reason, the efficient use of energy, ensuring continuous energy supply in most effective manner, the constant review of energy related risks and opportunities, and the management of operations in this direction are of great significance to our Group.**

Regular and high capacity energy supply is critical for the continuous supply and preservation of the high temperatures needed in our glass and soda

production processes. For this reason, energy supply and cost issues are of great importance for the sustainability of production operations. The purpose of Şişecam Enerji A.Ş., which centrally conducts the energy operations of Şişecam, is to supply electricity and natural gas to meet the energy demand from its own resources or by making agreements with other suppliers in the market.

As Şişecam energy efficiency and renewable energy alternatives are identified to enable sustainable use of energy in our operations.

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## Energy and Emission Management

Reducing energy consumption and emissions in our operations while improving efficiency and quality in production constitutes our fundamental approach in the area of energy and emission management. In this regard, we manage our operations on the basis of international energy management standards, we actively monitor our energy consumption, and we implement energy efficiency solutions. With the awareness of energy consumption related GHG emission's on climate change continuous efforts are made to monitor and reduce operation related GHG emissions which is managed under the supervision of Şişecam Corporate Development and Sustainability Presidency, Energy Efficiency Management unit. To ensure on – field management, every production plan employs is at least one Energy Responsible and Environmental Officer or Environmental Management Unit at every production plant. A significant majority of our production facilities hold ISO 50001 Energy Management System certification as well.

Energy audits, an important tool in assessing energy efficiency performance, were completed for all domestic operations in the reporting period. Audits for plants outside Turkey are projected to be completed in between 2017 and 2018. Saving opportunities identified during energy audits are planned and necessary investments are made. Within the context of reducing energy consumption and greenhouse gas emissions, projects within the scope of waste heat recovery, new glass furnace designs, modelling studies, and field applications are prioritized.



### Sustainable Energy Measurement and Tracking System

By means of the on line energy monitoring system (SEOIS), which was established in line with our global targets, main energy consumption items at 16 facilities instantaneously monitored and facilities can be compared based on the energy consumption at Headquarters. With the instant measurements, a significant database is generated in relation to energy consumption which allows on line system failures and/or low performance monitoring and requesting immediate remediation to ensure optimum performance and productivity.

### ENERGY CONSUMPTION AMOUNT BY YEARS (GJ)

2013	54,233,800
2014	56,277,700
2015	53,610,400
2016	55,463,400

### Energy Consumption Values by Source (GJ)

	Natural Gas	LPG	Electricity	Anthracite	Other	TOTAL
2013	46,871,900	42,000	3,934,600	3,348,800	36,500	54,233,800
2014	48,940,700	39,700	4,010,600	3,267,300	19,400	56,277,700
2015	46,429,900	44,700	3,863,600	3,203,100	69,200	53,610,400
2016	46,943,100	27,700	3,917,700	4,497,700	77,200	55,463,400

### Total Energy Consumption in 2016 by Business Fields (GJ)

	Natural Gas	LPG	Electricity	Anthracite	Other
FLAT GLASS	11,372,500	0	1,226,700	0	3,400
GLASS PACKAGING	5,887,100	0	1,199,200	0	1,200
GLASSWARE	4,237,400	27,700	751,100	0	31,300
CHEMICALS	24,127,000	0	723,300	4,497,700	41,300
CAMIŞ ELECTRICITY TRAKYA	1,319,200	0	17,400	0	0
ŞİSECAM GROUP	46,943,100	27,700	3,917,700	4,497,700	77,200

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Our energy consumption amount in the reporting period increased by 3.45% compared to 2015, resulted from the increase in glass production capacity, production amount and energy requirement.

A total of 590,700 GJ of energy savings was achieved and 25,800 tCO<sub>2</sub> of emission was prevented through energy savings projects we carried out in the reporting period.



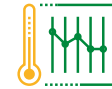
### ORC Waste Heat Recovery

“Organic Rankine Cycle (ORC) Waste Heat Recovery (WHR)” technology was approved as the most suitable waste heat recovery technologies and it was decided to be implemented in 3 plants with glass melting processes.

Trakya Glass Mersin ORC waste heat recovery (WHR) facility, which has the highest energy recovery potential, was completed in 2016. In December 2016, the preliminary tests of the plants were performed with a potential of 4.2 MWh electricity generation. The maximum electricity production capacity of this facility is 4.82 MWh. With the waste heat recovery implemented at the factories, the electricity demand supplied from grid will be reduced by around 35-40% annually. ORC WHR at its maximum capacity results in a 16,500 tons of CO<sub>2</sub> annual reduction.

The 6 MW capacity roof-type solar power panel project, for which contracts were signed within the scope of renewable energy resource use opportunities, is planned to be in place and functional by end of 2017, which will also contribute to the GHG emission reduction of the company.

GHG emission values are annually disclosed to our stakeholders within the scope of the Carbon Disclosure Project (CDP). In 2016, the total amount of Scope I and Scope II emissions generated by our operations was at the level of 4,082,300 tons CO<sub>2</sub>.



### Combating Climate Change

Şişecam’s Glass Plants in Turkey, contributed to combat climate change by reducing its specific energy by five times more than the 2016 target, which was 1%. Therefore, specific greenhouse gas emissions are reduced by 5%. Additionally, we are also collaborate with Ministries and actively contributing in infrastructure projects in Turkey in order to manage and mitigate production sourced greenhouse gas emissions.

As Şişecam Group, we have been participating in CDP Climate Change program since 2011 and CDP Supply Chain program since 2012. Şişecam was one of the 50 companies joining the platform from Turkey in 2016. As part of the project, performance information and information including relevant strategies, risk and opportunity analyses in relation to the carbon emissions caused by the operations of Şişecam Group in Turkey and Bulgaria are transparently disclosed to the public.



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## Sustainable Environment

**We aim to leave a habitable world for future generations, while striving to minimize environmental impacts generated by our operations.**

By doing so, we focus on the efficient use of natural resources in our production processes, we reduce wastes at the source, we carry our effective water management practices and we design products with reduced environmental impact. We work to improve our environmental sustainability performance in line with our fundamental strategic approach, while considerably reducing our operational costs as well.

We have integrated our environmental sustainability approach to all stages of our business processes. We conduct our environmental protection activities within the scope of the Environmental Management System established in all our operations in Turkey; in this context we rely on international standards, such as ISO 9001 Quality Management System, ISO 14001 Environmental

Management System and ISO 50001 Energy Management System. We carry out effective communication, auditing, and reporting practices with a process through a multilayered structure from Şişecam senior management to the level of plant and subcontractor; we ensure our environmental performance through corrective and preventive action plans we form.

### Efficient Use Of Resources

The approach to reduce negative environmental impact by making efficient use of natural resources in the production process is increasingly gaining importance. With the awareness of this importance we are conducting many studies in relation to our operations.

As Şişecam Group, our water management approach is based on ensuring the efficient use of water and preserving underground water resources. Wastewaters generated by production or household use are treated if

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necessary and discharged to the receiving environment in compliance with the limit values determined by relevant environmental regulations.

In 2016, a total of 29,341,700 m<sup>3</sup> of water was used, 8,840,700 m<sup>3</sup> of water was discharged in the production operations of Şişecam Group.

The waste management approach of Şişecam Group encompasses comprehensive practices supporting the reduction of waste at the source, recycling and reuse. At Şişecam Group, 99% of total generated wastes consist of nonhazardous wastes. In this regard, all recyclable wastes were treated at recycling facilities and reintroduced to the production line in 2016. Other wastes were transparently and responsibly sent to facilities with the required certification and licenses.

In 2016, Şişecam ensured the collection and recovery of 52% of the packaging material of products put on the market during the previous year.



### A First in the World from Şişecam and EBRD

In the reporting period, Şişecam Group and European Bank for Reconstruction and Development (EBRD) joined their forces to lead the industrialization of the glass recycling sector in Turkey.

As part of the project, a new company was founded under the name “Şişecam Çevre Sistemleri A.Ş.” (Şişecam Environmental Systems Inc.) to ensure knowhow transfer to the sector besides the financial support that will accelerate the modernization of glass waste collection and recycling companies. As part of the project, the glass recycling rate is aimed to be increased from 19% to 45% in the next 5 years, while the amount of recycled glass is aimed to be tripled. By constructing a sustainable glass recycling system, carbon emissions causing greenhouse effect will be reduced and the contribution made to the national economy will increase incrementally with the energy savings achieved.

Over 13,000 tons of paper, cardboard, plastic and wood was recycled. For this purpose, in addition to the recycling projects realized by the contracted authorized organization, training, support and awareness activities devoted to students were carried out, also. As part of the “Glass and Glass Again” Project which is managed by Şişecam since 2011 as one of the most comprehensive sustainability and social responsibility projects of Turkey, 175 district municipalities in 22 provinces were cooperated with and 17,400 glass banks were offered for use. In this regard, thanks to the recycled glasses;

- 740,000 tons of glass was prevented from going to waste,
- Energy savings was achieved, equivalent to the heating and hot water need of 31,100 homes
- Carbon dioxide emissions were avoided equivalent to the removal of 266,500 cars from traffic,
- Carbon dioxide emissions were prevented equivalent to that cleaned by 22,860,000 trees

We focus on the efficient use of natural resources in our production processes, we reduce wastes at the source, we carry our effective water management practices and we design products with reduced environmental impact. We ensure the constant development of our environmental sustainability performance in line with our fundamental strategic approach, while considerably reducing our operational costs as well.



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## Environmentally Friendly Product

**In Turkey, approximately 30% of energy consumption takes place in buildings. Around 30% of heat losses in buildings due to uninsulated windows.**

Şişecam Flat Glass made a special effort to develop and introduce double glasses that ensure 50% more heat insulation in comparison with single glass under the “Isıcam Sistemleri” brand since 1974. The objective of achieving better heat insulation with Isıcam Sistemleri has directed Şişecam Flat Glass to develop Low-E coated high-performance insulation glasses “Isıcam S” and “Isıcam K”.which ensure more effective insulation and therefore better energy savings, with the same transparency of standard glass.

Thanks to Şişecam Low-E Glass within “Isıcam S”, heat losses are reduced by 50% in comparison with standard double glass, ensuring savings in fuel costs. In Turkey, where four seasons are experienced, in many regions both winter and summer conditions apply. “Isıcam K”, which is aimed at this need, in addition to the heat insulation quality of “Isıcam S”, reduces summer sunlight

heat intake by 40% thereby ensuring savings in electricity cost due to air conditioning.

Additionally, Şişecam Flat Glass carries out various development and innovation projects in order to meet customer demands as well as energy saving and environmental protection purposes. In this context, development of energy efficient products within Şişecam Flat Glass was prioritized in line with the increasing demand of distributors which import them from overseas and Şişecam Tempered Solar Low-E Glass and Şişecam Tempered Low-E Glass products were introduced to the market since 2013, by developing high-performance tempered coated glasses provide energy efficiency with heat and sun control characteristics as well as safety as it can be tempered.

Preferred in residences, offices, hotels, shopping centers, airports, commercial buildings, roof skylights, and winter gardens, Şişecam Tempered Solar Low-E Glass offers users with yearlong comfortable living spaces in accordance with the needs of projects, while it also meets safety needs

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thanks to being tempered. It provides savings from heating expenses in the winter by reducing heat losses by 50% as against standard double-glass, and from cooling expenses in the summer by reducing solar heat intake by 40-65% compared to standard double-glass.

With the Isicam combination produced with the high quality new Şişecam Tempered Solar Low-E Glass product developed for the sidings of the new Istanbul airport project, 51% transparency was achieved, allowing for transparent design with the optimum transparency and low reflecting characteristics needed in the project. Besides, the Isicam combination preferred for the new airport project provides saving from cooling expenses by allowing only 29% of the solar energy to enter in the summer and reduces heat losses by 50% in comparison with regular double glass also providing saving from heating expenses during the winter.

Şişecam Tempered Solar Glass 30 and 20 were developed for warm climate regions requiring active sun control and offices, shopping malls, museums, and roof skylights. The product controls the daylight intake offering energy savings and reducing cooling costs.

Flotal E ecological mirror, which was introduced to the market by Şişecam Flat Glass in 2016, is produced with lead free paint and without copper and does not contain materials harmful to nature and offers impeccable display with its high reflection rate. Less solid/gas waste is generated during the production of Flotal E thanks to its copper and lead free structure. Flotal E ecological mirror, which has high resistance against corrosion and humidity, adds depth, spaciousness and aesthetics to the areas where it is applied by reflecting light from natural or artificial light sources.

The soda products of Şişecam Chemicals (Light Soda and Heavy Soda) are the input that significantly reduce the energy consumption of furnaces in glass production. For instance, the melting temperature of a standard glass packaging furnace where soda is used needs to be increased from 1450°C to 1700°C in case soda is not used. The use of soda reduces the melting temperature, theoretically ensuring energy savings at the level of 8-10%.

The global leader in chrome chemicals, Şişecam Chemicals offered a new basic chromium sulphate product, emphasizing the environment, ecol-tan, to the use of the leather sector, with the responsibility of being the leader. With its characteristics and the different tanning process developed for implementation, ecol-tan is a product and system that allows high chrome intake and responds to environmental requirements for waste which is generated during the tanning of various leather types. Ecol-tan is an environmentally friendly product that can increase the chromizing yield to the level of 98% by performing tanning at high pH without pickling and basification, and reduce the level of chromium oxide in the wastewater below 1 gr/L. Besides, ecol-tan tanning process does not require salt use. Therefore, no salt waste, which poses problems in treatment and is a serious problem in terms of environmental pollution, are generated.

Şişecam Glass Packaging achieved 8% lightening in nine products with the studies it has actualized in the reporting period. In consequence of the conducted studies, 6,727 tons of glass savings was ensured with an increase of more than one and a half times as against the previous period and 4,978 tons of CO<sub>2</sub> emission was prevented.

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## Social Responsibility

**As Şişecam Group, we carry out corporate social responsibility projects aimed at various fields and needs in accordance with our approach of creating value by contributing to social development in our operational geographies.**

### Contribution to Cultural Values

Antique Glass Works Collection - Şişecam Group's collection consisting of 520 antique glass works which it brought together to preserve cultural values and which reflects a history of nearly 3,500 years - is registered with the Istanbul Archeology Museum. The collection is also preserved and exhibited in a specially prepared area at Şişecam's new headquarters. Furthermore, the Glass Hall of the Bodrum Museum of Underwater Archaeology was opened in 1985 to visitors and history-enthusiasts under Şişecam's sponsorship.

History-Culture-Glass Collections - Aiming to preserve and pass on our cultural heritage to future generations, Şişecam Group exhibited the first of its History-Culture-Glass Collections in Paşabahçe Mağazaları in 1999.

These special collections are designed to reflect Anatolia's historical and cultural richness through glass artworks. Some 500 different artefacts among limited collections were brought together in this effort. A total of 12 collections - including Ottoman, Blue and White on Glass, Artistic Writing on Glass, Enamelled Glass, Mosaics, Anatolian Civilizations, 7, Ashura, Istanbul, Crystalline Chinas, Talking Moneys/Coins, and Zevk-I Selim - have been arranged to date. History-Culture-Glass Collections continue to expand with new series and designs such as "Folk Dances" and "Palace Cuisine".

Serçe Harbor Glass Wreck Documentary - Pursuant to Şişecam Group's vision of achieving sustainable growth and embracing environmental values, the "Glass and Glass Again" documentary tells the story of the discovery of the Serçe Harbor Glass Wreck, which played a major role in advancing underwater archaeology, glass manufacturing and recycling.

The Serçe Harbor Shipwreck was excavated by a team of Turkish and American archaeologists led by Dr. George Bass, world renowned as one of the earliest practitioners of underwater archaeology, near Marmaris 35 years

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ago. The excavation findings included two tons of broken glass nuggets and about one ton of glass cullets, as well as a variety of glassware. Popularly known as the “Glass Wreck,” it is regarded as one of the world’s most important shipwrecks both in terms of its load and that the ship’s body has largely survived intact to this day. The sunken ship and its contents have been on exhibit at the Bodrum Museum of Underwater Archaeology, under the care of Şişecam, since 1985.

### Contribution to Education and Training

Şişecam Group provides Education Incentive Scholarships to its employees and their children who attend school. Under this program, Şişecam awarded scholarships totaling TRY 3,678,742 to staff and their children in 2016.

In addition, Şişecam constructed the Private Şişecam Vocational and Technical Anatolian High School in Mersin with the aim of vocational training for youth. The facility was built in conjunction with the “Project for Improving Vocational Education” conducted by the Governor’s Office of Mersin. Located on the Tarsus Organized Industrial Site and comprising 24 classrooms and one workshop, the high school was donated by Şişecam to the Ministry of National Education. Some 486 students attended the school in the 2015-2016 academic year.

Glass Symposium- The 31<sup>st</sup> Glass Symposium was held with the theme “Glass in the Sustainable future” at İş Bank Tuzla Technology and Operations Center Auditorium. During the symposium – in which nine internationally recognized representatives of the glass industry participated as guest speakers – a total of 66 papers were presented, including 53 oral presentation and 13 poster presentations thirteen sessions were conducted in four parallel halls. A total of 313 participants attended the symposium, including 67 academics from 20 universities in and outside Turkey, 17 persons from eight companies/associations, and attendees from Şişecam.

### Contribution to Environmental Values

Besides our studies to reduce the environmental impact generated by our operations, we also conduct awareness raising studies to support the infinite recycling of the glass products we manufacture and we carry out afforestation and preservation studies to enhance biodiversity value in our operational regions.

Afforestation - Areas between five to ten acres within the sites of the Group’s facilities are set aside as forest area while Şişecam Memorial Forests are also brought to life in all regions where the Group conducts operations. To this end, Camiș Madencilik A.Ş. boasts a Şişecam Memorial Forest that has reached 1,489 acres (368 dunams) in a culmination of forestation efforts initiated in 2000 in the Yalıköy area, where its pit and facilities are located. Thanks to its sapling planting activities launched in Cankurtaran region, Denizli Cam Sanayii ve Ticaret A.Ş. created a mini forest with grown trees on an area of 12 acres (three dunams). There are approximately 6,500 trees and saplings on the plant site, nearly 50% of which is wooded area. Soda Sanayii A.Ş. initiated planting activities in 2006 in the Mersin region. Efforts to set aside forest areas and plant trees continue to be carried out every year. During the 11th Tree Planting Festival in 2016, 3 thousand saplings were planted by the families of employees and retirees. Some 37 thousand trees have been planted since the festival commenced.

Project for the Protection of Kazanlı Sea Turtle Population- The Kazanlı coast in Mersin province stands out as one of the world’s most important spawning areas of endangered sea turtle species. Under the Project for the Investigation, Examination and Protection of the Populations of Kazanlı Sea Turtles in Mersin Province, ongoing since 2007 in cooperation with Soda Sanayii A.Ş. and Mersin University, protection is provided for the nesting sites of the endangered species “Caretta Caretta” and “Chelonia Mydas” turtles. Thanks to this since 2007, with 1,705 sea turtle nests recorded in 2016 – an all-time high. In addition, as part of the efforts to raise awareness, the Company educated the local population on the subject while carrying out initiatives to protect the endangered sea turtles.

The Kazanlı Beach Spring Cleaning event, held with the participation of Soda Sanayii A.Ş. employees in collaboration with Mersin University academics on May 19, 2016, resulted in 500 volunteers helping to clean the sea turtles’ living environment.

Glass and Glass Again Project- Launched in 2011 by Şişecam in cooperation with ÇEVKO Foundation and local governments, the “Glass and Glass Again” project is one of the most comprehensive sustainability and social responsibility initiatives in Turkey. Designed to create change in social behavior and support the transition to a recycling aware society, the project has three primary objectives:

- Raising awareness and informing society about recycling glass packaging,
- Improving the infrastructure to collect glass packaging waste,



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- Streamlining the facilities where glass packaging waste is collected and processed, and separating glass packaging waste found in household waste prior to storage.

In 2016 under the project, 4,500 glass recycling bins were produced and 30 thousand students were trained on glass recycling. During the 2011-2016 period, 233 thousand primary school students have received training in recycling under the “Glass and Glass Again” project. In addition, a total of 17,400 glass bottle bins have been donated and 740 thousand tons of glass packaging waste have been recycled. The resulting reduction in carbon emissions is equivalent to taking 266,500 cars off the roads while the amount of energy saved was enough to meet the heating and hot water needs of 31 thousand households. Şişecam also collaborated with 175 district municipalities in 22 provinces to raise social awareness on the issue, improve the infrastructure for collection, and streamline facilities for glass recycling.

**Within the scope of the Glass and Glass Again Project;**

As part of the World of Glass Activity, elementary school children had the opportunity to observe and experience the recycling process in practice. The process begins from glass packaging production, coming to the table as a beverage, entering the recycling process as glass waste, and then going through production again. World of the Glass efforts were conducted around the “Don’t Dump That Power” theme along with the cooperation of the supported municipalities. In total, some 13 thousand children and their families were informed about glass recycling.

As part of the Street Market Activity, environment was communicated to homemakers in a pleasant and unique way via street market activities, where beverages were offered in glass packaging on the counters, which were built in the street markets. These efforts – during which an invitation was extended with the message “Bring the empty bottle, save the future” – resulted in the recycling of thousands of glass bottles and raised awareness among some 6 thousand people.

As part of the Glass and Glass Again, Istanbul Children and Youth Art Biennial Workshop Sponsorship, the Glass and Glass Again Project sponsored a workshop during the 4<sup>th</sup> Istanbul Children and Youth Art Biennial. The artworks of children and young people from Turkey and abroad met with attendees of the Biennial. The event was organized by the Palet Culture Art and Education Association with the corporate partnership of the Provincial Directorate of

National Education and the Educational Volunteers Foundation of Turkey (TEGV) between April 19 and May 23. Şişecam Group’s Glass and Glass Again Workshop was designed around the Biennial’s 2016 concept “Awakening Service,” and focused on generating awareness about recycling and the environment. The importance of glass recycling and the contribution of recycling to the environment was communicated to the young participants via plastic arts and applied activities carried out during the workshop. Throughout the Biennial, the glass recycling bins were painted with the help of children together with instructors. The glass bottle bins were transformed into glass-saving heroes and received a great deal of positive attention.



**Glass and Glass Again on Social Media!**

Facebook and Instagram accounts of Glass and Glass Again were opened in the reporting period. Information regarding communication activities are shared and questions of followers regarding recycling are answered through the social media accounts, where we also provide information regarding glass recycling.

Instagram /CamYenidenCamProjesi Facebook /camyenidencam



**“Green Point Industry Award” for Glass and Glass Again**

Şişecam Group was deemed worthy of the Green Point Industry Award, organized by ÇEVKO Foundation for the third time this year, in the category of “Environment Themed Social Responsibility Practices” for the studies conducted with “Glass and Glass Again” project.

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## Contribution to Sports

Şişecam Group Çayırova Sports Club - The Çayırova Sports Club was originally founded by Şişecam under the name Çayırova Sailing Sports Club with the objective of attracting young people to sports and contributing to the physical and moral development of youth through sports activities. After having started operations at the Çayırova Sports Facilities complex in 1982, it obtained federated club status from the General Directorate of Youth and Sport in 1984.

With a team of some 120 athletes and managers, the Club trains young athletes in the sports of sailing, rowing and canoeing. In 2016, the Club sent five athletes and one trainer cano branch in addition to three rowers and one trainer to the National Rowing Team.

The Club rowing team members achieved successful results in the international competitions that they attended in 2016, winning one gold, three silver, and three bronze medals. In the Youth European Championship held in Lithuania, our girls competed for the first time in the A finals and were ranked sixth. In the Turkish Championship, they won one gold and three bronze medals. The sailing team also recorded successful results in 2016. The

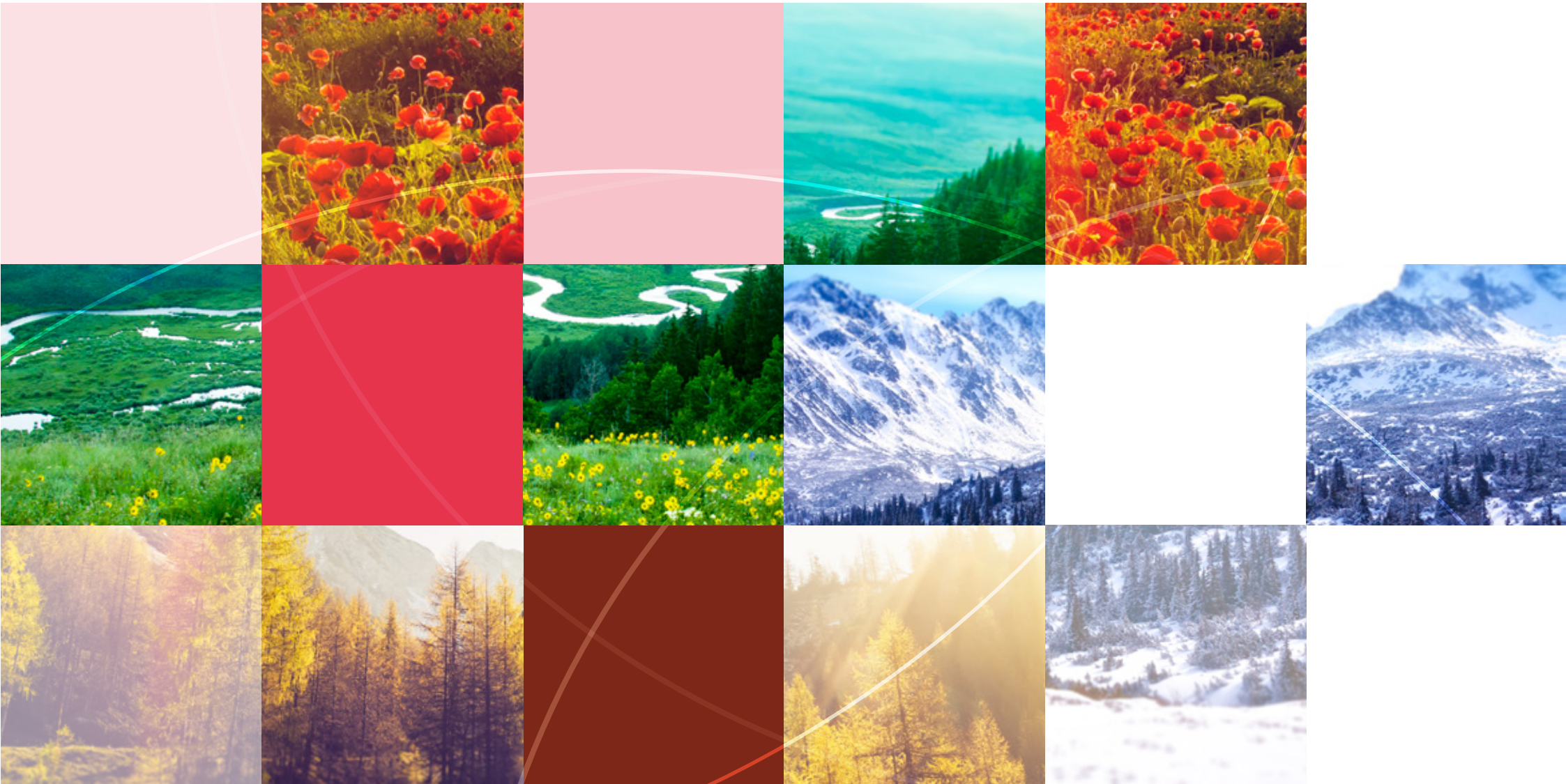
Club's athletes participated in a total of 24 races under the Turkish Sailing Federation program during the 2016 season - 12 local, 10 national and two international. The sailing team won 24 gold, 30 silver, and 17 bronze medals at these events. In the Pirat League of Turkey, the sailing team members placed first in the youth category and fourth in the adult category. These athletes were selected to the 2017 Pirat National Team and qualified to participate in the European Championship to be held in Germany.

Şişecam Çayırova Sports Club's canoe team had a successful season with the awards it won in national and international competitions in 2016. The Club's team won one gold and one bronze medal in the International Canoe Sprint Races attended by eight countries in Antalya; five gold, four silver and one bronze in the Turkey Flat Water Canoe Cup races; four gold, six silver, and one bronze in the Turkey Flat Water Canoe Championship; three gold, two silver, and one bronze in the Flat Water Canoe Olympic Hopes races. One Club athlete - Abbas Anıl Şen - raced with the national team in the finals during the Olympic Hopes Regatta race held in Hungary. He placed eighth among 36 athletes in his category. The Club's canoe team members won four gold, five silver, and three bronze medals in the Sea Canoe Turkish Championship in May. They once again went on to win the Championship Cup, as they do every year, by leaving all other clubs behind in the overall rankings.





# *One Global Family*





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**We are a global family ranking among the leading industrial enterprises in the world with 21,715 employees in 13 countries. Our employees are the key players and enable of our global value and our sustainable success. To maintain and empower employees, we are dedicated to continually increase and improve working environment, which allows social cohesion, respect for diversity, facilitate inclusivity and foster productivity, competence and satisfaction. Hence, we strive to become a preferred workplace by incorporating the most competent, successful and productive professionals.**

The value we create together with our employees is based on equality of opportunity. We focus on our successes and reject all kinds of discrimination with the awareness that differences and diverse perspectives enrich us. We create various platforms to listen to our employees' opinions and include them in our decision making processes. We promote the culture of innovation and actualize incentivizing practices in this area. We ensure that

competences are enriched through training opportunities. We regard the culture of occupational health and safety as part of our business manner and we consider providing our employees with a safe working environment to be among our greatest responsibilities.



### Şişecam Constitution

Şişecam Constitution, which brings Group mission, vision, and values under a single roof, is thus characterized as a guideline for all Şişecam employees. "Şişecam Constitution", which was prepared in Turkish and English, was translated into the languages of our countries of operation globally and was made accessible to all employees through "Camport", the intranet page of Şişecam Group.

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## Occupational Health and Safety

Occupational health and safety is an important part of Şişecam culture. Şişecam is aware that its sustainable business success depends on the existence of an extended occupational and health safety culture. At Şişecam, Occupational Health and Safety (OHS) is managed under the responsibility of Şişecam Industry Relations Directorate in compliance with the Occupational Health and Safety Policy published by the Group and OHSAS 18001 Standard. In this regard, periodical measurement and observation activities are performed at plants, support is provided in OHS issues, and the acquired results are shared with relevant departments. In consequence of these practices, Group-wide studies are conducted to raise the awareness level of employees in health and safety issues. Business processes are designed to minimize risks, investments are made in new and innovative technologies in order to constitute accident-free workplaces.



### Behavior-Focused Occupational Health and Safety Project

The project that started under the coordination of Şişecam Industry Relations Directorate in 2015 aims to determine the existing perceptions of all employees regarding Occupational Health and Safety and their shortcomings in abiding by the rules in this area, identify the necessary steps for positive behavioral change, and implement appropriate studies for this purpose.

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## OHS Ambassadors

In the reporting period, the OHS (Occupational Health and Safety) Ambassadors were engaged in order to enhance occupational health and safety awareness in all units at the plants and to ensure that rules are implemented as a habit during working hours with sensitivity.

There is an OHS Unit composed of the OHS expert, workplace doctor, and medical personnel at all Şişecam plants in Turkey. The periodic indoor working conditions and health controls of employees are performed at plants. Occupational health and safety issues are included within the scope of the collective labor agreements we make with unions.

Within the context of the protection of our employees against occupational and common diseases, employees are provided with trainings regarding the causes of occupational diseases, principles of protection and practice of protection techniques, biological and psychosocial risk elements, and first aid. In the reporting period, the OHS Training Portal was constructed and integrated within Şişecam Academy Library and opened to the access of all OHS experts and Workplace Doctors, in order to enrich the contents of OHS trainings provided at plants and increase sharing. The subject-based portal was offered to use in domestic plants.

In the reporting period, 10,115 employees were provided with a total 161,840 man\*hour of occupational health and safety training.

260 members, of which 72 employee representatives, take office in 24 OHS committees where all our employees in our Turkey operations are represented.



## Occupational Health and Safety Week Celebrations

Activities which have been held regionally since 2013 during the Occupational Health and Safety week, were organized to involve all operations in Turkey and abroad in the year 2016. Paintings by the children of blue collar employees, themed "Occupational Health and Safety When My Parents are at the Factory", were evaluated and six employee children in Turkey and six abroad were rewarded.

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In order to reduce the number and impact of accidents and injuries, continuous risk analyses and preventive control plans are conducted, periodical equipment controls are performed, instantaneous risks and preventive studies are identified through daily site visits. In 2016, weekly occupational health and safety audits were conducted during Şişecam Headquarters construction and moving processes with the same sensitivity. Relevant reports were communicated to the Construction Directorate in coordination with responsible subcontractor company OHS experts. Legally required OHS actions were swiftly taken following the moving process.

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## Respecting Differences

At Şişecam Group, a fair and transparent management approach respecting differences is adopted. In light of these principles, employees are offered equal opportunities in all human resources processes. No factors, such as race, religion, language, gender or physical disability, that can result in discrimination are used as criteria in human resources processes. Differences among employees are regarded as a richness that diversifies the corporate culture and helps us become an innovative company.

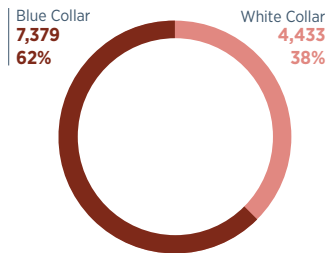
As a Group, we work to constitute a workplace which is free of all kinds of discrimination, conforming to national and international standards, where all rights are offered equally. Work life at Şişecam is based on the principle of equality of opportunity. Whereas employee rights are determined by work related criteria, such as work requirements, skill and experience

The remuneration and vested benefits management of employees are carried out without any discrimination based on gender, religion, language, race, and

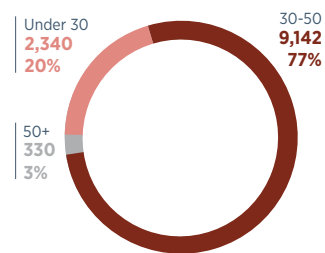
similar issues. In this context, there is no discrimination among employees with the same job and knowledge/skill experiences. The same base wage and vested benefits apply for employees with the same position level and qualities according to job evaluation ratings. An objective and systematic approach is similarly adopted in the assessment of employee performance; the performance of employees is measured under equal conditions and evaluated fairly. In the reporting period, there were no discrimination cases or grievances within the scope of our operations.

To resolve and ensure equal opportunity for women in the business world is recognized globally. As Group, we support women's employment and the participation of female employees in the management. As of the reporting period, the share of female employees is approximately 23% among our senior executive and 30% among our mid-level executives.

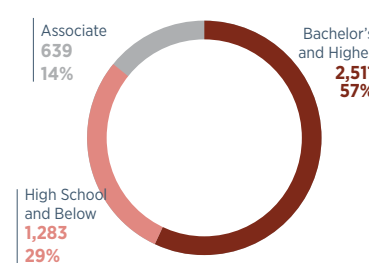
**EMPLOYEE BREAKDOWN BY CATEGORY**



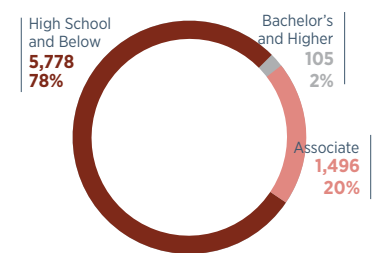
**EMPLOYEE BREAKDOWN BY AGE GROUP**



**WHITE-COLLAR EMPLOYEE BREAKDOWN BY EDUCATION LEVEL**



**BLUE-COLLAR EMPLOYEE BREAKDOWN BY EDUCATION LEVEL**





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## Providing Decent Work

At Şişecam Group, we act with the awareness that our employees are the most decisive factor in the successes we achieve; we make a superior effort to provide a participatory working environment, where human and employee rights are respected, employee satisfaction is pursued and which allows for the development of their competences. In this regard, we observe basic rights and freedoms in all our processes, design training programs to support the professional and individual developments of our employees, encourage their participation on corporate decision making mechanisms through efficient and transparent communication channels that we form.

### EMPLOYEE RIGHTS

Sustainable success is achieved through competent and successful individuals. Providing employees with a working environment where they will be more productive and happy also requires offering them fair and competitive benefits. In this scope, as Şişecam Group, our employees are offered annual leave, marriage leave, birth and parental leave besides several vested benefits, such as training allowance, success allowance, and premiums. The behaviors, efforts and successes of our employees individually or as a team that help achieve corporate objectives are rewarded.



In the reporting period, 85 employees were rewarded for 21 projects that contributed positively to business processes and results and created difference by making progress were rewarded in the Stars of the Year category, 15 employees in the Special Prize category and 12 workplaces in the Occupational Health and Safety category within the context of the “Stars Parade Award Ceremony”.

**Flexible Benefits Program;** is a reorganization of vested benefits that raises the awareness of getting new benefits among our employees, increases the perception of value and awareness about the benefits received, and controls costs. The Flexible Benefits Program aims to meet the changing needs of our employees, allow them to spend their personal budget in the most correct and effective way and to draw maximum benefit from their vested benefits thanks to tax cuts and discounted prices. As of the reporting period, 3,865 employees are actively benefiting from the program.

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All Şişecam employees can participate in the Individual Pension System (BES) as per BES Regulation articles. When an employee participates in the system, the employer invests an amount equivalent to 3% of the employee's gross wage on behalf of the employee as BES contribution.

Work-life balance is one of the issues we prioritize as Group. In this regard, The Flexible Working Hours Project was implemented on January 1<sup>st</sup>, 2015, to contribute to the work-life balance of our employees, enhance their motivation and support the sustainability of their success. In this regard, employees can determine their work start and end times in agreement with their managers. It is aimed for flexible working hours to be expanded and for the project to be improved. Another important issue regarding work-life balance is birth leaves. As Group, we fully comply with all legal regulations regarding birth leaves. In the reporting period, 70% of our female employees who left on birth leave returned to work following their period of leave.

### Our industrial relations vision is

- To increase competitiveness and productivity by improving industrial relations in a balanced and healthy manner within the framework of the Group policies,
- To maintain industrial harmony at the workplace based on trust and dialog with unions,
- To work for the promotion of occupational health and safety at workplaces within the frame of the "People First" philosophy.

Protecting the union rights of employees is among the primary issues we rigorously monitor. The representation of employees within the framework of a healthy structure in their relations with company management is emphasized; our employees' free use of their collective agreement and organization rights is ensured. At Şişecam Group, industrial relations are coordinated by the Industry Relations Directorate. As of 2015, industrial relations are maintained with four employee unions in three business lines. As of the end of the reporting period, 7,038 employees are included within the scope of the collective labor agreement.

Without prejudice to the rightful termination circumstances, both Group companies and employees are liable to give a prior notice to the opposite

party once they decide to terminate the employment contract. This issue is regulated within the context of the Labor Law Numbered 4857 and the collective labor agreements made with unions.



### Privacy Act Group HR Compliance Process

The Privacy Act Law numbered 6698 came into force on April 7<sup>th</sup>, 2016; in accordance with the process of harmonization with the Law, a study was started within the body of the Group Human Resources Directorate. As part of this study, conducted under the coordination of the Organizational Development Directorate and Legal Consultancy Department, a working plan, including all the actions that need to be taken within the context of the business processes of HR units, was prepared and prioritized actions were completed as of December. It is projected for the long term actions included within the working plan to be completed by 2017 yearend.

### EMPLOYEE ENGAGEMENT

As Şişecam Group we believe a participatory working environment to be one of the important factors supporting our success. In this regard, we actualize opportunities for our employees to share their opinions, follow developments in our Group and industry, and communicate with each other.

**Camport** - Camport is the corporate intranet system widely used across Şişecam Group. By means of Camport, a user friendly, easily accessible and interactive structure, communication within the Group is actively maintained.

**Blue Collar E-mail Addresses** - Email addresses were assigned to blue collar employees on demand to ensure that all employees are easily informed about developments in the agenda of Şişecam, to adopt some processes, such as wage information and payroll, to the electronic environment, and to facilitate interaction. 4,906 employees benefited from this practice.

**Idea Factory** is a practice facilitating the evaluation and rewarding of creative ideas that allow employees to add value to the company, increase



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productivity, aim to improve business climate and corporate culture, and embrace innovation.

**Şimdi!**, the social activity platform established within the body of Şişecam Group, is an organization based on volunteerism. In all the regions where Şişecam operated, a volunteering team composed of white and blue collar employees carry out social activity designs and organizations specific to the region. The activities are open to the participation of all employees and are conducted in accordance with employee preferences.



## EMPLOYEE ENGAGEMENT SURVEY

Şişecam Group started measuring employee engagement and developing improvement activities by drawing on the results in order to create a suitable working climate for its employees while achieving high performance. The Employee Engagement Survey, which involves all monthly waged employees throughout the Group is carried out every two years.

In accordance with the results of the survey, an impact analysis was performed in order to identify the most significant factors influencing the engagement score of Şişecam Group and the most influential development areas were determined. "Employee Engagement Action Development Workshops" were organized in all regions together with employees and managers representing different groups and units in 2016, to carry out detailed analysis studies and actions to be developed for these areas. During the course of the workshops, which were realized in 14 sessions with 388 participants in total, Şişecam Group's development areas were addressed, successful practices and areas of improvement were analyzed in detail, and the results of different represented groups were consolidated to identify prioritized employee engagement development actions.



## Şişecam is Moving

In the reporting period, the internal communication project "Şişecam is Moving" was formed with regard the process of moving Şişecam Headquarters to a new campus and the period of transition in order to maintain internal communication focusing on employee happiness and productivity. As part of the "Şişecam is Moving" project, it was aimed at establishing effective communication with 1,200 headquarters employees working at İş Towers and about 150 Paşabahçe Mağazalar Headquarter employees working at a different facility in Tuzla in the process of change, providing timely and accurate guidance for employees, preventing informal communication and disinformation, minimizing possible decreases in engagement, motivation and performance in this process.

Throughout the project, employees were regularly provided several contents, such as the characteristics of our new Headquarters, new opportunities offered to employees, senior management messages, facilitating information regarding the moving and settling process, through various methods and channels. 'Working Spaces Evaluation Survey' was conducted in order receive evaluations of current working spaces and expectations about the new headquarters building and campus from İş Towers employees.

Interviews were held with authorized individuals during the construction of the headquarters, building characteristics were shared with employees at certain periods through these videos. Bulletins including new characteristics and information that employees may need during or after the moving process; constant information flow was ensured with two or three bulletins every week. [sisecamtasiniyor@sisecam.com](mailto:sisecamtasiniyor@sisecam.com) address was created for employees to convey their questions and opinions. Şişecam Headquarters sketches and information regarding nearby hospitals, pharmacies, cab stands were distributed to employees as booklets. A digital handbook including information to facilitate life at Şişecam Headquarters was prepared and published on Campport. "Ask Me Team" was constituted to answer employees' questions and organize periodical tours at the Headquarters; they were stationed inside the building for three days. The project ended with the completion of the moving and post-moving support process.

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## EMPLOYEE DEVELOPMENT

Enhancing the competences of our employees and offering them development opportunities amounts to making a very valuable contribution to the success of Şişecam Group. For this purpose, we provide training opportunities for our employees to develop their competence in various fields and we carry out regular performance assessments, career management and development practices.

The aim of Şişecam Group Performance Management System is to generalize the culture of success-oriented performance, support the transformation of individual success into corporate success, and ensure corporate preparedness. Strategic targets are reduced to individual targets and success-oriented performance culture is constantly promoted through the Corporate Report practice.

As part of the Career Management System, organizational and personal needs are planned, whereby all employees are offered the opportunity to develop and advance their career. Competence analyses are performed and development plans are offered at Evaluation and Development Center practices open to white and blue collar employees.

In the reporting period, alternative training methods were engaged within the body of Şişecam Academy. The use of Alternative Education Technologies is aimed to develop the learning range of employees, support in-class trainings and improve schools with the mixed training method. For this purpose, at first the "Information Security Authority Agent (BGO) 4141 At Work" simulation was applied inside the corporation for all monthly-waged employees within the context of "ISO 27001 Information Security Management System" and 853 employees actively participated in the simulation. In addition, e-learning modules were developed by the Academy Education Technologies Department with internal production. In 2016, 38 e-learning modules were opened for white-collar employees and the total attendance was 15,783.

In the reporting period, an e-learning module regarding our Ethical principles and our competences within the context of the Global Leadership Model was prepared. Training planning was performed by Şişecam Academy for legal/required certifications for duty (PMP, Occupational Safety, First Aid, 6 Sigma, Vocational Competence, ISO certifications, IT certifications, etc.).

**Success Factors-** All white collar employees can track targets related to performance evaluations and results regarding their competences on the SuccessFactors system.



## Şişecam Academy

Şişecam Academy aims to contribute to the corporate objectives of the Group, develop human resource competences, and make significant contributions to corporate image and employee engagement. In this regard, special programs were designed for identified focus areas in relation with the career paths of employees. In this scope, Leadership School, Marketing School, Sales School, Glass School, HR Certificate Program, from among our schools and certificate programs were already launched, while the Supply Chain School and Financial Affairs Certificate Program will be launched in 2017.

The technical and personal development trainings that employees need to receive based on position were determined in accordance with the needs every business group with training catalogues prepared on the basis of business groups. Employees can request trainings through the catalogue. In addition, the attendance of our employees to conferences, seminars and summits, domestically and abroad, and their foreign language or graduate studies are supported by the corporation at determined rates. In 2016, training per person was realized as 31.6 hours for white collar employees and as 20.7 hours for blue collar employees.

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**Orientation Project-** The orientation e-module and electronic handbook for employees are used to ensure that recently recruited employees at Şişecam Group adapt to their new positions more easily by closely acquainting themselves with our corporate culture, field of activity, organizational structure, and practices.

**Employer Brand-** Şişecam employees organize events, such as case studies, interview simulations, technical visits and career meetings with managers, on college campuses every year in order to enhance brand image. Students are evaluated by managers as part of case studies and those deemed successful are provided with internship opportunities. Interview simulations aim for students to gain experience.

**Long Term Internship Programs-** In the program employment priority provided to successful students. In this way, interns joining the team are trained about corporate culture and evaluated by their managers with regard to their performance.



**Şişecam Group Talent Management System,**

which was designed to attract the talent required for sustainable corporate success, to retain talents within the body of the Group by giving them the opportunity to realize their potential, and to raise the leaders of the future, was actualized as of December 2016.

Within the process of Talent Management, candidates with high performance and potential level elected according to predetermined criteria and objective measurement results are identified as 'talent' for our Group. It is aimed to support the development of our employees included in the talent pool and to reflect their potential levels on their performance sustainably. With the System, the potential assessment process was carried out for the first time within the body of the Group in December 2016, ensuring the identification of the potential levels of all employees within scope. It is projected for "Şişecam Group Talent Pool" to be formed based on performance evaluation results, characteristic assessment process, talent committee assessments and results of additional research methods, during the year 2017.

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# Performance Data

## Economic Performance Indicators

Summary of Statement of Financial Position (TL Mio)	2014	2015	2016
Current Assets	5,657	6,570	7,690
Non-Current Assets	6,693	9,093	11,462
Total Assets	12,350	15,663	19,152
Current Liabilities	1,902	2,311	3,584
Non-Current Liabilities	3,209	3,849	4,239
Equity	7,239	9,503	11,330
Equity Holders of the Parent	5,692	7,467	8,546
Non-Controlling Interests	1,547	2,036	2,783
Total Equity and Liabilities	12,350	15,663	19,153
Summary Statement of Profit and Loss (TL Mio)	2014	2015	2016
Revenue	6,876	7,415	8,422
Cost of Sales	-5,003	-5,236	-5,892
Gross Profit from Trading Activity	1,873	2,179	2,530
Operating Expenses	-1,220	-1,299	-1,432
Operating Income	653	880	1,098
Income From Investing Activities	24	146	212
Operating Profit Before Financial Expenses	677	1,026	1,310
Financial Expenses (Net)	-182	-127	-136
Profit Before Tax from Continued Operations	495	899	1,174

	2014	2015	2016
Tax Expenses for Continued Operations	-75	-94	-134
Taxes Expenses for the Period	-171	-180	-206
Deferred Tax Income	96	86	72
Profit for the Period	420	805	1,040
Breakdown of Profit for the Period			
Non-Controlling Interests	7	82	297
Equity Holders of the Parent	413	723	743
Earnings Before Interest and Taxes (EBIT)*	677	1,026	1,310
Depreciation	688	738	810
Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA)*	1,365	1,764	2,120
Net Cash from Operations	768	823	845
Net Financial Debt	1,068	1,440	1,489
Financial Ratios	2014	2015	2016
Current Assets / Current Liabilities (x)	3.0	2.8	2.1
Equity / Total Equity and Liabilities (%)	58.6	60.7	59.2
Total Liabilities /Equity (%)	70.6	64.8	69.0
Net Financial Debt /Total Equity and Liabilities (%)	8.6	9.4	7.8
Net Financial Debt / Equity (%)	14.8	15.5	13.1
Gross Profit / Sales Revenue (%)	27.2	29.4	30.0
EBITDA* / Sales Revenue (%)	19.9	23.8	25.2
EBIT* / Sales Revenue (%)	9.8	13.8	15.6
Net Financial Debt / EBITDA* (x)	0.8	0.8	0.7

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**Social Performance Indicators**

	2014	2015	2016
<b>Total Workforce (number)</b>	12,684	12,759	11,812
Female	1,373	1,452	1,139
Male	11,311	11,307	10,673
<b>Total Workforce by Contract Type (number)</b>	12,684	12,759	11,812
<b>Permanent</b>	12,661	12,722	11,776
Female	1,365	1,435	1,126
Male	11,296	11,287	10,650
<b>Temporary</b>	23	37	36
Female	8	17	13
Male	15	20	23
<b>Total Workforce by Category (number)</b>	12,684	12,759	11,812
<b>Blue Collar</b>	7,822	7,613	7,379
Female	23	23	23
Male	7,799	7,590	7,356
<b>White Collar</b>	4,862	5,146	4,433
Female	1,350	1,430	1,116
Male	3,512	3,716	3,317
<b>Total Workforce by Employment Type (number)</b>	12,684	12,759	11,812
<b>Full Time</b>	12,683	12,754	11,809
Female	1,373	1,452	1,138
Male	11,310	11,302	10,671
<b>Part Time</b>	1	5	3
Female	0	0	1
Male	1	5	2
<b>Total Workforce by Education Level (number)</b>	12,684	12,759	11,812
<b>White Collar</b>	4,862	5,146	4,433
High School and Below	1,582	1,677	1,283
Associate Degree	644	731	639
University and Above	2,636	2,738	2,511
<b>Blue Collar</b>	7,822	7,613	7,379
High School and Below	6,349	6,129	5,778
Associate Degree	1,392	1,396	1,496
University and Above	81	88	105

	2014	2015	2016
<b>Total Workforce by Age Group (number)</b>	12,684	12,759	11,812
Below 30	2,798	2,764	2,340
30 - 50	9,570	9,616	9,142
50+	316	379	330
<b>Senior Management Structure (number)</b>			
<b>by Gender</b>	77	83	76
Female	23	25	17
Male	54	58	59
<b>by Age Group</b>	77	83	76
Below 30	0	0	0
30 - 50	39	45	41
50+	38	38	35
<b>by Nationality</b>	77	83	76
Turkish Citizen	77	83	76
Expat	0	0	0
<b>Mid-Level Management Structure (number)</b>			
<b>by Gender</b>	269	287	281
Female	65	71	64
Male	204	216	217
<b>by Age Group</b>	267	328	281
Below 30	2	43	0
30 - 50	190	219	208
50+	75	66	73
<b>New Hires (number)</b>			
<b>by Gender</b>	1,487	1,325	586
Female	306	309	99
Male	1,181	1,016	487
<b>by Age Group</b>	1,487	1,325	586
Below 30	1,010	870	376
30 - 50	426	422	205
50+	51	33	5



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	2014	2015	2016
<b>Quitting Employees (number)</b>			
<i>by Gender</i>	1,241	1,362	669
Female	240	240	152
Male	1,001	1,122	517
<i>by Age Group</i>	1,241	1,363	669
Below 30	445	483	124
30 - 50	626	781	457
50+	170	99	88
<b>Number of Employees on Parental Leave</b>			
Female	56	55	60
<b>Employees Returning to Work Following Parental Leave</b>			
Female	42	49	42
<b>Employees Returning to Work Following Parental Leave and Still Employed 12 Months After Their Return</b>			
Female	34	40	20
<b>Absence Rate (%)</b>			
White Collar	4.6	4.8	5.9
<b>Employee Trainings - Number of Participants</b>			
Blue Collar	8,024	13,306	23,508
White Collar	8,103	8,426	14,445
Female	2,501	1,829	3,295
Male	13,860	19,903	34,658
<b>Employee Trainings - Total Hours (man*hour)</b>			
Blue Collar	48,821	117,604	152,900
White Collar	98,222	104,253	139,107
Female	25,678	18,623	32,793
Male	121,365	203,234	268,305
<b>Injury Rate</b>	18	21	26
<b>Occupational Disease</b>	0	0	2
<b>Lost Day Rate</b>	272	369	431
<b>OHS Trainings - Number of Participants</b>	939	11,352	10,115
<b>OHS Training Hours (man*hour)</b>	7,512	149,437	161,840

**Environmental Performance Indicators**

	2014	2015	2016
<b>Energy Consumption Amount (GJ)</b>			
Natural Gas	48,940,700	46,429,900	46,943,100
LPG	39,700	44,700	27,700
Electricity	4,010,600	3,863,600	3,917,700
Anthracite	3,267,300	3,203,100	4,497,700
Other	19,400	69,200	77,200
<b>Total</b>	56,277,700	53,610,400	55,463,400
<b>Emission Amount (ton CO<sub>2</sub>e)</b>			
Total Amount of Scope I Emissions	3,583,700	3,475,600	3,607,200
Raw Material Sourced Emissions	834,200	897,100	582,000
Fossil Fuel Sourced Emissions	2,749,500	2,578,400	3,025,200
Total Amount of Scope II Emissions	528,000	506,400	475,100
Electricity Use Sourced Emissions	528,000	506,000	475,100
<b>Total</b>	4,111,700	3,982,000	4,082,300
<b>Total Water Withdrawal (m<sup>3</sup>)</b>	26,777,200	29,113,300	29,342,000
<b>Amount of Recovered/Reused Water (m<sup>3</sup>)</b>	319,800	284,000	508,800
<b>Total Wastewater Discharge (m<sup>3</sup>)</b>			
Natural Receiving Environment + Sewer	9,870,900	9,383,900	8,840,700
<b>Total Hazardous Waste Amount (tonnes)</b>	3,600	4,700	7,400
<b>Total Nonhazardous Waste Amount (tonnes)</b>	811,000	1,063,000	958,900
<b>Total Environmental Investment Costs (TRY)</b>	25,048,000	10,509,000	6,186,400
<b>Total Environmental Management Costs (TRY)</b>	25,308,100	33,707,600	33,896,100

# GRI Content Index

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Indicators	Description
<b>GENERAL DISCLOSURES</b>	
G4-1	Message from the Chairman (p.3); Message from the CEO (pp.4-5)
G4-2	Message from the Chairman (p.3); Message from the CEO (pp.4-5)
G4-3	About the Report (p.2)
G4-4	About Şişecam (pp.6-7)
G4-5	Corporate Web Site: <a href="http://www.sisecam.com.tr/en/contact-us/contact-us">http://www.sisecam.com.tr/en/contact-us/contact-us</a>
G4-6	About Şişecam (pp.6-7)
G4-7	Corporate Website: <a href="http://www.sisecam.com.tr/en/investor-relations/corporate-overview-and-governance/shareholder-structure">http://www.sisecam.com.tr/en/investor-relations/corporate-overview-and-governance/shareholder-structure</a>
G4-8	About Şişecam (pp.6-7)
G4-9	Financial Stability (p.30); One Global Family (pp.43-51); Performance Table (p.52)
G4-10	One Global Family (pp.43-51)
G4-11	Performance Table (p.53)
G4-12	Supply Chain Management (p.23)
G4-13	Corporate Website: <a href="http://www.sisecam.com.tr/en/investor-relations/presentations-and-bulletins/material-disclosures">http://www.sisecam.com.tr/en/investor-relations/presentations-and-bulletins/material-disclosures</a>
G4-14	Risk Management and Internal Audit (p.18); Business Ethics (p.19); Employee Health and Safety (pp.44-45); Combating Climate Change (p.33)
G4-15	Our Corporate Memberships (p.8)
G4-16	Our Corporate Memberships (p.8)
G4-17	About the Report (p.2)
G4-18	About the Report (p.2); Sustainability Management (p.11)
G4-19	Sustainability Management (p.11)
G4-20	Sustainability Management (p.11)
G4-21	Sustainability Management (p.11)
G4-22	GRI G4 Index (p.55-57) The report does not have any restatements of information provided in the previous report.
G4-23	About the Report (p.2); Sustainability Management (p.11)
G4-24	Stakeholder Engagement (p.14)
G4-25	GRI G4 Index (p.55-57) We define all individuals and institutions, who either are impacted by our operations or have an impact on them, as our stakeholders.
G4-26	Stakeholder Engagement (p.14)
G4-27	Stakeholder Engagement (p.14)
G4-28	About the Report (p.2)



Indicators	Description
G4-29	About the Report (p.2)
G4-30	About the Report (p.2)
G4-31	About the Report (p.2)
G4-32	About the Report (p.2); GRI G4 Content Index (p.55)
G4-33	GRI G4 Content Index (p.55) The report was not subjected to external assurance.
G4-34	Transparent and Integrated Management (p.18)
G4-56	Business Ethics (p.19)
<b>STANDARD DISCLOSURES</b>	
<b>Material Aspect: Economic Performance</b>	
G4-DMA	Global Presence (pp.29-41); Financial Stability (p.30); Supply Chain Management (p.23)
G4-EC1	Global Presence (pp.29-41); Financial Stability (p.30); Supply Chain Management (p.23); Performance Table(p.52)
G4-EC2	Combating Climate Change (p.33)
G4-EC3	Employee Rights (pp.47-48)
<b>Material Aspect: Market Presence</b>	
G4-DMA	Not material
G4-EC6	Performance Table (p.52)
<b>Material Aspect: Indirect Economic Impacts</b>	
G4-DMA	Innovation (p.26); Employee Development (p.50); Social Responsibility (pp.38-41)
G4-EC7	Innovation (p.26); Social Responsibility (pp.38-41)
G4-EC8	Innovation (p.26); Employee Development (p.50); Social Responsibility (pp.38-41)
<b>Material Aspect: Energy</b>	
G4-DMA	Energy and Emission Management (pp.31-32)
G4-EN3	Energy and Emission Management (pp.31-32); Performance Table (p.54)
G4-EN6	Energy and Emission Management (pp.31-32)
G4-EN7	Environment Friendly Products (pp.36-37)
<b>Material Aspect: Water</b>	
G4-DMA	Efficient Use of Resources (pp.34-35)
G4-EN8	Efficient Use of Resources (pp.34-35)
G4-EN9	GRI G4 Content Index (p.55) No stress caused by water consumption within Şişecam operations was found on resource consistency.

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Indicators	Description
G4-EN10	Efficient Use of Resources (pp.34-35)
<b>Material Aspect: Biodiversity</b>	
G4-DMA	GRI G4 Content Index (p.56)
G4-EN11	GRI G4 Content Index (p.56) Şişecam production plants and other units are not located in the areas under protection due to their biodiversity or other environmental particularities.
G4-EN12	GRI G4 Content Index (p.56) No significant negative environmental impact case witnessed in the neighboring areas to Şişecam manufacturing plant has occurred due to Şişecam operations. All operations are conducted in line with limit values defined in permissions granted by related authorities.
<b>Material Aspect: Emissions</b>	
G4-DMA	Energy and Emission Management (pp.31-32)
G4-EN15	Energy and Emission Management (pp.31-32); Performance Table (p.54)
G4-EN16	Energy and Emission Management (pp.31-32); Performance Table (p.54)
G4-EN19	Energy and Emission Management (pp.31-32)
<b>Material Aspect: Effluents and Waste</b>	
G4-DMA	Efficient Use of Resources (pp.34-35)
G4-EN23	Efficient Use of Resources (pp.34-35)
G4-EN26	Efficient Use of Resources (pp.34-35)
<b>Material Aspect: Products and Services</b>	
G4-DMA	Efficient Use of Resources (pp.34-35)
G4-EN27	Environment Friendly Products (pp.36-37)
G4-EN28	Efficient Use of Resources (pp.34-35)
<b>Material Aspect: Compliance</b>	
G4-DMA	Sustainable Environment (p.34)
G4-EN29	GRI G4 Content Index (p. 56) During the reporting period, no significant fines were paid due to non-compliance with environmental laws and regulations.
<b>Material Aspect: Overall</b>	
G4-DMA	Sustainable Environment (p.34)
G4-EN31	Sustainable Environment (p.34)
<b>Material Aspect: Employment</b>	
G4-DMA	One Global Family (pp.43-51)
G4-LA1	Performance Table (p.53)
G4-LA2	Employee Rights (pp.47-48)
G4-LA3	Performance Table (p.53)

Indicators	Description
<b>Material Aspect: Occupational Health and Safety</b>	
G4-DMA	Employee Health and Safety (pp.44-45)
G4-LA4	Employee Rights (pp.47-48)
G4-LA5	Employee Health and Safety (pp.44-45)
G4-LA6	Performance Table (p.53)
G4-LA8	Employee Health and Safety (pp.44-45)
<b>Material Aspect: Training and Education</b>	
G4-DMA	Employee Development (p.50)
G4-LA9	Employee Development (p.50); Performance Table (p.54)
G4-LA10	Employee Development (p.50)
<b>Material Aspect: Diversity and Equal Opportunity</b>	
G4-DMA	Respecting Differences (p.46)
G4-LA12	Respecting Differences (p.46); Performance Table (p.54)
<b>Material Aspect: Equal Remuneration for Women and Men</b>	
G4-DMA	Respecting Differences (p.46)
G4-LA13	Respecting Differences (p.46)
<b>Material Aspect: Non-Discrimination</b>	
G4-DMA	Respecting Differences (p.46)
G4-HR3	GRI G4 Content Index (p.56) During the reporting period, no case of discrimination has occurred.
<b>Material Aspect: Freedom of Association and Collective Bargaining</b>	
G4-DMA	Employee Rights (p.41)
G4-HR4	GRI G4 Content Index (p.56) In all Soda Sanayii A.Ş. operations, exercise of the freedom of association and collective bargaining is ensured. Business partners are also expected to adopt same principle. During the reporting period, no breach or significant risk is identified regarding exercise of these rights.
<b>Material Aspect: Child Labor</b>	
G4-DMA	GRI G4 Content Index (p.56)
G4-HR5	Soda Sanayii A.Ş. does not permit child labor within its operations. Business partners are also expected to adopt same principle. During the reporting period, no breach or significant risk is identified regarding this principle. GRI G4 Content Index (p.56)
<b>Material Aspect: Forced and Compulsory Labor</b>	
G4-DMA	GRI G4 Content Index (p.56)
G4-HR6	GRI G4 Content Index (p.56) Şişecam does not permit forced and compulsory labor within its operations. Business partners are also expected to adopt same principle. During the reporting period, no breach or significant risk is identified regarding this principle.

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Indicators	Description
<b>Material Aspect: Anti-Corruption</b>	
G4-DMA	Fight Against Corruption (p.19)
G4-SO3	GRI G4 Content Index (p.57) During the reporting period, all operations were assessed for risks related to corruption.
G4-SO5	GRI G4 Content Index (p.57) No incidents of corruption has taken place during the reporting period.
<b>Material Aspect: Anti-competitive Behavior</b>	
G4-DMA	Not material
G4-SO7	GRI G4 Content Index (p.57) During the reporting period, no legal actions were charged against Şişecam regarding anticompetitive behavior and violations of anti-trust and monopoly legislation.
<b>Material Aspect: Compliance</b>	
G4-DMA	Stakeholder Engagement (p.14); Transparent and Integrated Management (p.18)
G4-SO8	GRI G4 Content Index (p.57) During the reporting period, no significant fines were paid due to non-compliance with laws and regulations.
<b>Material Aspect: Customer Health and Safety</b>	
G4-DMA	Operational Excellence (p.12)
G4-PR1	Operational Excellence (p.12)
G4-PR2	GRI G4 Content Index (p.57) During the reporting period, no case of non-compliance to regulations has occurred.

Indicators	Description
<b>Material Aspect: Product and Service Labeling</b>	
G4-DMA	Operational Excellence (p.12)
G4-PR3	Operational Excellence (p.12)
G4-PR4	GRI G4 Content Index (p.57) During the reporting period, no case of non-compliance to regulations has occurred regarding customer information practices and product labeling.
<b>Material Aspect: Marketing Communications</b>	
G4-DMA	Operational Excellence (p.12)
G4-PR7	GRI G4 Content Index (p.57) During the reporting period, no case of non-compliance to regulations has occurred regarding marketing communication aspects.
<b>Material Aspect: Customer Information Privacy</b>	
G4-DMA	Not material
G4-PR8	GRI G4 Content Index (p.57) During the reporting period, no complaints were received concerning breaches of - customer privacy.
<b>Material Aspect: Compliance</b>	
G4-DMA	Operational Excellence (p.12)
G4-PR9	Operational Excellence (p.12)

ABOUT THE REPORT  
MESSAGE FROM THE CHAIRMAN  
MESSAGE FROM THE CEO  
ABOUT ŞİŞECAM  
2016 PERFORMANCE  
OUR SUSTAINABILITY APPROACH

**BECOMING ONE OF THE TOP 3 PLAYERS IN THE GLOBAL MARKET**

- DYNAMIC STRUCTURE
- OPERATIONAL EXCELLENCE
- DIGITALIZATION
- INNOVATION

**GLOBAL PRESENCE**

- FINANCIAL STABILITY
- SUSTAINABLE ENERGY
- SUSTAINABLE ENVIRONMENT
- SOCIAL RESPONSIBILITY

**ONE GLOBAL FAMILY**

- EMPLOYEE HEALTH AND SAFETY
- RESPECTING DIFFERENCES
- PROVIDING DECENT WORK

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

ŞİŞECAM HEADQUARTERS  
İçmeler Mahallesi, D-100 Karayolu Caddesi, No:44A  
34947 Tuzla/İSTANBUL

**Reporting Consultant**

KIYMET-İ  
harbiye

kiymetiharbiye.com

**Graphic&Design**

**DENK**

DENK / denkdesign.net

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