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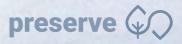
ŞİŞECAM

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EACH DROP GIVES LIFE!





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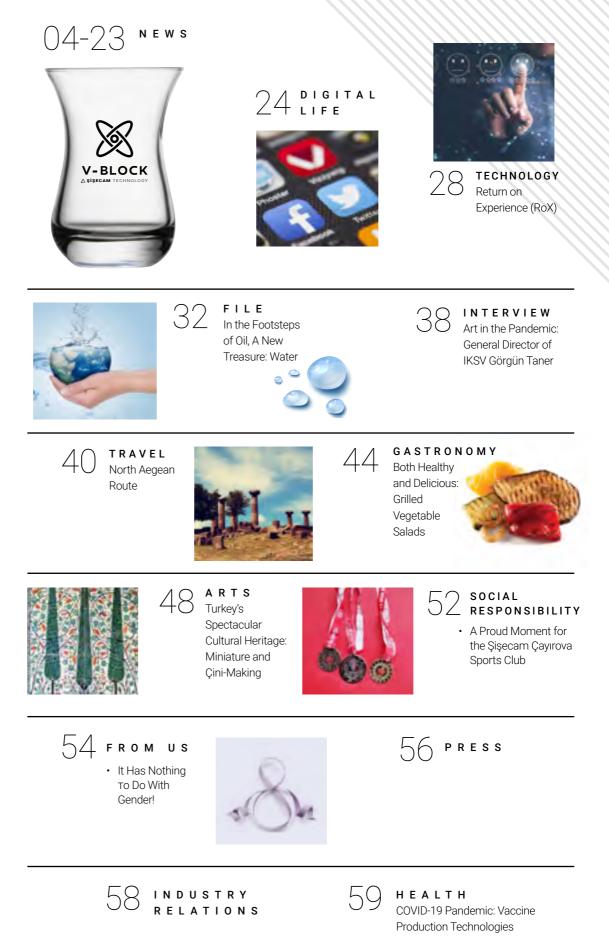
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A.5 NEWS

THERE IS LIFE AT PAŞABAHÇE MAĞAZALARI!

PAŞABAHÇE MAĞAZALARI ADD A SPLASH OF COLOR TO LIFE YET AGAIN THROUGH COLLECTIONS THAT PAY HOMAGE TO CULTURAL HERITAGE AND EXCLUSIVE DESIGNS FOR SPECIAL OCCASIONS.

REFLECTIONS OF THE HISTORY OF GLASS ARE

AT PAŞABAHÇE MAĞAZALARI

DRAWING ITS INSPIRATION FROM THE SİŞECAM GLASS WORKS COLLECTION THAT PRESENTS REFLECTIONS OF THE HISTORY OF GLASS SPANNING 3,500 YEARS TO ART AND HISTORY AFICIONADOS, PASABAHCE MAĞAZALARI HAS DEBUTED A BRAND-NEW COLLECTION.

Incorporating the rich heritage of Anatolian civilizations into its collections, Paşabahçe Mağazaları was inspired by the Şişecam Glass Works Collection when creating the five-piece Glass Works Collection it debuted to appeal to history connoisseurs. Shedding light on the history of glass spanning 3,500 years and produced with the handcrafted glass aging technique, the collection consists of a Cylindrical Bottle with Handle, Long Necked

Conical Teardrop Bottle, Uzun Boyunlu Küre İksir Şişesi (Long Necked Spherical Elixir Bottle), and an Antique Calice. Comprising of glass found in Anatolian lands and Şişecam's invaluable pieces that shed light on the

history of glass spanning 3,500 years, Paşabahçe's Glass Works Collection takes you on a journey stretching back to thousands of years and periods, including the Ottoman, Byzantine, and Roman period, along with the Antiquity. Moreover, you can also visit the digital exhibition of the Glass Works Collection on display at the Şişecam Headquarters at www.sisecamcameserleri.com/tr.

PAŞABAHÇE MAĞAZALARI PRESENT THE GOND

PAŞABAHÇE MAĞAZALARI CONTINUE TO PAY HOMAGE TO THE ANATOLIAN CULTURE WITH THE VELI GONDOLA DESIGNED WITH INFLUENCE FROM HAJI BEKTASH VELI.

UNESCO has declared 2021 "The Year of Haji Bektash Veli" on the 750th anniversary of the passing of Haji Bektash Veli, an Anatolian thinker who symbolizes love, open-heartedness, solidarity, and peace. In accordance with its mission to preserve cultural heritage and pass it on to future generations, Pasabahce Mağazaları have added the Veli Gondol (Veli Gondola), which commemorates Haji Bektash Veli, to the World Heritage in Glass Collection. The designs on the Veli Gondol were inspired by the engravements on the walls of the Haji Bektash Veli Tomb located in the town of Hacıbektaş in Nevşehir. The entire relief design on the gondola made of handcrafted glass, of which only 1,000 were produced, was decorated handmade with 24-karat gold, aging techniques, and glass paint.

PAŞABAHÇE MAĞAZALARI REFLECT THE SPIRIT OF

|THE ÇANAKKALE | VICTORY THROUGH THEIR PRODUCTS

PAŞABAHÇE MAĞAZALARI DEBUTED PRODUCTS FEATURING COMPONENTS THAT COMMEMORATE THE ANNIVERSARY OF THE MARCH 18 ÇANAKKALE VICTORY TO APPEAL TO HISTORY AFICIONADOS.

Paşabahçe Mağazaları honored the memory of the 18 March Çanakkale Victory, a legendary story of belief, determination, and independence for the people of Turkey, with its products specially designed for the 106th anniversary. The Abide Lantern is one of the most striking items in the collection, inspired by the Martyrs' Monument, which is located on the Gallipoli Peninsula and which commemorates the 253 thousand heroes who were martyred during the Gallipoli Campaign, and is topped with a Turkish flag. The Red Star and Crescent paperweight, the Turkish Map Star and Crescent weight, and the Çanakkale Victory writing set are among the products designed to commemorate the Çanakkale Victory.



PAŞABAHÇE MAĞAZALARI

ADD MEANING TO VALENTINE'S DAY

THOSE LOOKING TO BUY GIFTS FOR THEIR LOVED ONES ON VALENTINES DAY FOUND JUST WHAT THEY NEEDED AT PAŞABAHÇE MAĞAZALARI.

Paşabahçe Mağazaları offered a selection of romantic gifts for those looking to buy a special present on Valentine's Day. The designs that appeal to all tastes added a splash of color and joy to Valentine's Day.

Those passionate about coffee and tea opted for mugs and mug sets adorned with elements that evoke love to make their sweethearts happy. Drawing attention with their unique typography and dominated by golden and black colors, the lettered cups stood out as a special gift option. The Kintsugi coffee cup sets inspired by kintsugi, the antique Japanese philosophy that posits nothing is ever truly broken, were among the popular gift options. The Lügat 365 Yuva (Home), Aheste (Gentle), and Saadet (Felicity) Candles, Lügat 365 Saadet (Felicity) & Tebessüm (Smile)

Cup Set, Lügat 365 Müstesna (Exceptional) Mug with Plate, Lügat 365 Gönül (Soul) Mug, and the Lügat 365 Aşk (Love) Cup in the Lügat 365 series prepared in accordance with the motto "some words are just beautiful", were the top picks of those wishing to make their loved ones immensely happy with small gifts. The World and "Time-less" themed decorative products and chic writing sets that served as nostalgic gift alternatives were ideal for those who wished to

express their love through gifts.

OLON

SPECIAL GIFT OPTIONS

FOR MARCH 8, INTERNATIONAL WOMEN'S DAY WERE AVAILABLE AT PAŞABAHÇE MAĞAZALARI

PAŞABAHÇE MAĞAZALARI DREW SHOPPERS WISHING TO MAKE THEIR LOVED ONES FEEL SPECIAL WITH MEANINGFUL GIFTS ON MARCH 8, INTERNATIONAL WOMEN'S DAY.

The "Life" and "Boutique" departments of Paşabahçe Mağazaları offered a wide array of alternatives for March 8, International Women's Day. Among the top gift options was a "Kadın (Woman)" Mug from the Lügat 365 series designed in line with the motto "some words are just beautiful", which bore the writing "Bayan değil kadın (Its woman, not lady)". Moreover, mugs with the words "Müstesna (Exceptional)", "Minnettar (Grateful)", and "Gönül (Soul)" transcribed on them also reflected the meaning of the day.

The Mimosa Cologne, one of the colognes that stand out with their pleasant fragrances at Paşabahçe Mağazaları, coffee cups that are a perfect gift option for coffee lovers, picture frames, decorative objects, amulets, and mirrors of various sizes that draw attention with their unique designs were the top picks of those wishing to make their loved ones happy on March 8, International Women's Day.

PAŞABAHÇE MAĞAZALARI

LAUNCH THEIR FIRST EXPERIENCE STORE IN ERENKÖY

SUPPORTED WITH DIGITAL RETAILING SOLUTIONS AND APPLICATIONS, PAŞABAHÇE MAĞAZALARI OPENED THEIR FIRST EXPERIENCE STORE IN ERENKÖY, ISTANBUL, WHICH IS COMPLETE WITH A STRIKING GLASS INSTALLATION AND FLORAL AREAS OFFERING FRESH FLOWERS.



The first experience store of Paşabahçe Mağazaları, which doubles the fun of shopping and takes customer experience to a whole new level, is now open for service on Bağdat Avenue in Erenköy, Istanbul. The new three-storey store, established on an area of approximately 1,200 square meters, presents an extraordinary shopping experience to visitors. The experience store developed with digital innovations showcases nearly 6,000 products, ranging from exclusive collections to glass products, and from tableware and kitchen items to decorative collection pieces, in inspiring trend areas. Featuring an advanced technological infrastructure, a wide product range, and an aesthetic visual layout, the experience store enables customers to enjoy a fast and seamless process throughout the shopping experience, including when browsing for products, making purchases, and conducting



after sales transactions. The design of the in-store navigation system facilitates and enhances the effectiveness of the customer's journey through the store.

WELCOMING AND NATURAL LIVING SPACES

The floral area adorned with freshly picked flowers is among the most striking components of the store. Store visitors can complement gifts with flowers they've purchased from the store and create their own floral arrangements with real flowers in a vase of their choosing. Various workshops on this floor of the store are planned for the upcoming period. Another striking design component of the experience store is the 12-meter high glass installation at the center of the store that runs through all stories and is made up of meticulously crafted handmade glass figures.

THE STORE'S OWN MOBILE APP

Thanks to the interactive digital screens with rich content placed on all stories of Paşabahçe Mağazaları Erenköy, customers are able to find where the products and collections they are looking for are located. The store's own mobile app makes it possible for customers to complete their purchase without having to carry any products or baskets by simply scanning a QR code with their mobile devices at the checkout counter. Another prominent feature of the mobile app is the Gift Wizard. Paşabahçe Mağazaları offer solutions for customers experiencing difficulty choosing a gift both through the mobile app and the interactive screens at the Erenköy store. Visitors can easily select the perfect gift for specific individuals based on their gender, hobbies, personal taste, and even gift budget, thanks to the app.





CULTIVATED TASTES: TASTEMAKERS BY NUDE GLASS

WITH ITS VIDEO AND PHOTOGRAPHY SERIES TITLED TASTEMAKERS, NUDE GLASS REFLECTS THE EXPERIENCES CREATIVE PROFILES WITH CULTIVATED TASTES HAVE HAD WITH THEIR BRAND.



With its collections designed with a refined and original touch, NUDE Glass is the top pick of individuals with creative profiles, ranging from architects to interior designers, and from gallerists to chefs. The new video and photography series called TASTE-MAKERS by NUDE Glass portrays the experiences of creative individuals who have drawn inspiration from these collections. Opinion leaders from various fields of creative industries describe their creative processes and visions. Thus, those who keep track of the series have the opportunity to experience up close the NUDE Glass collections in the context of various lifestyles and settings.

The first guest of the series curated by In-Between Design Platform is Şebnem Buhara, an architect and designer renowned for her timeless, original, and functional approach to design. Buhara, the founder of Bou Design, describes her creative perspective and design philosophy in a video filmed in a living space whose interior she designed. Buhara's approach to design shows how materials, fabrics and textiles can be used to evoke different emotions.

Buhara indicates that the most important component of design is balance and highlights that this is achieved through glass objects. Buhara, who believes that she enhances the design of the space by combining craft and art, turns the Rock & Pop Artist collection, in which designer Ali Bakova reinterprets the Memento Mori skulls, into the focal point of the space dominated by black. The storage boxes from the Ecrin collection, designed by Sebastian Herkner and inspired by the World Pyramids of Ritten, a stunning natural monument in South Tyrol, are displayed on the coffee table, adding both a simple aesthetic and functionality to the space. Vases from the Layers collection create a simple yet powerful effect through the harmony of two different colors.





ŞİŞECAM DEVELOPS

V-BLOCK TECHNOLOGY

AGAINST VIRUSES AND BACTERIA







DEVELOPED BY ŞİŞECAM, V-BLOCK TECHNOLOGY NEUTRALIZES VIRUSES AND BACTERIA ON GLASS SURFACES AND OFFERS MAXIMUM HYGIENE FOR GLASSWARE UNDER THE PAŞABAHÇE BRAND.

Şişecam developed V-Block Technology against viruses and bacteria on glass surfaces. The entirely domestic coating technology, V-Block, which was developed at the Şişecam Science, Technology and Design Center, is 90-99.5% effective against viruses and bacteria.

The efficacy of V-Block's special formula was tested in accredited laboratories and approved by the Turkish Health Ministry. Paşabahçe has developed the world's first antimicrobial glassware products featuring V-Block Technology. V-Block Technology was applied on Paşabahçe's highly admired product series, including Iconic, Allegra, Aiada, Casablanca, and Timeless. Offering ultra hygiene, Paşabahçe products are ideal not only for use in the home, but also spaces such as restaurants, cafes, hospitals, and cafeterias. Aesthetically appealing products such as drink glasses, tumblers, tea cups, tea plates, cups with handles, and bowls offer maximum hygiene. V-Block glassware products, which have taken their places in retail sales points, hotels, restaurants and cafes across Turkey, are also available to consumers abroad.







12.13 N E W S

V-BLOCK TECHNOLOGY IS NOW IN BULGARIA

From Right to Left:

Bahtiyar Dalgıç – Paşabahçe Bulgaria EAD Plant Manager, Panayot Dimitrov – Deputy Governor of Targovishte, Zeki Budak – Trakya Glass Bulgaria EAD Plant Manager, Dr. Darin Dimitrov – Mayor of Targovishte, Prof. Ahmet Kırman – Şişecam Chairman and CEO Mitko Staykov – Governor of Targovishte, Dr. Boyko Penkov – Deputy Health Minister, Muhsin Miroğlu – Şişecam Automotive EAD Plant Manager

THE NECESSARY INVESTMENTS AND DEVELOPMENT ACTIVITIES TO MANUFACTURE ŞİŞECAM'S PRODUCTS FEATURING V-BLOCK TECHNOLOGY IN BULGARIA HAVE BEEN RAPIDLY COMPLETED.

Sisecam developed V-Block Technology against viruses and bacteria on glass surfaces. V-Block Technology prevents harmful organisms from living and breeding by coating glass surfaces with its special formula. This special technology which offers superior hygiene was tested in accredited laboratories and was found to be 90-99,5% effective against viruses and bacteria, and it was and approved by the Turkish Health Ministry. The special formula applied to the outer surface of products at high temperatures through the vapor condensation method during production remains active and is suitable for use in spaces such as hotels, restaurants, cafes, hospitals, and cafeterias, as well as the home. The world's first glassware featuring antimicrobial coating and produced with V-Block Technology were manufactured in Şişecam's domestic facilities and launched in February. The necessary infrastructure and development activities have



Governor of Targovishte Mitko Staykov and Prof. Ahmet Kırman – Şişecam Chairman and CEO

been completed for the production of V-Block coated products, which have drawn great interest, at Paşabahçe's Bulgaria EAD Plant in Targovishte. Following the ceremony attended by senior officials, production was initiated at the plant. Speaking at the ceremony attended by the Deputy Health Minister of Bulgaria, the Governor of Targovishte, the Deputy Governor and the Mayor, Şişecam Chairman and CEO Prof. Ahmet Kırman highlighted the importance Sisecam attaches to technology and innovation. During the ceremony, Governor of Targovishte Mitka Staykov presented a plaque of appreciation to Prof. Ahmet Kırman for Şişecam's long-term investments in Bulgaria and their contributions to the economic development of Targovishte. Products produced in Bulgaria with V-Block coating technology are also aimed to be rolled out as soon as possible.

ŞİŞECAM



RECEIVES A SUSTAINABLE INVESTMENT AWARD FROM BULGARIA

ŞİŞECAM RECEIVES "SUSTAINABLE INVESTMENT AWARD" AT THE "INVESTOR OF THE YEAR AWARDS" ORGANIZED BY THE BULGARIAN INVESTMENT AGENCY.

At the Investor of the Year Awards, held for the 15th time this year by the Bulgarian Investment Agency operating under the Bulgarian Ministry of Economy, Şişecam was deemed worthy of the Sustainable Investment Award. Candidates for the "Investor of the Year Awards" were selected by the country's ministries, governorates, and economic institutions. More than 60 candidates from several sectors, ranging from information technologies to healthcare, were evaluated by jury members. Şişecam was announced the winner of the "Sustainable Investment Award" category, which was evaluated for the first time this year under the awards program. The award presented to Şişecam for its long-term and effective investments was presented to Şişecam Chairman and CEO Prof. Ahmet Kırman by the Deputy Prime Minister of Bulgaria and the Tourism Minister Mariana Nikolova. During his speech at the award ceremony, Şişecam Chairman and CEO Prof. Ahmet Kırman mentioned Şişecam's targets for global growth. Şişecam, which is currently a leader in flat glass and the secondlargest player in glassware in Europe, attaches great importance to Bulgaria, in which it has been operating since 1997, as it is its first gateway to Europe Union markets. Şişecam's investments in Bulgaria, where it continues to carry out production in the fields of flat glass, auto glass, glassware and chemicals, significantly contribute to the development of economic relations between Turkey and Bulgaria.





PROF. DR. AHMET KIRMAN APPEARED ON BLOOMBERG HT AS AÇIL SEZEN'S GUEST

APPEARING ON BLOOMBERG HT AS AÇIL SEZEN'S GUEST, ŞİŞECAM CHAIRMAN AND CEO PROF. AHMET KIRMAN SPOKE ABOUT ŞİŞECAM'S ACTIVITIES IN 2020 AND EXPECTATIONS FOR 2021.

Şişecam Chairman and CEO Prof. Ahmet Kırman attended the program called Finans Merkezi (Finance Center) on Bloomberg HT and evaluated the year 2020. Prof. Ahmet Kırman indicated that although it was a difficult year due to the pandemic and the economy, Şişecam completed the year with success by achieving a turnover of more than 21 billion TRY, in addition to production with a profit of more than 2.8 billion TRY and volumes surpassing millions of tons, thus exceeding market expectations. Expressing that 2020 was a year of mergers and structural reform, Prof. Ahmet Kırman spoke about his expectations for 2021. Moreover, he stated that efforts targeting fundamental issues such as production excellence, digitalization, the supply chain, new product development, procurement competence, customer segmentation, and portfolio analysis were ongoing in 2021. Another topic that was mentioned during the interview was V-Block technology. A result of Şişecam's R&D activities, Antimicrobial V-Block Technology guarantees maximum hygiene by providing effective protection against viruses and bacteria on glass surfaces. The interview that aired on Bloomberg HT was also posted on the Bloomberg HT YouTube channel and shared on all of Şişecam's social media pages. The interview reached international analysts and investors as it was posted with English subtitles on YouTube.



EXCLUSIVE INTERVIEW WITH ŞİŞECAM CHAIRMAN AND CEO PROF. AHMET KIRMAN

ŞİŞECAM CHAIRMAN AND CEO PROF. AHMET KIRMAN ANSWERED BURCU GÖKSÜZOĞLU'S QUESTIONS ON A PARA EVENING NEWS.

Şişecam Chairman and CEO Prof. Ahmet Kırman was Burcu Göksüzoğlu's guest on A Para Evening News, where he evaluated the results of the merging of Şişecam's companies under one roof. Indicating that Şişecam completed 2020 above market expectations despite the challenging conditions, Prof. Ahmet Kırman shared their growth targets for 2021. During the interview, Kırman spoke about Antimicrobial V-Block Technology, which emerged as a result of Şişecam's R&D activities and provides maximum hygiene against viruses and bacteria on glass surfaces.





ŞİŞECAM

PARTICIPATES IN ULUDAĞ ECONOMY SUMMIT

IN THE ITALY EXCLUSIVE PANEL ORGANIZED AS PART OF THE ULUDAĞ ECONOMY SUMMIT, ŞİŞECAM CHAIRMAN AND CEO PROF. AHMET KIRMAN SPOKE ABOUT ŞİŞECAM'S INVESTMENTS IN THE COUNTRY.

Şişecam Chairman and CEO Prof. Ahmet Kırman attended the Uludağ Economy Summit, one of Turkey's most prominent events in the area of business and economy, as a speaker in the Italy Exclusive Panel. Italy's Foreign Minister Manlio Di Stefano made the opening speech in the Italy Exclusive Panel, which was held online on March 24, and the closing speech was delivered by Roberto Luongo, Managing Director of the Italian Trade Agency.

During the panel, Prof. Ahmet Kırman indicated that Italy is a strategically important country for Şişecam. Expressing that Şişecam had made investments of more than 150 million euros in Italy in the areas of chemicals, glassware, and flat glass to date, Prof. Ahmet Kırman highlighted that these investments made



Şişecam one of the largest Turkish investors in the country. Şişecam, one of Italy's largest Turkish investors, has an investment history of 16 years in the country. Şişecam, which operates in three different areas in Italy, made its first investment in 2005 as a 50% partner of Cromital, which operates in the field of chromium chemicals, and in 2011 it acquired the entire company. Şişecam has made two significant investments in flat glass in Italy. Şişecam, which made its first investment in flat glass by acquiring the Porto Nogaro facility in 2016, has become Europe's largest flat glass producer in terms of production capacity as a result of this investment. Most recently, Şişecam invested in the Manfredonia facility, which it acquired in 2018, thereby doubling its flat glass capacity to 410,000 tons per year.





ŞİŞECAM HOLDS 85[™] ORDINARY GENERAL ASSEMBLY MEETING

Sisecam's 85th General Assembly Meeting, which was attended by Şişecam Chairman and CEO Prof. Ahmet Kırman, Members of the Board of Directors, Members of the Executive Board, and Şişecam's executives and shareholders, was held on March 30 at the Şişecam Headquarters. During the General Assembly Meeting, where precautions against the pandemic were maximally implemented, the 2020 Annual Report and the Ordinary General Assembly Agenda of the Partners were shared with the participants. During the General Assembly meeting, it was decided that Prof. Ahmet Kırman, who was appointed as Chairman of the Board of Directors, would resign from his position as CEO of Türkiye Şişe ve Cam Fabrikaları A.Ş. as of June 30, 2021 and begin to serve as Chairman of the Board of Directors as of July 1, 2021, and that Mustafa Görkem Elverici, who is currently the Chief Financial Officer, would begin to serve as the CEO as of July 1, 2021. Moreover, Şişecam's new board of directors was also determined.

ŞİŞECAM BOARD OF DIRECTORS

Prof. Dr. Ahmet Kırman Chairman and CEO Senar Akkuş Vice Chairman Sezgin Lüle Member Zeynep Hansu Uçar Member İzlem Erdem Member Prof.Dr. Şener Oktik Member Dinç Kızıldemir Independent Member Dr. Cem M. Kozlu Independent Member Gül Ayşem Sargın Independent Member







ŞİŞECAM PRODUCES FOR TURKEY

ŞİŞECAM FIRES AND COMMISSIONS THE 240,000-TON CAPACITY FURNACE IT RENEWED WITH AN INVESTMENT WORTH TRY 400 MILLION AT THE YENİŞEHİR FLAT GLASS FACILITY.

Sisecam fired the flat glass furnace it renewed by completing a cold repair with an investment worth nearly TRY 400 million at its Bursa Yenişehir production facility. Upon commissioning the 240,000-ton capacity furnace equipped with the latest production capabilities, Sisecam became one of the few producers to produce flat glass reaching up to 16 meters. Renewed and revamped with the latest technology in accordance with Industry 4.0 standards, the furnace is targeted to meet the surging domestic demand for flat glass. Şişecam, which continues to produce flat glass at four production facilities located in Bursa Yenişehir, Kırklareli, Mersin and Ankara Polatlı using eight furnaces in total, reached a flat glass production capacity of 2 million tons in Turkey with the renewed furnace. Offering 90% of its flat glass production to the domestic market, Şişecam will be able to respond to the high demands of the construction, furniture, white goods, and automotive industry thanks to its increased capacity to supply. The technologies employed by the sixth renewed furnace of the Yenişehir facility make it possible to introduce new products with added value, such as ultra clear flat glass, into the market. Turkey's first mega jumbo glass in the area of architectural glass will be produced by the new furnace.



IN 2020, ŞİŞECAM

RECYCLED 250,000 TONS OF WASTE GLASS

ŞİŞECAM, WHICH RECYCLED 250,000 TONS OF WASTE GLASS IN 2020, CONTINUES TO GENERATE VALUE FOR THE FUTURE OF THE PLANET IN ACCORDANCE WITH ITS SUSTAINABILITY GOALS.

Şişecam contributes to the circular economy with its recycling efforts and sustainable supplier management practices. Having reached its annual targets by recycling 250,000 tons of waste glass in 2020, Şişecam reduced its carbon emissions by cutting down on its use of natural raw materials. Şişecam, which launched the Glass and Glass Again project, one of Turkey's most extensive sustainability and social responsibility projects, in 2011, and which founded Sisecam Cevre Sistemleri A.Ş., a company focused primarily on waste glass collection and recycling, in 2016, continues to carry out innovative projects in line with its sustainability goals.



ŞİŞECAM ÇEVRE SİSTEMLERİ

COMMENCES PRODUCTION OF CEMENT CONTAINING WASTE GLASS

THE GLASS CULLETS PRODUCED AT THE FACILITY OF ŞİŞECAM ÇEVRE SİSTEMLERİ A.Ş., WHICH WAS FOUNDED BY ŞİŞECAM TO PERFORM RECYCLING ACTIVITIES, ARE TURNED INTO GLASS CEMENT.

Şişecam Çevre Sistemleri A.Ş., which was jointly established with the European Bank for Reconstruction and Development (EBRD) in 2016 in accordance with Şişecam's sustainability goals, continues to carry out its activities oriented towards the recycling of glass waste with its increasing production capacity, value-added products, and customer-oriented value creation strategy. The glass cullet products produced at the facility of Şişecam Çevre Sistemleri A.Ş., which previously had no use, are now being turned into glass cement following the adoption of an innovative approach. Thanks to new technology that enables glass cullets to be turned into glass cement containing 50% glass cullets, instead of being treated as waste, the production of C16/20 grade cement has started. Colored and clear glass concrete slabs, which are transformed into a prefabricated building system, can be used as walls without the need for additional reinforcement thanks to their special design.





REFERENCE PROJECTS 2021

PRESENTS PROJECTS THAT HAVE COME TO LIFE WITH FLAT GLASS PRODUCTS

"Reference Projects 2021", the third of the Reference Projects series, brings together 108 selected projects from Turkey and the world. The book contains inspiring projects of 90 architects, 18 façade consultants, 94 investors, and 22 authorized producers stands out with its professional photographs of projects. Alongside the

ZODER

1. Renkli Camlor

Comior

2. Reflektif Comlor 3. Temperlesebilir Low-5

/ Solar Low-E Kopler

Farklı Çözümler ile Cephede Farklı Etkiler

photographs, the book also features detailed information of the latest Flat Glass products used in these projects, their architectural design, façade consultants, investors, and authorized producers. The book, which showcases the endless possibilities for using glass in architectural projects, was gifted to industry professionals.

FLAT GLASS ARE MADE AVAILABLE TO INTERNATIONAL

E-TRAINING COURSES ON

INTERNATIONAL CUSTOMERS

Flat Glass continues to work towards its goal of growing in international markets and increasing its customer number and product recognition. In line with this goal, e-training courses on products, production, and glass processing, which consist of 37 videos available in 6 different languages, are shared with international customers through the Şişecam Academy Portal. The Safety and Security Glass e-training course, first made accessible to Flat Glass customers in Russia, is planned to be shared with all international sales teams and customers in the upcoming period.

CAMDA EMNİYET VE GÜVENLİK UNIVERSITY STUDENTS SHOW GREAT INTEREST IN

SEMINARS ON GLASS The seminars on glass organized by Flat Glass for university students are underway. A group of about 500 students studying architecture and engineering at Munzur University, Van Yüzüncü Yıl University, and Medipol University attended technical seminars on flat glass

products. There was great interest in the seminars which introduced both existing and new products. Students who participated in the seminars had the opportunity to learn about the glazing systems required by TS 825 Thermal Insulation Requirements in Buildings Standart and Noise Control Regulation.

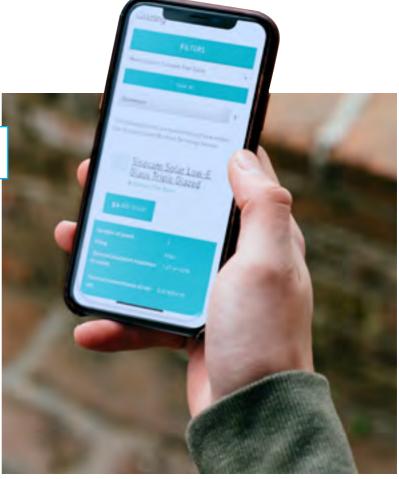
ŞİŞECAM PRODUCTS

ARE FEATURED ON THE WEBSITE OF EBRD



Energy-efficient, innovative Şişecam products have been added to the database of Green Technology Selector (GTS), European Bank which applies to 38 countries in which the European Bank for Reconstruction and Development

(EBRD) develops projects. The products in Sisecam's Temperable Coated Glass family were posted on the platform in both Turkish and English. Products and vendors in the EBRD's GTS database, which promotes an energy-efficient green economy, become visible in all countries using the platform. New Şişecam products are planned to be added to the database in the upcoming period.





ISICAM SYSTEMS

CALLS FOR **ENERGY SAVING**

Isicam Systems, with its "Saving-Oriented posts, and digital content. The campaign, which is carried out with the slogans "Earn in your sleep", "Earn on your couch" and "Earn as you stand", draws attention to the savings provided by Isicam Systems and its benefits for end-users. The features of triple Isicam Systems which provide maximum heat and solar control, are also emphasized in social media posts.



AT ŞİŞECAM ACADEMY A NEW PERIOD BEGINS

AS THE ŞİŞECAM ACADEMY SEMINARS CONTINUE TO BE PROVIDED ONLINE, DEVELOPMENT JOURNEYS AND INTERNAL MENTORING PROGRAMS HAVE BEEN LAUNCHED.

DEVELOPMENT JOURNEYS AT ŞİŞECAM ACADEMY

As part of the Global Talent Management System Journey, the competence-based Assessment Center application has been implemented with the participation of 366 Şişecam employees. According to the inventory results of the Assessment Center, employees had the opportunity to determine their strong competencies and/or areas of development. Following the assessment and feedback interviews, the participants who were to take part in the Sisecam Academy Development Journeys in March were determined with the aim of supporting the development of these competencies. The Development Journeys, assigned in both Turkish and English, include various development resources, such as distance learning, videos, book recommendations, articles, and tasks. In addition to all these, a Development Plan will be created to monitor competency development throughout the year.



ŞİŞECAM INTERNAL MENTORING PROGRAM BEGINS

Pilot applications for the Internal Mentoring Program, one of the development programs under the Global Talent Management System Journey which aims to support the professional development of Şişecam employees, have begun to be implemented at both domestic and international facilities. As part of the program, the Mentors and Mentees who volunteered in March were matched, and the necessary trainings were completed. The Mentor-Mentee meetings started in April. The program will be applied on a wider scale based on the assessments made and feedback obtained after a process that is planned to last 6 months.



ONLINE SEMINARS ARE OFFERED TO EMPLOYEES

In order to minimize any risks and maintain social distancing amidst the Covid-19 pandemic, the Academy seminars, which are held annually, were offered to Sisecam employees through the Bluejeans Events platform this year. From April onwards, the seminars shaped according to current issues and needs focused on topics of importance during the pandemic, such as psychological resilience, remote team management, Covid-19 awareness and personal protection methods, potential developments in the economy, the impact of distance education on parenting psychology, nutritional recommendations to boost the immune system, and macro and micro expressions in the digital environment to strengthen communication in the virtual environment. As the pace of digitalization is

increasing in all areas, tips about digital tools and methods to facilitate decision making were shared during the seminar titled "Myths and Facts about Design Thinking" organized in cooperation with Yakup Bayrak on January 15th. The seminar titled "Understanding Humans in the Grip of Technology" was held on February 12 with Yüce Zerey and focused on the effects of technological transformation on human life and change management. Furthermore, the seminar titled "Key Skills: Human Relations in Business and Life" and led by Polat Doğru on March 12 explored answers to the questions "What do we need to be aware of in order to manage our relationships?" and "On which basic dimensions do we convey messages when communicating?" Those who were unable to watch the seminars live were given access to the recordings through the Şişecam Academy Portal.

THE 2021-2022 LEARNING AND DEVELOPMENT PLANNING PERIOD FOR ŞİŞECAM ACADEMY BEGINS



In order to maintain social distancing during the Covid-19 pandemic, the learning and development activities for the 2020-2021 period were designed using alternative training methods. During the planning activities for the new period to begin in April, the conditions of

the pandemic were taken into consideration, and the catalogues were simplified primarily with trainings suitable for distance learning. The competency and technical/professional skills oriented training catalogues prepared for various titles and competencies with the aim of supporting the personal and vocational development of Şişecam employees within the April 2021-March 2022 period have been made accessible.

ŞİŞECAM AT UNIVERSITIES

ŞİŞECAM CONTINUES TO COLLABORATE WITH YOUTH THROUGH INSPIRATIONAL TRAININGS ON CAMPUS, INTERNSHIPS, AND TALENT PROGRAMS.



TOGETHER UNITES YOUNG TALENTS

As part of the Young Talent Program, whose fourth phase began on January 12, 130 long-term interns started their project internships at our headquarters units and R&D center. The "Welcome Event", which kicked off with the sending of surprise orientation kits to the homes of interns on the weekend before the start of the program, officially started on January 12 with the opening speeches delivered on a digital platform. The opening day, which featured online taboo games and sessions held to encourage interns and the teams to get to know each other, was full of fun and joy. After the first month of the internship, HR teams and the interns came together in a digital environment and shared their feedback regarding the program.



EASING INTO A CAREER THROUGH THE SUMMER INTERNSHIP PROGRAM FIRST STEP

The Summer Internship Program First Step, which aims to enable university students to embark on their career journey with an effective internship experience by supporting them in their first step towards business life and onwards, started in March. The interns, who will be evaluated in April and May, will begin to work in June.



UNIVERSITY CAMPUS EVENTS TAKE PLACE AT FULL SPEED

Employer Brand university campus events are jam-packed with activities in the new year, as well. In the first three months of 2021, 38 events were organized at 22 universities. University students showed great interest in the events that offered a wide range of activities, from inspirational talks to case studies and interview simulations.

UNIVERSITY-INDUSTRY COLLABORATIONS

Projects that bring together universities and the industry provide senior-year university students with the opportunity to gain valuable job experience. As part of the graduation projects that give students a chance to gain experience in real projects, 19 graduation projects involving student groups from six universities are underway. A separate project, the Material Engineering Branded Curriculum, aims to create a qualified work force by targeting the department of Material Engineering. An agreement has been reached with Yildız Technical University and METU for the Şişecam branded Glass Technologies course, which is planned to be offered at the undergraduate level to promote interest in the glass industry among university students. Content development activities for the course that is planned to be offered in the 2021-2022 academic year have begun.

24.25 DIGITAL LIFE

THE DIGITAL STATUS OF TURKEY: THE WE ARE SOCIAL TURKEY 2021 REPORT HAS BEEN PUBLISHED

The We Are Social Turkey 2021 report, which shares the digital report card of the world each year and is eagerly awaited by the digital industry, was recently published. Jointly prepared by We Are Social and Hootsuite, the report is presented to the public at certain intervals each year. Containing several details about the internet, e-commerce, mobile, social networks, the digital world and advertising, the report offers important information to both industry professionals and academics, who interpret and analyze the results. Below are the headings that stand out in the We Are Social Turkey 2021 report:

AVERAGE TIME SPENT ON THE INTERNET

How much time do we spend on the internet? It's the first time we've seen such a high number in recent years.

- The average time we spend on the internet in 1 day reaches about 8 hours.
- The average time spent on social media is 2 hours and 57 minutes.
- Our country has still not gotten into the habit of listening to podcasts. In one day, we only set aside 36 minutes to listen to podcasts.

WHICH SOCIAL PLATFORMS ARE USED THE MOST IN TURKEY?

YouTube is the second most popular search network after Google, but also ranks first in terms of social media. YouTube is followed by Instagram with a rate of 89.5%. In the We Are Social 2021 Global Report, the country with highest level of Instagram penetration is Turkey. In the 2022 report, it is estimated that the Clubhouse application, which has drawn attention with its swift rise in January, will be added to the list after Facebook and Twitter.

WHAT DOES THE PICTURE LOOK LIKE FOR FACEBOOK?

Facebook has increased its advertising audience by 1 million compared to last year. Although it is true that Facebook is losing strength, it would be wrong to say that it has completely died out. It does not seem likely for a platform that holds such a great amount of data to die out in the near future.

WHAT DOES THE PICTURE LOOK LIKE FOR INSTAGRAM?

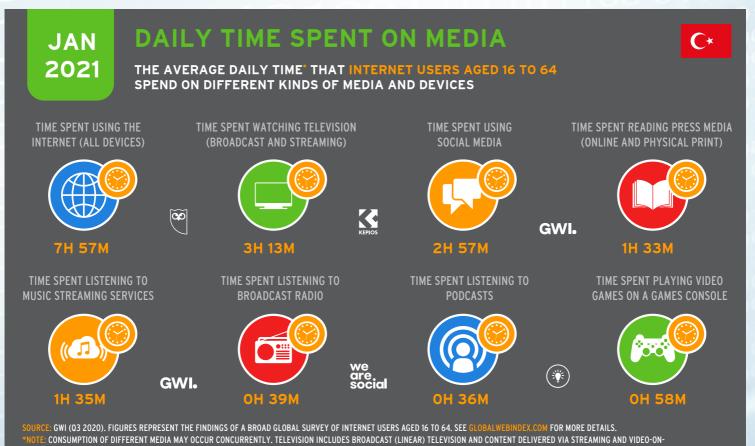
Instagram continues to rise unabated. Its potential audience, which was 38 million in 2020, reached 46 million in 2021. Approximately 69% of the adult population makes up the percentage of Instagram users in Turkey.

GENERAL OVERVIEW OF LINKEDIN

The percentage of LinkedIn users in Turkey is comprised of 16% of the adult population. LinkedIn is mostly used by the segment of society that is actively employed, and the LinkedIn platform reaches about 10 million people in Turkey.

WHICH PLATFORM DID WE USE MOST TO RESEARCH BRANDS?

According to the report, search engines ranked first in terms of brand research. First place in this category never changes. This is followed by social media channels and websites. It is safe to say that consumer comments are a very important brand research criterion regardless of the platform.

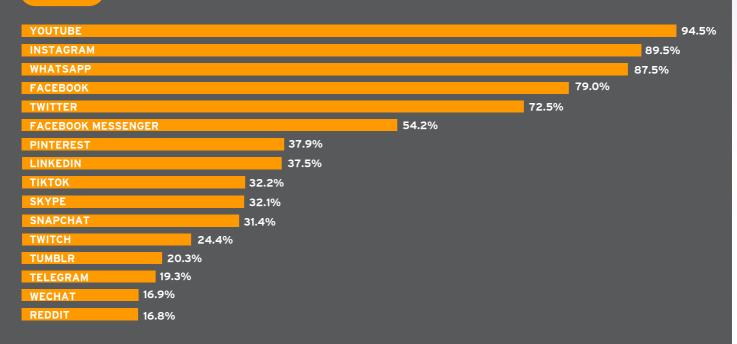


DEMAND SERVICES. PRESS INCLUDES ONLINE AS WELL AS PHYSICAL PRINT MEDIA. BROADCAST RADIO DOES NOT INCLUDE INTERNET RADIO.

JAN 2021

DAILY TIME SPENT ON MEDIA

PERCENTAGE OF INTERNET USERS AGED 16 TO 64 THAT HAS USED EACH PLATFORM IN THE PAST MONTH



SOURCE: GWI (03 2020). FIGURES REPRESENT THE FINDINGS OF A BROAD GLOBAL SURVEY OF INTERNET USERS AGED 16 TO 64. SEE GLOBALWEBINDEX.COM FOR MORE DETAILS. NOTE: FIGURES ON THIS CHART REPRESENT INTERNET USERS' SELF-REPORTED SOCIAL MEDIA BEHAVIOURS, AND MAY NOT CORRELATE WITH THE FIGURES CITED ELSEWHERE IN THIS REPORT FOR EACH PLATFORM'S ADVERTISING AUDIENCE REACH. OR THE ACTIVE USER FIGURES PUBLISHED BY INDIVIDUAL SOCIAL MEDIA PLATFORMS.

FACEBOOK: AUDIENCE OVERVIEW

THE POTENTIAL AUDIENCE THAT MARKETERS CAN REACH USING ADVERTS ON FACEBOOK



POTENTIAL AUDIENCE* THAT INSTAGRAM REPORTS CAN BE REACHED USING ADVERTS ON INSTAGRAM





68.4%

ADVERTISING AUDIENCE

COMPARED TO THE TOTAL

KEPIOS



+4.5% +2.0 MILLION

IN INSTAGRAM'S

ADVERTISING REACH

PERCENTAGE OF ITS AD AUDIENCE THAT INSTAGRAM REPORTS IS FEMALE*



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42.2%

PERCENTAGE OF ITS AD AUDIENCE THAT INSTAGRAM REPORTS IS MALE*

(*

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26.27 DIGITAL LIFE

LION'S SHARE GOES TO DIGITAL MEDIA IN MEDIA AND ADVERTISING INVESTMENTS

According to the Estimated Media and Advertising Investments Report in Turkey, total media investments in 2020 amounted to TRY 13 billion 976 million. The sector that received the largest share of investments with a rate of 54% was digital media. The report in question was prepared by Deloitte, an independent consultancy firm, on behalf of the Advertisers Association (Reklamcılar Derneği -RD), the Association of Advertisers (Reklamverenler Derneği - RVD), the Interactive Advertising Bureau (IAB TR), the Foundation of Outdoor Advertisers (ARVAK), the National Radio Broadcasters Association

(URYAD), and the Mobile Marketing Association (Mobil Mecralar Araştırma Pazarlama ve Reklamcılık Derneği - MMA).

CONSUMPTION OF DIGITAL CONTENT INCREASES

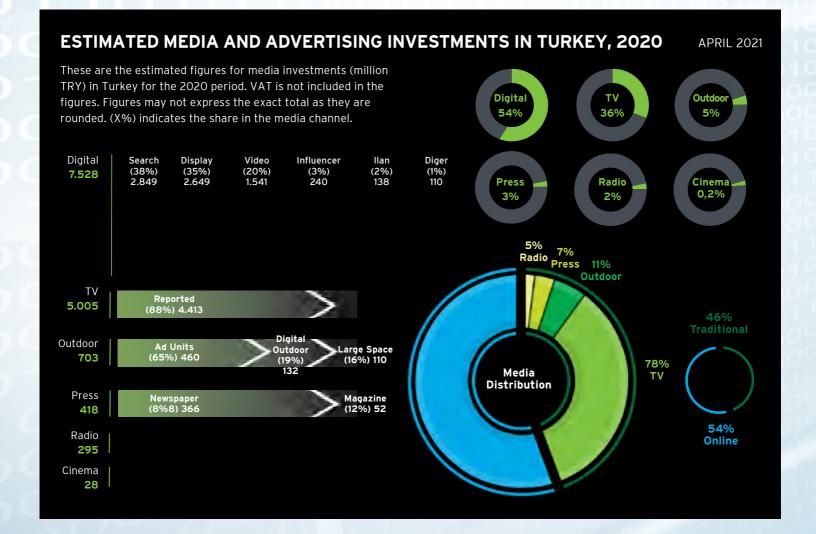
During the pandemic that started in March of last year, it has been observed that people are spending more time at home due to lockdowns and remote working practices. Consequently, the consumption of digital content has increased. Although the lockdown was lifted in June, it was reintroduced in October, leading to consumer behavior and media consumption similar to the first phase of the pandemic. As a result, digital media was the most-used media channel throughout the year.

DIGITAL TRANSFORMATION MAKES GREAT STRIDES IN 2020

Due to the remote working method, there has been a spike in the number of people using applications that offer voice and video calls over the internet. During this period, brands opted for digital media and digital solutions to reach their consumers, create benefit, create emotional connections, and interact. Accordingly, they increased their investments in this direction. In brand communications targeting live steams on social media, effectiveness and interaction, an increase in collaborations with influencers was observed.

MOBILE PLATFORMS GREW BY 70 PERCENT

In 2020, the highest growth in digital media investments was reported for mobile platforms. Last year, the share of mobile platforms in digital media investments was 70%, and the investments in these platforms totaled TRY 5 billion 261 million. The sectors that increased their advertising investments the most in 2020 were retail, healthmedical, and cleaning (household cleaning products).





RICHARD FRITZ WEBSITE MOVES TO SISECAM.COM.TR

Richard Fritz Holding GmbH companies, the automotive glass manufacturer that is highly preferred by the world's leading upper segment automotive manufacturers, joined Şişecam in 2013 and have been operating under the name Sisecam Automotive since 2021. During the name change process in which Richard Fritz Holding GmbH, which has production facilities in Germany, Hungary and Slovakia, was renamed Sisecam Otomotiv A.Ş., the website fritz-group.com was moved under the Sisecam Automotive websites on Şişecam's corporate website. After the move, the links on the website of Richard Fritz Holding were redirected to the page otomotiv. sisecam.com.tr.

ŞİŞECAM AUTOMOTIVE RENEWS ITS CORPORATE IDENTITY GUIDE

During the name change process in which Richard Fritz Holding GmbH was renamed Şişecam Otomotiv A.Ş, the corporate documents of Şişecam Automotive were revised in accordance with Şişecam's corporate identity standards and made available in both English and Turkish. The corporate documents were published under the brand library corporate identity guides menu on Camport, Şişecam Automotive's local network for corporate identity guides.





RETURNION EXPERIENCE (ROX)

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FOLLOWING THE ARTICLES SHARED IN PREVIOUS ISSUES AS PART OF OUR ARTICLE SERIES ON DIGITALIZATION AND INDUSTRY 4.0. - NAMELY "THE INTERNET OF THINGS, BIG DATA, ARTIFICIAL INTELLIGENCE, TURKEY'S DIGITAL ROADMAP, DIGITAL TWINS, CUSTOMER EXPERIENCE, CYBERSECURITY, ROBOTIC PROCESS AUTOMATION (RPA), VIRTUAL & AUGMENTED REALITY, BLOCKCHAIN, DIGITAL OFFICE, INTERNAL ENTREPRENEURSHIP, DIGITAL ALGORITHMS & DYNAMIC PRICING, AND HABIT DESIGN" - WE WILL ADDRESS THE TOPIC OF "RETURN ON EXPERIENCE (RoX)" IN THIS ISSUE.

WHAT IS RoX?

Traditional return on investment (ROI) metrics no longer suffice in determining your company's success on their own. An assessment of whether your value proposition, talents, and products and services portfolio will create shareholder value requires a focus on the extent to which higher customer expectations are met in terms of the customer experience.

Return on Experience (RoX) is a new performance management metric that connects Customer Experience-CX, Employee Experience (EX), and Leadership Experience-LX and brings together investment metrics in the areas of corporate culture, technology, and analytics. It promotes a healthy, productive, and emotionally driven commitment among all three groups: leaders, employees, and customers. It ensures that your IT systems, data infrastructure, business processes, and performance criteria align with these basic capabilities. As a result, this can forge a stronger identity for the company and set it up for success in the digital age.

- 67% of customers are willing to pay more for a great experience.
- Experience-led companies have 1.6 times higher customer satisfaction rates and 1.9 times higher average order value.
- Companies with engaged employees outperform the competition by 147%.
- 76% of customers expect companies to understand their needs and expectations.
- Loyal customers are five times more likely to buy again and four times more likely to refer the brand to family and friends.
- Consumers who have an emotional connection with a brand have a 306% higher lifetime value.

HOW IS RoX MEASURED?

- 1. Does our customer experience accurately reflect our brand?
- 2. Does our employee experience have a positive impact on the customer experience?
- **3.** How do you measure improvement in customer and employee experience initiatives?
- **4.** How does the organizational culture affect the employee experience?
- **5.** What is the role and effectiveness

of leaders in creating value?

6. How have value-creating behaviors affected your profit and loss statements?

A structure that aligns the customer, employee, and leader experience can significantly improve all three forms of experience and prepare the organization for a more effective transformation journey. In fact, re-designing these three elements process-wise and defining performance metrics is one of the most effective and scalable ways to influence a company's culture and shape its digital future.

Sources:

 PWC, https://www.pwc.com/gx/ en/industries/consumer-markets/ consumer-insights-survey/ archive/2019/insights-2019.html
 Forbes, https://www. forbes.com/sites/ blakemorgan/2019/12/16/100stats-on-digitaltransformation-and-customerexperience/?sh=6ad1d38f3bf3
 Forbes, https://www. forbes.com/sites/ blakemorgan/2019/09/24/50-statsthat-prove-the-value-of-customerexperience/?sh=7b3efd504ef2

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ŞİŞECAM'S CORE VALUES:

DIVERSITY AND INCLUSION

ŞİŞECAM, WHICH ATTACHES IMPORTANCE TO FAIR AND EQUITABLE APPROACHES IN THE AREA OF HUMAN RESOURCES, IS CARRYING OUT A NUMBER OF PROJECTS AND APPLICATIONS TARGETING DIVERSITY AND INCLUSION.

Sisecam aims to promote diversity and inclusion, which are among the increasingly important global values in all business processes and regions where it operates. Inclusion, which values employee diversity and the individual differences of employees, is one of the main factors that has driven Sisecam's success on a global scale.

Established in 2019, the Diversity and Inclusion Work Group operates under the Şişecam Sustainability Committee and carries out activities focused on disseminating an inclusive corporate culture throughout all of Şişecam's operations. The Şişecam Diversity and Inclusion Guidelines published in 2019 contains corporate goals that align with Şişecam's principle of equal opportunity and the sustainable development goals determined by the United Nations.¬

Empower 🕼

ELIMINATING GENDER STEREOTYPES

Şişecam also attaches great importance to efforts aimed at ensuring that all employees have equal access to career opportunities. Şişecam manages the career paths of employees by taking into consideration their competencies rather than their gender, and is currently carrying out efforts directed at "Equal Opportunity in the Workplace (İş'te Fırsat Eşitliği)" in order to eliminate gender inequalitybased obstacles that hinder women from participating in business life. The number of female employees at Şişecam is roughly 5,000, and the share of female employees among all employees exceeds 20%. Efforts focused on gender equality aim to boost the number of female employees across all levels of Şişecam by 30%.

The "Women-Friendly Plant Project", which aims to promote a culture of equal opportunity and inclusion throughout Şişecam as well as ensure and support women's participation in the labor force, was first implemented at the production facilities in Turkey. Under the project, whose main goal is to eliminate social barriers that hinder women's participation in business life, target employment rates were defined to increase the number of female employees in production facilities and the physical working conditions of plants were improved. The number of young female talents recruited through the Şişecam internship programs is increasing by the year. Within the scope of long-term project internships, efforts are underway to recruit qualified female employees at the headquarters and plants. Collaborations are being developed with professional organizations and universities in order to employ qualified female workers in plants.

Increasing employment opportunities for disabled employees makes up a fundamental part of Şişecam's principles of diversity and inclusion. In this regard, workspaces are arranged to facilitate the business lives of disabled employees. Thanks to Şişecam's facilitative approach, the number of disabled employees has exceeded 500.

ŞİŞECAM RECEIVES "BOARDS EMPOWERED BY WOMEN" AWARD

Şişecam values the competence of women in its management staff, as well. As part of the "Women Directors Conference of Turkey" organized for the 7th time in 2019 by the Sabancı University's Corporate Governance Forum, Şişecam was deemed worthy of the "Boards Empowered by Women" Award. In 2020, women made up 44% of Şişecam's Board of Directors, thus landing it among the companies with the highest number of women board members in Turkey.

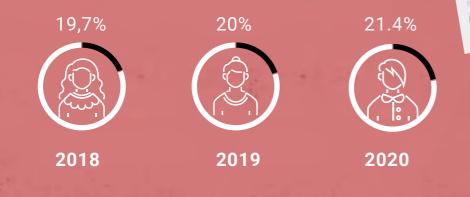
SISECAM CELEBRATES MARCH 8, INTERNATIONAL WOMEN'S DAY

Şişecam's principles of diversity and inclusion are among the core elements of its corporate heritage. At Şişecam, which initiated its technological transformation with a female scientist in the 1950s, women have always made, and will continue to make, significant contributions to business life. Şişecam is taking important steps towards ensuring equal opportunity with projects such

as the recently introduced "Women-Friendly Plant Standard" and professional development programs for women. Şişecam is continuing its efforts to combat stereotypes surrounding women's participation in certain sectors of the manufacturing industry and to recruit women in production areas. As part of these efforts, the importance of women's employment for Şişecam was explained through a special video prepared for March 8, International Women's Day. This video, which was published on social media on March 8 and drew lots of attention, demonstrates the importance Şişecam attaches to equality of opportunity both domestically and internationally.

SISECAM

FEMALE EMPLOYMENT AT ŞİŞECAM





IN THE FOOTSTEPS OF OIL, A NEW TREASURE:

A SUSTAINABLE LIFE ON OUR PLANET DEPENDS ON THE SUFFICIENT AND GOOD QUALITY OF WATER RESOURCES. AMONG THE TOP FORECASTED CRISIS SCENARIOS IS A SHORTAGE OF WATER RESOURCES. EACH INDIVIDUAL AND ORGANIZATION HAS A DUTY TO PREVENT A POTENTIAL WATER CRISIS THAT MIGHT IMPACT EVERY AREA OF LIFE, FROM THE ECONOMY TO THE ENVIRONMENT. ŞİŞECAM IS CONTINUING ITS ACTIVITIES TARGETING THE EFFICIENT USE AND RECOVERY OF WATER RESOURCES WITH ITS EFFECTIVE WATER MANAGEMENT APPROACH.

A series of global pandemics, drought, famine, waves of mass migration, political instabilities and wars have reminded us once more how important it is to have access to water and water resources, a basic condition for sustainable life, for our future.

Last year, the stock markets experienced a period in which oil prices dropped to unprecedented negative levels, and the first period of this year marked yet another historic development as water assets can now be traded. CME Group, one of the world's largest stock exchange operators, is among those who launched future contracts based on California's water asset worth \$1.1 billion as of December 7. It is inevitable that the diminishing interest in oil will be replaced by a rising interest in water. The "Water Crisis" is included in the list of top 5 risks for the next 10 years, which was published by the World Economic Forum in 2019, a stark reminder of the gravity of the situation.

Water, which is an indispensable resource for basic food resources, plays a discreet yet profound role in providing critical industrial inputs to many fields of industrial production, such as energy, minerals, oil, steel and paper, as well as promoting economic development and eliminating poverty. Today, 12% of the world's water is used in the household while 88% is used in agriculture and industry.¹

REFERENCES

¹ Food and Agriculture Organization of the United Nations Statistics



34.35 FEATURE



RATIO OF WATER CONSUMPTION TO WATER RESOURCES⁴

When comparing to the water access of thirdworld countries with similar incomes per capita and the average annual growth levels of these countries, countries with greater access to clean water have an average annual growth of 3.7%, while countries with limited access to water remain at 0.1%. ² Today, access to water resources and effective water management continues to gain strategic and economic importance all across the globe due to their social and political effects.

However, despite increasing rates of water consumption, our existing resources are faced with the risk of depletion. In the last century, global water consumption has witnessed an approximately six-fold increase and reached 4 trillion m3, whereas renewable water resources per capita have decreased by 56%.³

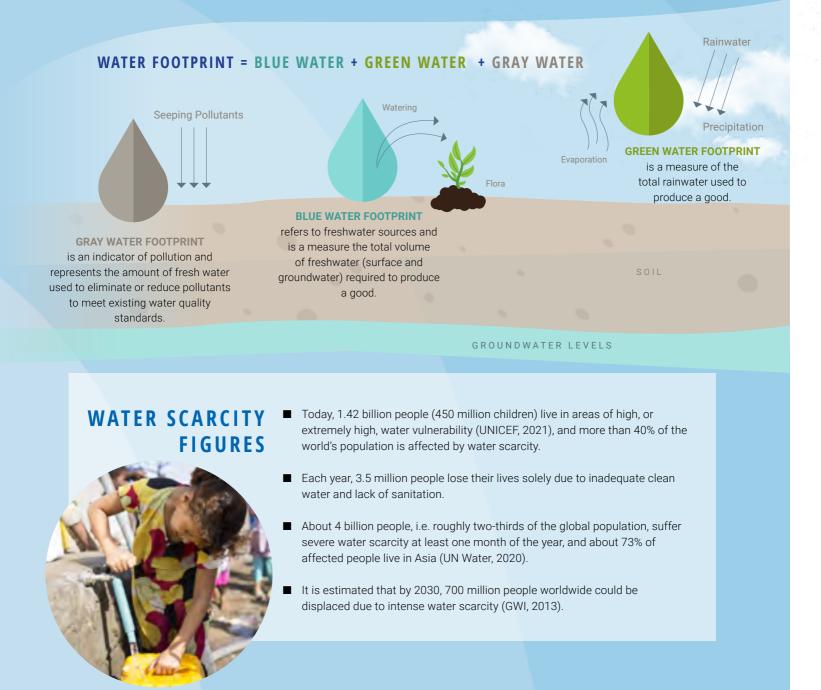
The "Falkenmark Indicator", which is a measure of the ratio of available water resources to the population, considers the annual consumption of 1,700 m³ of water per capita to be a **"critical level"**, and defines areas that have a reserve between 1,000 m³-1,700 m³ as regions below the **"water stress"** threshold. Areas with reserves that hold under 1,000 m³ of water are categorized as regions experiencing **"water scarcity"**. According to the figures, while 32 countries are experiencing water stress as of 2020, 22 countries are at risk of water stress. Today, one billion people live in regions below the water stress threshold. Moreover, 20% of the population does not even have access to healthy drinking water and potable water.⁵ Researchers predict that in the future global water consumption will continue to increase due to economic growth, changing consumer behaviors, and various other factors; moreover, they also anticipate that the climate crisis will further exacerbate water scarcity. While global water needs are expected to increase by more than 50% by 2040, it is estimated that by 2050, at least one out of every four people will be affected by frequent water shortages.

WHAT IS A WATER FOOTPRINT?

A water footprint is the total amount of clean water resources used for the production of goods and services consumed by an individual or society or used by a producer for the production of goods and services. A water footprint measures not only the volume of water consumed, but also the type of water used (green, blue, gray), in addition to when and where it was used. In this respect, a product's water footprint serves as a multidimensional indicator.⁶

KAYNAKÇA

- ² SIWI Report "Making Water A Part of Economic Development the Economic Benefits of Improved Water Management and Services"
 ³ World Bank Statistics
- https://ourworldindata.org/water-use-stress#global-freshwater-use
- ⁵ WWAP-World Water Assessment Programme. Managing Water under Uncertainty and Risk, The United Nations World Water,
- United Nations Educational, Scientific and Cultural Organization, 75352 Paris 07 SP, France.
- ⁶ Figure: https://sutema.org/kirilgan-dongu/sanayidekullanilan-su.11.aspx





THE ZERO LIQUID DISCHARGE APPROACH

The recovery and reuse of water within the process is considered a standard practice in the industry due to increasing water needs, limited water resources, discharge costs, and penalties. Moreover, it is conceived as more than a mere "waste prevention" approach, and is rather seen as an essential component of a sustainable water strategy. Around 19 percent of total water withdrawals in the world are used for industrial purposes. In 2009, the industrial consumption of water in Europe and North America reached 50%, compared to 4-12% in developing countries. In rapidly industrializing countries, this rate is expected to increase fivefold in the next 10-20 years. For this reason, cost savings alone are a strong driving force for the recycling of waste water. Technology that has evolved in parallel with increasing water stress has led the industry to adopt an approach by which the entirety of consumed water is recovered: Zero liquid discharge.

Zero liquid discharge is a closed-loop cycle comprised of the treatment, recovery, and reuse of effluents for industrial purposes (within the same process or for different points of consumption). Zero liquid discharge systems employ advanced wastewater treatment technologies to treat and recycle virtually all of the wastewater that is generated. This approach, which is an ambitious water management strategy, eliminates the pollution risk associated with wastewater discharge, and maximizes water efficiency. Thus, a balance is achieved between the exploitation of freshwater resources and the preservation of aquatic environments.

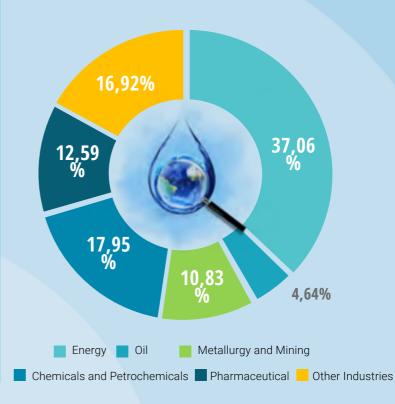
Despite its setbacks, such as the fact that it requires a relatively high initial cost of investment in addition to energy, this strategy provides savings in overall operating costs by eliminating water supply and waste disposal costs and separating recyclable chemicals from water. However, the adoption of a zero liquid discharge strategy necessitates extensive research and a pilot application. The amount of water used and the properties of the waste water generated are the primary criteria that determine the financial viability of the system.

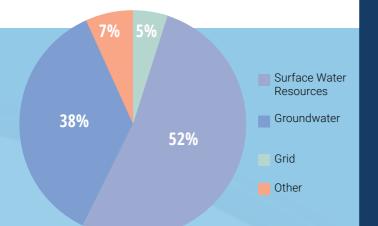
Strict legal regulations introduced in recent years coupled with increasing wastewater disposal costs have deemed zero liquid discharge a necessary alternative. Currently, global interest in zero liquid discharge practices has peaked. It is estimated that the global market for zero liquid discharge technologies will reach an investment value of at least \$100-200 million annually, as it is spreading rapidly from developed countries in North America and Europe to developing economies, such as China and India.

WHAT IS ZERO LIQUID DISCHARGE?

- Zero liquid discharge is centered around the treatment of waste water to separate it from the components, chemicals and solid waste it contains, in addition to the recycling of treated water for reuse.
- Compared to waste water, it requires high investment costs.
- It gives rise to high energy costs.
- Small and medium sized players may opt for conventional systems instead of zero liquid discharge systems.
- Its widespread use is limited to developed countries.
- As stricter regulations on wastewater disposal are introduced, sectors exhibit a greater preference for this system.

MARKET SHARE OF ZERO LIQUID DISCHARGE SYSTEMS Revenue Share by Final User Sector, 2019





WATER MANAGEMENT AT ŞİŞECAM

AWARE OF ITS RESPONSIBILITY TO PROTECT THE ENVIRONMENT, ŞİŞECAM AIMS TO LEAVE A LIVABLE WORLD FOR FUTURE GENERATIONS BY USING NATURAL RESOURCES EFFICIENTLY.

Addressing the issue of effective water consumption within the scope of "Care for Next", its Corporate Sustainability Approach, Şişecam has been launching a series of projects and activities to reduce water consumption in all the regions where it produces and to promote maximum recovery.

11% of the good practices and projects carried out in 2020 consist of activities in the category of effective water management and contribute to the United Nation's global sustainable development goals "Clean Water and Sanitation" (SDG 6) and "Life Below Water" (SDG 14).

To this day, Şişecam has recycled 9.3 million m3 of water in the regions where

6 TEMİZ SU VE

sustainable management of water and sanitation for all

and

it produces. Moreover, its total water consumption level in 2020 decreased by 7% compared to 2018. Thus, the goal to reuse industrial wastewater, which is driven by the "Preserve" mindset, was achieved prior to the period for which it was planned.

Sisecam attaches great importance to efforts aimed at reducing water loss, ensuring that water is cycled back to the process, and creating alternative water resources in order to reduce its water footprint in the face of water scarcity that threatens the world. Şişecam carried out various projects at several of its plants in 2020 to reduce water consumption, create alternative sources for water consumption, and reuse the water used in production processes.

> SDG 14: Conserve and

sustainably use the



oceans, seas and marine resources

SİSECAM

WATER CONSERVATION PROJECTS AND DEVELOPMENT EFFORTS (2020)7

SISECAM FLAT GLASS

The water consumption of the washing machine used in the cutting line at the Mersin plant has decreased by 20%. By increasing the

conductivity of the water in the water tank at the Ankara plant, daily water consumption has been reduced from 144 m³ to around 20 m³

At the Manfredonia facility in southern-Italy, rainwater is collected in a storage tank with a volume of 24,000 m3, which saves water during production.

Thanks to the air-cooled dry type water cooler commissioned at the plant in Bulgaria, annual water savings are achieved.

SISECAM GLASS PACKAGING

At the Mersin plant, 24,165 m³ of water was saved annually by reducing water consumption at its source.

ŞİŞECAM GLASSWARE

As a result of the recovery of the treated wastewater from the chemical treatment plant in Kırklareli, water is saved and the amount of wastewater discharged into the receiving environment is reduced. Water conservation

is also achieved by feeding waste water from the reverse osmosis unit to the cooling towers, instead of raw water.

At the production facilities in Egypt and Bulgaria, water saving is achieved by reusing wastewater, which is treated after production processes, in the washing of cullets, bathrooms, and plant roads.

At the Istanbul Tuzla production facility, a project has been launched to increase the amount of rainwater collected for use in machine cleaning, glue making and bathrooms, and also reduce the overall water consumption rate.



The wastewater discharged from the Fluid Bed system at the soda plant through drainage is fed to the wet line compressor cooling towers, thus saving 175,200 m³ of groundwater annually.

ŞİŞECAM AUTOMOTIVE

At the Lüleburgaz plant, the sand filter backwash water was transferred to a separate water tank and started to be used in garden irrigation. This practice is expected to save 1,000-2,000 m³ of water annually.



SDG 6: Ensure availability

38.39 N T E R V I E W

ART IN THE PANDEMIC: GENERAL DIRECTOR OF IKSV

GÖRGÜN TANER

THE PANDEMIC THAT HAS IMPACTED THE ENTIRE WORLD HAS PROFOUNDLY SHAKEN THE CULTURE AND ARTS SCENE. AS EVENTS WERE MIGRATED TO DIGITAL PLATFORMS, ART ORGANIZATIONS ACCELERATED THEIR DIGITAL TRANSFORMATION. THE ISTANBUL FOUNDATION FOR CULTURE AND ARTS (İKSV) HAS INTENSIFIED ITS EFFORTS TO KEEP THE CULTURE-ART SCENE ALIVE DURING THESE DIFFICULT TIMES. WE SPOKE WITH GENERAL DIRECTOR OF İKSV, GÖRGÜN TANER, ABOUT HOW THE PANDEMIC HAS AFFECTED THE ART WORLD.

You first joined İKSV in 1983, and you have been serving as the General Director of İKSV since 2002. In light of your experience over the years, how would you assess the role and importance of culture and arts organizations in urban culture?

Culture and arts hold special importance for social life. Culture and arts organizations make up important building blocks that enrich the culture and art life of the city with the artistic events they organize and enable. Culture and arts organizations that promote the production of culture and arts through activities for art enthusiasts of all ages, national and international joint productions, orders for artwork, and awards, are entities that act as bridges between art and society, establish new cultural bonds, and make significant contributions to urban culture. Displaying the wealth of various levels of society and laying the grounds for cultural diversity, as well as encouraging people to listen to and understand one another, are among the functions of these organizations

We have been combating a pandemic that has taken a hold of the world for quite some time now. What role do you think art plays in this challenging period?

In difficult times, people need art more than ever. In this prolonged and tiring pandemic, I believe that the importance of art -in addition to science, health, and technologyhas been better understood by all. The many people who have embraced art while confined at home have demonstrated this once more. Several cultural organizations have made their collections and archives accessible online, and a number of artists have created opportunities to reach audiences through the internet... We at IKSV have moved several of our events to a digital sphere, and our online events have been met with great interest across Turkey. During this period in which people have become more lonely than ever, online arts and culture activities have greatly alleviated the overwhelming effects of isolation. We are currently in need of art's creativity and its power to encourage people to dream, and

will continue to need it in a postpandemic world.

Why do you think people turn to art in challenging times?

Escaping the hectic and tiring developments of the world for even a moment, diving into another world, and experiencing the healing power of art is good for the soul. Many studies have shown that there is a strong correlation between participation in cultural life and well-being.

COVID-19 has affected every aspect of life, every industry and every profession, and art is no exception. How has the art world been affected by these developments?

Culture and arts has been one of the areas most impacted by the pandemic. The primary reason for this the fact that one of the fundamental purposes of culture and arts is bringing people together. The sector practically came to a standstill at the beginning of the pandemic. Although a digital transformation occurred afterwards to adapt to the new conditions, the sector still took a severe blow. Sector professionals, musicians, theater companies, and venues are among those that struggled the most and are in need of the most support. Since the onset of the pandemic, we at İKSV have collaborated with several of our stakeholders to develop projects of various scales, such as the Musicians Support Fund, the Cinema and Television Sector Support Fund, and Co-production, in an endeavor to support sector professionals. Our sponsors who have been supporting our activities in the private sector for years, and of course our Founder, Eczacıbaşı Holding, continued to support us. However, generally speaking, the art sector is in need of more systematic support... And this does not apply only during the pandemic, but at all times...

Do you think that in the upcoming period, we will witness the birth of the most groundbreaking breaking works of all time amidst this crisis?

Extraordinary times have always fueled art and artists. I believe that the pandemic will lay the ground for the birth of incredible works of art. Why not?..

How did İKSV navigate this period? What has been done on digital platforms to maintain an active dialogue with the art audience?

Since it had to postpone its events following the outbreak of the pandemic, İKSV guickly turned to digital platforms. We started to use social media, and especially our YouTube channel, more actively, thus touching the lives of art enthusiasts in the digital world, as well. From the start of the pandemic, we made several productions freely accessible to art enthusiasts on the İKSV YouTube channel, such as "La Diva Turca" which tells the life of Leyla Gencer, "Ve Perde!" which is centered around the life of Haldun Taner, "Nâzım'a Armağan" which features Genco Erkal as a screenwriter, director and cast member, the documentary "Türkiye'de Caz (Jazz in Turkey)", and the documentary "A Breath with Pina Bausch", all of which attracted tens of thousands of viewers. We provided art enthusiasts with special digital content in various genres, such as animated series for children, poem recitals by prominent names, Meetings on the Bridge-Cinema Talks, and much more. In addition, all our festival and biennial teams produced special projects for digital platforms, and they organized their programs with a focus on the digital sphere. The Istanbul Film Festival has been screening through the https:// filmonline.iksv.org/ platform since May 2020.

How do you think the digital transformation has affected the art world?

I find that digital opportunities are very important in terms of lifting geographical borders that hinder access to culture and arts. Today, art enthusiasts from all across the globe can access the online events we organize, and this is incredible. Moreover, the digital transformation has had other positive effects as well, such as not being restricted by seat numbers and being able to work with smaller budgets. However, it's clear that digital events will never truly replace the feeling of coming together at physical events.

How has the migration of screenings to digital channels affected audience numbers?

In terms of İKSV events, it's safe to say that digital events have attracted larger audiences for certain branches of art. For example, in 2020, the Istanbul Film Festival quickly adapted to the digital sphere and monthly selections of screenings were presented to viewers throughout the year. Although it was a different channel, it managed to deliver all of its content to art enthusiasts. A similar practice is being implemented this year. Naturally, cinema is slightly luckier than other fields in this respect. The Istanbul Theater Festival welcomed audiences both on stage and online in accordance with strict pandemic measures in November 2020, and its online program drew great

interest. Another one of our areas of activity, İKSV Alt Kat, transferred its content, training activities and workshops oriented towards children and young people to a digital environment and continues to operate

successfully. The 5th Istanbul Design Biennial, which started in October 2020, was spread over a six-month period and attracted greater numbers of viewers. In 2020, the Istanbul Music Festival and the Istanbul Jazz Festival reached all of Turkey and even the world with their online programs, and they diversified their audience profile to a great extent. When inspecting the general 2020 data, we saw that art enthusiasts from several locations outside Istanbul purchased tickets for our online events; this wide reach and diversity were among the developments that made us very happy during the pandemic. Which areas experienced the greatest increase and decrease in audience numbers?

The Istanbul Film Festival, which celebrated its 40th anniversary this year, has been one of our events

that experienced the greatest increase in audience numbers in the digital environment. Salon İKSV, on the other hand, was unable to host an audience since it remained closed during the pandemic. However, the Salon İKSV team collaborated with various brands to design digital projects and continues to reach audiences.

Has the shift to digital channels for screenings made art more affordable to access?

Naturally, the budgets required for physical and digital events differ. However, there is a certain cost for properly recording digital events in the manner they deserve, and also delivering the content to viewers. But it is safe to say that online events have made access to art more affordable for viewers.

> brought about by the pandemic in several fields will remain permanent. What do you think the postpandemic art world will look like? I believe that the art world, like many other fields, will continue to make frequent

It is predicted

that the change

use of digital possibilities after the pandemic, because this has facilitated and increased access. However, I feel that this will be oriented more towards complementing physical events. I believe that physical events will make a powerful comeback. No matter how much our lives change, what people need deep down is to physically convene at a culture and arts event that offers intellectual pleasure, with other people who value this event like themselves.

Will İKSV continue to have digitaloriented productions and plans after the pandemic? Will there be an area for which you will continue to use new media?

Of course. From now on, in our planning, physical and digital events will go hand-in-hand and complement each other. We will continue our efforts to develop new digital projects in all areas and produce new content.

What would your advice be to young artists who have fallen into despair in this period?

The whole world is going through a very difficult phase, and in this setting, it's only natural to fall into despair from time to time. But I believe young artists and the art world will overcome this difficulty through solidarity and creativity. I truly hope they will continue to produce under all circumstances.

Could you share some information about İKSV's projects for the upcoming period?

In 2021, we at IKSV plan to organize events for art enthusiasts both in the physical and digital sphere by drawing from last year's experience and taking strict pandemic measures. We are in a volatile period in which all plans can be easily upended. However, if conditions allow, we plan to hold the 28th Istanbul Jazz Festival and the 49th Istanbul Music Festival in outdoor venues in the summer. The 40th Istanbul Film Festival is underway with online selections spread out over the year. The 17th Istanbul aims to debut its exhibitions in September, and before then, it is preparing to come together with art enthusiasts in various forums in the city. The 25th Film Festival is preparing to greet viewers in the fall in a hybrid format. Meanwhile, İKSV is preparing to celebrate its 50th anniversary in 2022. We hope that we can celebrate it with crowds of people ...

Could you share what comes to mind when you think of Şişecam?

Founded under the guidance of Atatürk, Şişecam is one of the most deeply-rooted industrial organizations in Turkey with an impressive history. But more importantly, Sisecam pioneers the sector on a global scale by offering highly creative and innovative products that meet current demands, and successfully manages the transformation necessitated by its pioneering position. The fact that it is the first company in Turkey to perform foreign trade transactions using blockchain technology is an indicator of its pioneering position. I proudly keep track of Şişecam's achievements.

66 WE ARE CURRENTLY IN NEED OF ART'S CREATIVITY AND ITS POWER TO ENCOURAGE PEOPLE TO DREAM, AND WILL CONTINUE TO NEED IT IN A POST-PANDEMIC WORLD.





NORTH AEGEAN ROUTE

FEATURING EXTRAORDINARY SCENIC BEAUTY ALL FOUR SEASONS, THE NORTH AEGEAN IS BRIMMING WITH DESTINATIONS TO BE VISITED AND EXPLORED. REGARDLESS OF WHERE YOU GO IN THE NORTH AEGEAN, BREATHTAKING VIEWS OF NATURE, HISTORICAL SPLENDOR, SERENITY THAT CALMS THE SOUL, AND MOUTH-WATERING FOOD AWAIT YOU. IF YOU'D LIKE TO EXPERIENCE THE NORTH AEGEAN FIRST HAND, THEN BE SURE TO ADD THESE DESTINATIONS TO YOUR ITINERARY.





From Ayvalık to Cunda

Ayvalık, a tourist hotspot in the North Aegean, attracts travelers with its picturesque nature, beaches and delicious cuisine. If you happen to visit Ayvalık, there are tons of activities you can do. Taking in the view of Midilli and the Ayvalık islands from the hilltop known as Şeytan Sofrası (The Devil's Feast) is an experience like no other. Just off the coast of Ayvalık, Cunda, or Alibey Island, features streets paved with history and a mesmerizing atmosphere. When on Cunda Island, which is accessible by a causeway, be sure to stop by the Church of Taksiyarhis and the Sevim and Necdet Kent Library, which was once a church but now serves as a library. Make sure to take a dip in the waters of Pateriça Bay, sip on some dibek coffee in the historical Taş Kahve, and get a taste of Aegean dishes, flavored with locally produced olive oil, at the restaurants along the beach.



The Windswept Bays of Bozcaada

Spring and autumn in Bozcaada, which is the busiest in summer, are entirely different. Known for its clean and refreshing sea, windswept covers, historical stone houses, and narrow streets, Bozcaada carries the traces of its multicultural past to the present. Located on the southern tip of the island, Ayazma beach is one of the most popular spots. Other attractive spots for those who wish to enjoy a swim in the sea include: Habbele Beach, Beylik Bay, Sulubahçe Bay, and Aquarium Bay. Your list of things to do in Bozcaada should most definitely include popular activities, such as watching the sunset from the Polente Lighthouse, tasting the famous mastic flavored cookies and ice cream, and touring the vineyard houses.



Gallipoli Peninsula National Park



The Land of Legends: Çanakkale

Çanakkale is more than just the land that witnessed the Trojan war which broke out when Paris of Troy kidnapped Helen, the wife of King Menelaus of Sparta, and the city that houses the towering Temple of Athena. This beautiful city in the North Aegean is truly an open-air museum that bears traces of the Wars of Gallipoli. About 70 monuments and hundreds of tombs erected in the Gallipoli Peninsula National Park in memory of the soldiers who lost their lives in the war attract thousands of visitors annually. But it doesn't end there. The Çanakkale Epic Promotion Center, the Gallipoli War Museum, the Çanakkale Piri Reis Museum and Gallery, the Rumeli Mecidiye Bastion, the monuments of Sergeant Yahya and Corporal Seyit, and many other sites are a reminder of the city's striking history.

The Warm Villages of the Magnificent Mount Kaz

Mount Kaz, also known by its mythological name Mount Ida, is a captivating mountain that has served as the backdrop of countless myths. One of the best parts of Mount Kaz, which has becoming increasingly popular in recent years, is the array of delightful villages. The region is home to Adatepe Village famous for its Olive Oil Museum and the Altar of Zeus, Çamlıbel Village, Yeşilyurt Village, and Tahtakuşlar Village, which hosts the Tahtakuşlar Ethnography Museum, to name a few. An unparalleled route that will quench your appetite for nature and oxygen with its natural habitats such as Kazdağları National Park and Hasan Boğuldu Waterfall.







A Cultural Heritage Site Dating Back Thousands of Years: Assos

The renowned philosopher Aristotle established a philosophy school in Assos, where he lived for three years, and taught philosophy. In order to understand the spirit of Assos, whose history stretches back to the 7th century B.C., one must visit the Ancient City of Assos, which houses the magnificent Temple of Athena. Also known as Behramkale, Assos is among the rare places that has retained its tranquility despite its splendid beach. In addition to the beach of the Ancient Port and Kadırga Bay, you can also swim at Yeşil Port, Sivrice Bay and Koruoba Bay just off of Assos.

44.45 GASTRONOMY



BOTH HEALTHY AND DELICIOUS:

GRILLED VEGETABLE SALADS

SALADS FEATURING GRILLED VEGETABLES ARE A TESTAMENT TO THE FACT THAT IT IS POSSIBLE TO EAT HEALTHY WITHOUT COMPROMISING ON TASTE...





Grilled Vegetable Salad with Asparagus and Zucchini

ASPARAGUS AND ZUCCHINI ARE AMONG THAT VEGETABLES THAT TASTE EVEN BETTER GRILLED. YOU CAN MAKE AN AMAZING SALAD WITH THESE VEGETABLES BY TOSSING THEM WITH FRESH LEAFY GREENS AND A TASTY VINAIGRETTE.

INGREDIENTS

FOR THE SAUCE

8 asparagus spears

2 zucchini

- 1 red pepper
- 1 red onion
- 2 mushrooms
- 1 green onion stalk
- 1 sprig of basil
- 1 sprig of parsley
- 2 tablespoons vinegar
 1 tablespoon olive oil
 1/2 teaspoon salt
 1 teaspoon honey
 1/2 teaspoon mustard
 1 pinch of black pepper

DIRECTIONS

- After peeling and cleaning the asparagus, zucchini, red pepper, mushrooms, and red onion, place them on an oiled grill.
- · Grill both sides of the vegetables without over-charring them.
- After the grilled vegetables have cooled, chop them up into small pieces.
- Wash and finely chop the leafy greens.
- Combine the sauce ingredients in a mixing bowl and whisk well.
- Next, put the vegetables and greens in a service platter, top with sauce, and serve.





Grilled Vegetable Salad with Giant Croutons

IMAGINE THE ITSY BITSY CROUTONS WE GENERALLY ADD TO SOUP IN THE FORM OF LARGE SLICES OF BREAD, MIXED WITH MOUTH-WATERING GRILLED VEGETABLES!

INGREDIENTS

3 colored peppers (red, green and yellow) 2 eggplants 1 zucchini 3-4 cherry tomatoes

1 tablespoon olive oil

FOR THE

CROUTONS A quarter of bread, thinly sliced (of your choosing) 1 tablespoon olive oil Salt

Pepper

FOR THE SAUCE

2 tablespoons olive oil 2 tablespoons balsamic vinegar 1/2 teaspoon mustard

DIRECTIONS

- Combine the sauce ingredients in a bowl and mix well. Set the mixture aside to rest.
- Wash all of the vegetables. Slice the peppers into thick strips, and the eggplants and zucchini into medium-sized rings.
- Toss the cherry tomatoes, eggplants, peppers and zucchini in a bowl with olive oil, and place them on the grill. Grill both sides of the vegetables so that they are slightly cooked.
- Season the bread slices with salt, pepper, and olive oil and place them on the grill.
- Drizzle the sauce onto the grilled vegetables in a salad bowl. Top the salad with giant croutons and serve.

Grilled Vegetable Salad with Tomato Sauce

WHEN GRILLED VEGETABLES MEET A SAVORY TOMATO SAUCE, A FILLING AND NUTRITIOUS SALAD IS BORN.



INGREDIENTS

1 zucchini 1 carrot 1 asparagus spear 2 colored peppers 2-3 cauliflower florets Fresh basil Grated parmesan or aged kashar cheese

1 tablespoon honey 2 tablespoons olive oil

Half an onion 1 clove of garlic

5-6 cherry tomatoes

DIRECTIONS

- Cook all the sauce ingredients in a sauce pan until the tomatoes soften and start to break down. When the sauce is ready, crush the tomatoes in the sauce with a fork. Since the sauce will be a little chunky, it would be even better to use a blender instead of fork.
- Prepare and wash the vegetables. Chop them up as you please, making sure they aren't too thin.
- · Lightly oil the grill and cook both sides of the vegetables.
- Pour the sauce onto the grilled vegetables and mix.
- · Top it off with fresh basil and cheese. Serve cold or hold.





Grilled Summer Vegetable Salad with Quinoa

QUINOA, A PROTEIN POWERHOUSE HIGH IN FIBER, IS AN INCREDIBLE INGREDIENT FOR BOTH THOSE WHO WISH TO PREPARE HEALTHY AND FILLING RECIPES AND THOSE WHO AVOID GLUTEN. THIS RECIPE THAT BRINGS TOGETHER QUINOA AND GRILLED VEGETABLES IS TRULY NUTRITIOUS.

INGREDIENTS

- 1 small cup of cooked quinoa 1 eggplant 2 zucchini
- 1-2 tablespoons olive oil Salt, pepper
- 3-4 cherry tomatoes
- Fresh basil
- Fresh mint

FOR THE SAUCE

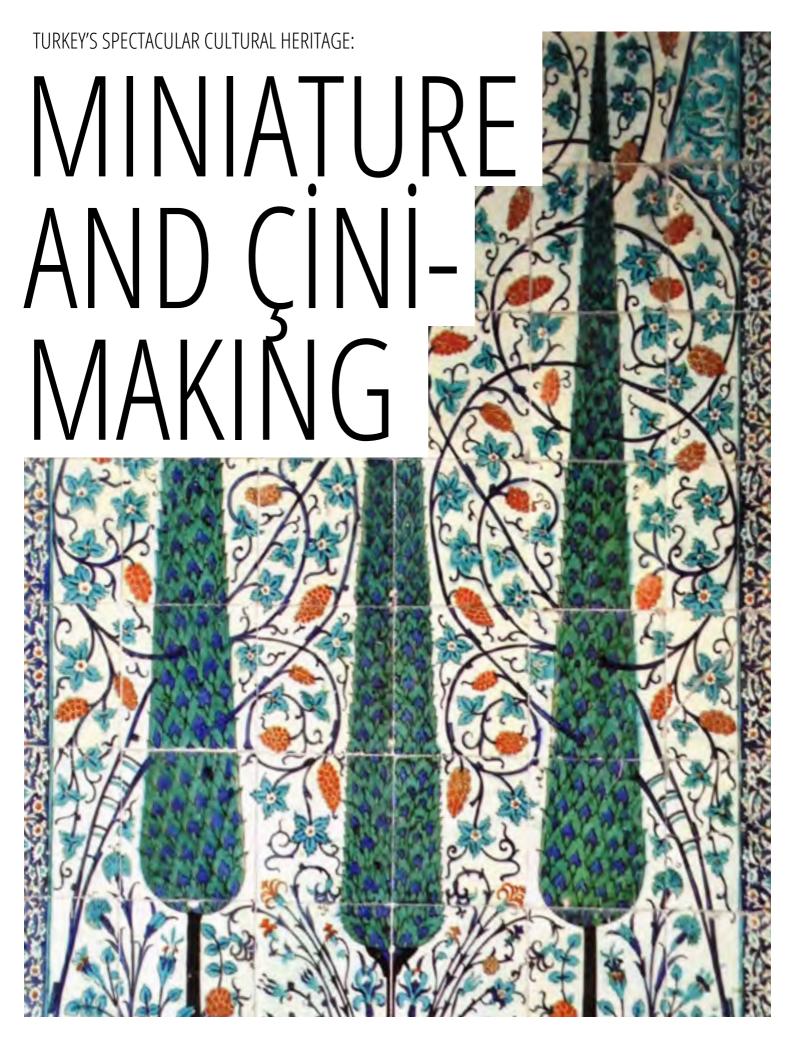
2 tablespoons lemon juice 1 clove of garlic, grated 2 tablespoons olive oil



DIRECTIONS

- Clean the eggplants and zucchini and dice them. Toss them in 1-2 tablespoons of olive oil, salt and pepper, and place them on a baking tray with parchment paper.
- Cook the vegetables for 20-25 minutes at 180 degrees.
- Mix the sauce ingredients.
- Place the grilled vegetables, quinoa, tomatoes, and chopped greens in a service platter.
- · Top off with sauce and serve.











Çini Museum - Kütahya

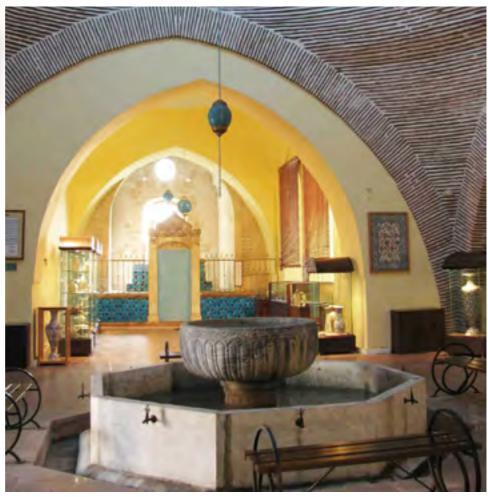
Turkey's first çini museum is located in Kütahya, a city famous for its çini. The Çini Museum, where works of çini from both Kütahya and İznik are exhibited, is located in a social complex commissioned by Yakup II of Germiyan. The museum, which opened its doors in 1999, contains a wide selection of çini works, including çini inscriptions, plates, vases, household items, and architectural items. Çini works from the Seljuk and Ottoman periods are also of significance in that they allow you to see the differences between çini works created in different periods, in addition to the development of çini and its characteristic features in different periods.

THE UNESCO INTANGIBLE CULTURAL HERITAGE LIST CONTAINS TWO TRADITIONAL ART FORMS FROM TURKEY: MINIATURE AND ÇİNİ MAKING. LET'S TAKE A CLOSER LOOK AT THE DEEP-ROOTED HISTORY OF THESE ART FORMS AND THE PLACES YOU CAN FIND THE FINEST EXAMPLES OF BOTH.

Turkey's geography is quite rich in terms of both tangible and intangible cultural heritage. In the Intangible Cultural Heritage List created by UNESCO from 2003 onwards, there are nearly 20 traditions, art forms and games from Turkey. Two of these reflect our art heritage: miniature and çini-making.

Miniature is an ancient form of illustration that originated in the 2nd century BC. Miniature art, which is finely crafted and contains intricate details and compositions, is known all over the world for its unique style. Used also in the Roman, Byzantine, Uyghur, Seljuk and Ottoman periods, miniature art often appears in books and manuscripts. Over time, social issues also started to be addressed, especially in miniatures that adorn religious books. Miniature art was added to the UNESCO Intangible Cultural Heritage List in 2020.

Çini-making, on the other hand, underwent historical development from the 13th century to the 18th century, and is a traditional art form applied to many architectural and portable works of art. The art of çini-making, which is primarily practiced in Kütahya and İznik, comes to life when the painting on the ceramic is glazed and baked, resulting in a glassy appearance. The traditional art of çini-making was added to the 2016 UNESCO Intangible Cultural Heritage List. There are several destinations where you can find and get a closer look at the finest examples of both art forms. Here you have some of the main ones...



50.51 ARTS



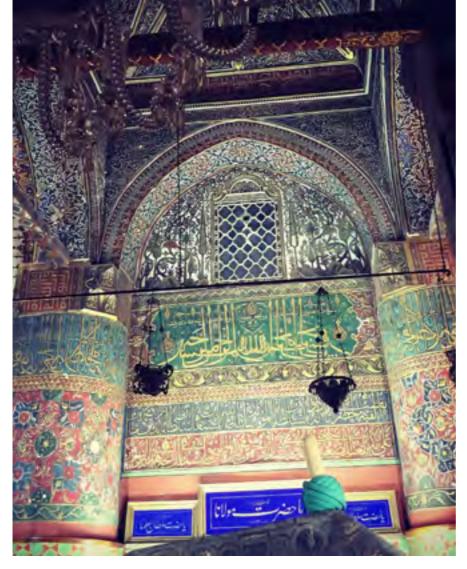
The Tiled Kiosk - İstanbul

The Tiled Kiosk, where you can find the finest examples of Turkish cini and ceramics, is affiliated with the Istanbul Archeology Museums. In the two-storey building, located directly opposite the main building of the Archeology Museum, artifacts from the 11th century to the 20th century are exhibited. Naturally, the collection from the Seljuk and Ottoman periods also includes çini from İznik in addition to ceramics from Kütahya and Çanakkale. Alongside the works it showcases, the museum also stands out with its own cini adornments. The tiles on the exterior façade, in the interior of the iwan and in the rooms are mostly against a turquoise backdrop. The cini are mostly decorated with Kufic, an Arabic script, and geometrical designs. In order to see these unique works, you can visit the Tiled Kiosk in the Gülhane Park in Istanbul.

The İznik Museum - Bursa

The İznik Museum, which started to host visitors following the conversion of the almshouse (charity that distributes food) into a museum in 1960, was built in the memory of Nilüfer Hatun in 14th century, the mother of Sultan Murat I, and is located in the İznik district of Bursa. This special region, which has witnessed the Roman, Byzantine and Ottoman periods, is seen as considered of the most important centers of çini art. The çini and ceramics of this region are showcased in the museum. In addition to these, archaeological artifacts from different periods are also exhibited in the museum. The museum, which has been under restoration for several years, will soon be ready to reopen and will be able to host its visitors after the pandemic.





The Mevlana Museum - Konya

In 2019, miniature works from the 15th century were discovered in the Mevlana Museum, which is visited by thousands of people each year. These six miniatures, uncovered in the dome of the Mevlana Celaleddin-i Rumi tomb connected to the Mevlana Museum, consist of illustrations that portray 15th century Konya. In addition to the city landscapes decorated with geometric and floral designs, Alaaddin Mosque is also depicted in the works. These works, which date back to the second Bayezid period, also give us an idea about the miniature art of the 15th century.





Pera Museum - Istanbul

Although miniature was a popular art form in the Seljuk and Ottoman periods, many miniature artists continue this traditional art legacy today. Pera Museum features contemporary miniature art and modern interpretations of miniature in its exhibition called Miniature 2.0. The exhibition showcases the works of 14 artists, who are not only from Turkey, but also Azerbaijan, Iran, Saudi Arabia and Pakistan. The works are centered around a variety of topics, from colonialism to social violence, migration to gender, and orientalism to economic inequality. A 3D tour of Miniature 2.0, hosted by Pera Museum, can currently be accessed at www. peramuzesi.org.tr. If you are interested in miniature art and would like to view this art from a new perspective, be sure to check out this exhibition.

52.53 OCIAL RESPONSIBILITY

A PROUD NOONENT EVENTSEE AM CAYIROVA SPORTS CLUB





ATHLETES OF THE ŞIŞECAM ÇAYIROVA SPORTS CLUB WERE INVITED TO NATIONAL TEAM TRAINING CAMPS UPON ACHIEVING SUCCESS IN THE NATIONAL TEAM QUALIFYING.

GREAT SUCCESS FOR THE CANOEING BRANCH OF ÇAYIROVA SPORTS CLUB

Athletes of the Çayırova Sports Club canoeing branch achieved great success in the national team qualifying and evaluation races.

SPRINT CANOE NATIONAL TEAM SELECTIONS

The Sprint Canoe National Team Qualifying took place on February 6-7. Athletes of the Şişecam Çayırova Sports Club canoeing branch achieved successful results in the qualifying. As a result of the qualifying races, Özge Uzar was selected for the Olympic National Team Training Camp in Antalya to be held between February 8 and March 4, Abbas Anıl Şen was selected for the National Team Candidates Training Camp to be held in Adana between 8 February and 4 March, and Furkan Özen was selected for the National Team Candidates Training camp to be held in Adana between February 20 and March 4. Özge Uzar became the first club athlete to be selected for the Olympic National Team (the candidate team to compete in the 2024 Paris Olympics) in the history of the club.



QUALIFYING AND EVALUATION RACES FOR THE SPRINT CANOE NATIONAL TEAM AND OLYMPIC NATIONAL TEAM

The qualifying and evaluation races for the Sprint Canoe National Team and Olympic National Team organized by the Turkish Canoe Federation were held in Adana between March 5-7. A total of 97 athletes from 11 provinces and 20 clubs participated in the races held at Seyhan Dam Lake. Çayırova Sports Club athletes competed in 1000, 500 and 200 meter races and earned a total of 14 medals, consisting of 8 gold, 5 silver and 1 bronze medal. Özge Uzar, Furkan Özer and Abbas Anıl Şen were selected for the national team once again and became eligible to participate in the training camp to be held in Antalya.

1000 METERS

Özge Uzar: Women's U-23 First Place Selin Sevin: Young Women's K1 First Place Furkan Özen: Men's U-23 First Place Tuana Deniz: Young Women's K1 Second Place

500 METERS

Özge Uzar: Women's U-23 First Place Selin Sevin: Young Women's K1 First Place Furkan Özen: Men's U-23 Second Place Tuana Deniz: Young Women's K1 Second Place Abbas Anıl Şen: Men's U-23 Third Place

200 METERS

Özge Uzar: Women's U-23 K1First Place Selin Sevin: Young Women's K1 First Place Furkan Özen: Men's U-23 C1 First Place Abbas Anıl Şen: Men's U-23 K1 Second Place Tuana Deniz: Young Women's K1 Second Place

ÇAYIROVA MAKES A MARK AT THE MARCH 18 ÇANAKKALE VICTORY COMMEMORATION CUP

The March 18 Çanakkale Victory Commemoration Cup Sailing Races were held on March 20-21 and hosted by Çayırova Sports Club. In the competitions attended by 4 clubs and 30 athletes, Çayırova Sports Club athletes earned a total of 5 medals, 3 gold, 1 silver and 1 bronze. Alperen Ağma came in first place in the Optimist class, Defne Uçal was the overall first-place winner in the Laser 4.7 class and the first place winner of Laser 4.7 junior, Uğurkan Yılmaz was the overall second place winner in the Laser 4.7 class, and Yağız Aşçıoğlu was the overall third place winner in the Laser 4.7 class.





54.55 ROM US

IT HAS NOTHING TO DO WITH GENDER!

RENOWNED FOR ITS INCLUSIVE PRACTICES ROOTED IN FAIRNESS AND EQUALITY, ŞİŞECAM SHOWED ONCE AGAIN THAT IT STANDS AGAINST GENDER-BASED DISCRIMINATION THROUGH ITS CAMPAIGN FOR MARCH 8, INTERNATIONAL WOMEN'S DAY.



comprises in business or everything the

shout here everyone at Special and Special working outure the checks productive and collaboration contribute to the Business Margin

On March 8th - International Waman's Day we provely demonstra ence again that we are against granter discrimination with our principles and practices forefaring discriminations with our

Obsi tara to find diversity and inclusion.

SISECAN

Şişecam, which perceives diversity in its human resources, made up of people of different origins and ages, as a form of wealth, adopts a sustainable equality mindset in recruitment processes, trainings, working conditions, and career and compensation management. In this regard, it aims to create practices and working environments in which all employees feel valued, differences are seen as equal, cooperation and productivity are encouraged, and employees can use their full potential.

Through its internal communications campaign called It Has Nothing To Do

With Gender, Şişecam has highlighted its sensitivity to the issue of gender equality. The campaign, which underlines that the basic criterion that determines what individuals can do in life is their potential and not their personal characteristics such as gender, was shared with employees in all countries where Şişecam operates.

Another event held in parallel with the communication campaign is a word game contest organized by the Now! club to raise awareness about the discriminatory discourse used in communication. In addition, a special event for International Women's Day was held at the plant in Italy.

Şişecam İtalya





NOW! SURVEY DETERMINES THE NAME OF THE NEW ŞİŞECAM FACILITY

The Shared Services Center, one of the initiatives under the Roots and Wings Digital Transformation Journey aimed at creating value for the future, has marked the beginning of a new era at Sisecam. Şişecam employees, who had previously chosen the name of the Sisecam Headquarters, started a "mini contest" to name our shared services operations facility in Tuzla, which has recently been commissioned. After name suggestions were collected through the Now! survey, the top name suggestions were put to a vote. As a result of the voting, the new Sisecam facility was named TOHUM (Technology and Shared Services Application Center), which symbolizes digital transformation and a new era. Ten employees who participated in the survey and poll won surprise gifts.

MINI MEMBERS OF ŞİŞECAM CAME TOGETHER FOR ONLINE WORKSHOPS

NOW! DIGITAL SURPRISES WERE PREPARED FOR THE MINI MEMBERS OF ŞİŞECAM DURING THE SEMESTER HOLIDAY.

The Music and Design workshops, which were organized online following the start of the holiday in Turkey and were aimed at enabling the mini members of Şişecam to have fun and unleash their creativity, were full of excitement. During the design workshop, the mini members discovered the answer to the question "How Many Accessories Can Be Made With One Roll?" in an applied manner and designed creative products using various materials under the guidance of their instructors. The workshops continued into the second week of the holiday. In the Music Workshop, the mini members grabbed the necessary materials and set across a screen. Caught up in the rhythm of the music, the mini members of Şişecam made their own maracas with their instructors and then showcased their musical talent.



"DON'T DISCRIMINATE, USE EQUAL LANGUAGE!" FOR GENDER EQUALITY

Şişecam employees came together for a game of TABU themed "Don't Discriminate, Use Equal Language!" in order to say stop "Stop!" to the use of discriminatory, derogatory and demeaning discourse that has become a part of daily language. The online game that was full of fun managed to create the desired awareness. At the end of the game, surprise prizes were given to all participants as a token of the day.







Şişecam'a Bulgaristan'dan ödül of sam town has Valid or Car and Canadama Andrews Car Table States

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56.57 PRESS

Saperana, Ibagaranan Tatarun Agana tarahmdan diazetlemen "35, Yular Te-tarunyan Odallers" kagamentek "Sin-diolaketkir Yazarun Odalla'sen layak mentek Şipcani's gran estali ve etkili yatı strilds.

Superantis annun wahait we erkild yat-turiharundan dolaya verdien isekit Sup-ian Yuawina Karuha Englean Vekil ve-Genel Middiri Prof. Dr. Ahmut Kar-nama Itagbakan Yardancan ve Tu-riantan Antikan erkitat. Turiharubakar Tatalan Mariana Nikolowa tan-turihir ta yu ilikkar verihi. Superan Yanatim Karuha Englean Vekil ve Ganil Minihri Prof. Dr. Ah-nat Karmara. 6001 Veceninde yapaha komupenada. "Dört katada 14 ülanda



als Isoli 4.3 tenia ve 22 bits piloparat ynt göstsetlyorun. Şişecum Ingilin Avrupa'nın dilmenn alamında lidar, carı ev eşyası alamında da ikinci böyük

eryuni vani, Budgarincan An United Nan nyian Ek kapansa olman mele-niyin hinim için Azemli. Küreni iyik izimlizi perişlerirken Turkiye ve Bal perintan termentaki ekonomik ilipki-bela pilipensi komuncula da basmii eris pliqueet kop

nikilar nağlıyoruz." Kornan, "Boğurlaran'da yatırında mıza ilk 1907'de kinyusadlar slanın da başladık. Özsibeştirme sürecinde da başladık. Oznikeştirmi sitterinde olan Balgar soda terstirini fodi ye or-tak olduk. Doğradan yesi yatırmıla tenzi için şar ile edeni 2006'te başa-tersti için şar ile edeni 2006'te başatonin nyan yan tak adami 2004'te haya-ta Biçlirerek temat camlar, bayna nj jin camlari, otomotiy camlari ve cam ar nyyan fahrikalarimizin tematleri-pi senik' dadi.



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- BLOOMBERG HT FINANCE CENTER -1 INTERVIEW BY ACIL SEZEN
- A PARA NEWS INTERVIEW BY BURCU 2 GÖKSÜZOĞLU

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- 3. "WE ENJOY INVESTING IN TIMES OF CRISIS BY MEASURING RISKS" DÜNYA DAILY - 15.02.2021 - Page 1
- "WE ENJOY INVESTING IN TIMES OF CRISIS BY 4 MEASURING RISKS"
 - DÜNYA DAILY 15.02.2021 Page 13
- NET SALES EXCEED 21 BILLION IN THE 5 PANDEMIC

AK\$AM DAILY - 06.02.2021 - Page 5

- ŞİŞECAM'S SALES SURPASS TRY 21 BILLION 6. MILLIYET DAILY - 04.02.2021 - Page 9
- ŞİŞECAM'S NET SALES WORTH TRY 21.3 7. BILLION

DÜNYA DAILY - 03.02.2021 - Page 11

- **ŞİŞECAM RECEIVES AWARD FROM BULGARIA** 8 DÜNYA DAILY - 05.03.2021 - Page 7
- **ŞİŞECAM RECEIVES AWARD FROM BULGARIA** 9 MILLIYET DAILY - 05.03.2021 - Page 8
- 10. ANTIBACTERIAL GLASS TECHNOLOGY POSTA DAILY - 08.02.2021 - Page 7
- 11. DOMESTIC TECHNOLOGY THAT REMOVES VIRUSES FROM GLASS PRODUCTS AK\$AM DAILY - 07.02.2021 - Page 6
- 12. ŞİŞECAM OFFERS CAMPAIGN WITH VIRUS SHIELD

DÜNYA DAILY - 15.03.2021 - Page 18

- 13. SPECIAL CAMPAIGN FOR HEALTH WORKERS POSTA DAILY - 15.03.2021 - Page 5
- 14. ANTIMICROBIAL CUPS FOR HEALTH WORKERS TÜRKİYE DAILY - 15.03.2021 - Page 5
- 15. ANTI-VIRAL GLASS MUG FOR HEALTH WORKERS

AKŞAM DAILY - 14.03.2021 - Page 5 16. VIRUS-RESISTANT CUP FOR HEALTHCARE

- PROFESSIONALS HÜRRİYET DAILY - 14.03.2021 - Page 8
- 17. A GIFT FROM SİŞECAM TO HEALTHCARE PROFESSIONALS

MİLLİYET DAILY - 14.03.2021 - Page 9 18. FIRST TRY, THEN BUY ERA

- AKŞAM DAILY 20.03.2021 Page 5
- 19 PAŞABAHÇE LAUNCHES EXPERIENCE STORE DÜNYA DAILY - 19.03.2021 - Page 6
- 20. NEW EXPERIENCE STORE MILLIYET DAILY - 18.03.2021 - Page 8
- 21. PAŞABAHÇE OPENS EXPERIENCE STORE POSTA DAILY - 18.03.2021 - Page 7



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58.59 NDUSTRY RELATIONS



ŞİŞECAM OCCUPATIONAL HEALTH AND SAFETY POLICY:

We aim to carry out all stages of our production activities in a healthy and safe work environment. In line with this goal, as a requirement of our responsibility for creating healthy individuals and a manpower, we adopt;

•Determining, implementing and causing to be implemented necessary measures to prevent occupational accidents and domestic and occupational diseases.

• Performing a risk assessment by ensuring the employee participation and achieving an acceptable risk level;

• Using safe equipment and appropriate technologies for a healthy and safe work environment,

• Ensuring the participation of every level of the organization and

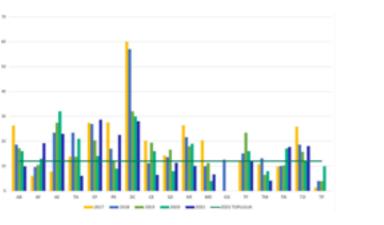
our stakeholders in the efforts to improve the occupational health and safety practices, and

• Creating an Occupational Health and Safety culture and making it our life style.

In line therewith, we represent and undertake to:

• meet the legal requirements, applicable standards and conditions for Occupational Health and Safety,

Improve our processes and increase our performance constantly with a proactive approach in Occupational Health and Safety, and
Continuing our trainings and activities aimed at our employees and subcontractors'/suppliers' employees, visitors, interns and improve them.



T. Şişe ve Cam Fabrikaları A.Ş. Domestic Plants Incident Frequency Rates January - March 2021 Annual Results T. Şişe ve Cam Fabrikaları A.Ş. Overseas Plants Incident Frequency Rates January - March 2021 Annual Results

CBA PROCESSES

JANUARY-MARCH 2021

CBA PROCESS AT JSC MİNA CONCLUDED WITH AN AGREEMENT

The 2nd term of CBA negotiations with Georgia's Metallurgy, Mining and Chemical Industry Labor Union, which was initiated at the JSC Mina Plant in Georgia on 26.10.2020, was concluded with an agreement on 22.01.2021. The collective bargaining agreement will remain in force for four years, from January 1, 2021 to December 31, 2024.

CBA PROCESS WITH ŞIŞECAM AUTOMOTIVE HUNGARY CONCLUDED WITH AN AGREEMENT

In the ongoing collective bargaining agreement negotiations at the Şişecam Automotive Hungary workplace established in Hungary, an agreement was reached on 29.03.2021. The collective bargaining agreement will remain in force for 13 months, from March 1, 2021 to April 1, 2022.

CBA NEGOTIATIONS WITH ŞİŞECAM AUTOMOTIVE SLOVAKIA ARE UNDERWAY

CBA negotiations with the Ozkovo Labor Union were initiated at the Şişecam Automotive Slovakia workplace established in Slovakia on 01.12.2020. The 8th meeting with the Ozkovo Labor Union took place on 30.03.2021. CBA negotiations are underway.

CBA NEGOTIATIONS WITH ŞİŞECAM AUTOMOTIVE ROMANIA ARE UNDERWAY

The existing collective bargaining agreement involving the Şişecam Automotive Romania workplace established in Romania expired as of 28.02.2021, and negotiations for the new terms of the collective bargaining agreement were initiated on 02.02.2021. The 6th meeting with the Glasscorp Labor Union took place on 06.04.2021. CBA negotiations are underway.

CBA PROCESSES INITIATED WITH TRAKYA GLASS BULGARIA, ŞİŞECAM AUTOMOTIVE BULGARIA, AND ŞİŞECAM GLASS BULGARIA EAD

The 12th term collective bargaining agreements currently in force at the Trakya Glass Bulgaria, Şişecam Automotive Bulgaria and Şişecam Glass Bulgaria EAD workplaces established in Bulgaria for will expire as of 30.06.2021, and pursuant to the legislation, negotiations for the new terms of the collective bargaining agreement with the Podkrepa Labor Union were initiated on 26.03.2021. CBA negotiations are underway.



COVID-19 PANDEMIC: VACCINE PRODUCTION TECHNOLOGIES

COVID-19 Vaccine 2019-9649

Injection Only

LET'S TAKE A CLOSER LOOK AT OUR STRONGEST WEAPON AGAINST THE COVID-19 PANDEMIC THAT HAS TAKEN HOLD OF THE ENTIRE WORLD.

PREPARED BY: DR. FATIH HAMŞİOĞLU Consultant for Occupational Health and Diseases, Industrial Relations and OHS Directorate

Viruses are microscopic infectious agents that can only live in living cells and reproduce by division. The disease agent known as COVID-19, which first appeared in Wuhan, China's Hubei province in December 2019 and has affected the entire world, is the new virus named SARS-CoV-2 from the family of coronaviruses. Until now, the most effective tool in combating the pandemic that has affected millions of people around the world for more than a year is the newly developed vaccines.

Vaccines are biological products developed by removing the diseasecausing properties of viruses, bacteria and similar microbes that are capable of causing disease in humans and animals. After vaccination, the body recognizes any disease-causing microbe or any part of the microbe and develops a defense against them; in other words, it develops immunity against the disease in question. The aim is to navigate the pandemic with minimum damage by creating a general immunity within society through vaccination. In addition to traditional methods, innovative practices have also been adopted in vaccine development studies for COVID-19. Let's take a closer look at the technologies used to produce the COVID-19 vaccine...

COVID-19 VACCINE PRODUCTION TECHNOLOGIES

Vaccines aim to induce active immunity against viral and bacterial diseases. After the vaccine specifically prepared for each microbe is injected into the body, the body recognizes these substances (antigens) and produces protective substances (antibodies or other defensive substances). These formations are encoded in the body's memory, and in the event that a virus enters the body, it quickly builds immunity and either prevents the disease or alleviates its effects. The production technologies used for COVID-19 vaccines are as follows:

■ Inactivated vaccines: Inactivated vaccines are developed by breaking down viruses and making them ineffective. The body develops a defense by recognizing these particles, and then ensures the rapid destruction of viruses in the event of a live virus infection. Thus, the disease is prevented. The Sinovac vaccine, developed to combat COVID-19, is an inactivated vaccine.

■ Viral vector vaccines: Immunity is induced by injecting live but weakened viruses that cannot cause disease. The Sputnik-V and Oxford/ AstraZeneca vaccines are among the viral vector vaccines developed against COVID-19. ■ Messenger RNA (mRNA) vaccines: mRNA are structures that deliver the coded information required for proteins to be synthesized inside the cell, to the ribosome (the protein production unit for cell structure and activities). In the production of mRNA vaccines, a piece of mRNA that corresponds to a viral protein is produced artificially in the laboratory environment and injected into the body through vaccination. The mRNA enters the cells in the body and enables the proteins of the virus to produce new antigens. The immune system recognizes these proteins and builds immunity against the disease. The Biontech/Pfizer and Moderna vaccines are examples of mRNA vaccines.

WHAT NEEDS TO HAPPEN FOR THE COVID-19 PANDEMIC TO END?

Pandemics typically have two types of endings. Through natural immunity, the virus spreads to a vast majority of the population. Thus, either herd immunity is achieved or the transmission and disease-making properties of the virus are gradually weakened. Active immunity refers to vaccine-induced, faster and entire-population-directed immunization. Since the duration of the pandemic and the precise effects of the virus are unknown in the case of natural immunity, it is difficult to predict the extent of the material and emotional damage society will incur. For this reason, authorized institutions aim to combat the pandemic by inducing active immunity through the vaccination of the population. Usually, the development of vaccines and obtaining permission to use them would take about an average of thirty years. However, thanks to the advanced technology and accumulated knowledge, this period now averages eight to ten years. However, in the case of the COVID-19 pandemic, the rate of transmission has been very fast compared to other viruses and it has caused tremendous loss all across the world, prompting authorities to act faster. Traditional vaccination and vaccine preparation programs have been abandoned, and the vaccine has been made ready in a short period of time. When it comes to issues like questions like "should I be vaccinated" or "which vaccine is best", it is not advisable to make anti-vaccine remarks based on hearsay, considering the destruction caused by the current pandemic. Due to the situation we are in, the most appropriate response would be to indicate that vaccination is necessary "under the guidance of reliable, official institutions as soon as possible".

SOURCES:

- Declarations of the Turkish Ministry of Health Hacettepe University Hacettepe Faculty of Medicine Publications
- · Declarations of the World Health Organization

