



Sustainability Talks

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EXECUTIVE SUMMARY

The Europe's Widest Ranged Sustainability Summit: Sustainability Talks İstanbul

The fourth Sustainability Talks Istanbul conference, organized by **Orbit Consulting** and **Kipaş Tekstil** in strategic partnership with **ITHIB** (Istanbul Textile and Raw Materials Exporters' Association), took place on November 28th at the Hilton Bomonti Conference Center. The conference has become a meeting point for all stakeholders to develop sustainable solutions to the problems encountered in the fashion and textile sectors.

The main topics were the ongoing climate crisis, green solutions, artificial intelligence applications, circularity, and sustainable raw materials. This bulletin includes key insights from the keynote speeches delivered by representatives of Ministries from EU countries, executives of fashion brands and leading manufacturers, technology providers and solution partners in the fashion and textile ecosystem.

The Turkish textile and raw materials sector, one of the world's leading textile exporters, exported over 1.7 million tons of products in the first eight months of 2023, maintaining its position as one of the main centers of textile production. Worldwide, demand for sustainable products continues to grow, driven by brands and consumers as well as legislation such as the EU Green Deal and the Border Carbon Regulation Mechanism. Turkish producers have the power to turn this demand growth into an opportunity through investments in rapidly developing technologies and sustainable agriculture.



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Business Finland and the Dutch Government, who participated in Sustainability Talks Istanbul as returning country partners, were pleased to contribute to the green transformation of Turkey's textile sector by sharing sustainability and circularity solutions implemented in their respective countries. The combination of Turkey's textile manufacturing know-how and the technical and sustainability know-how of Finland and the Netherlands has the power to create lasting change in the textile industry.

STI 2023 Topics "INTERACTION and COLLABORATION"

Speaking under STI23's theme "Interaction and Collaboration", all panelists and speakers agreed on the urgent need for action on sustainability in the textile industry. This theme shows that change is possible and ongoing in the areas of circularity, traceability, regenerative practices and digital transformation. However, it is emphasized that all stakeholders in the textile industry value chain need to increase their cooperation with stronger actions. The companies participating in the conference explained their practices in these areas and shared how they are strengthening their initiatives through collaboration in the industry. STI23 also hosted seven companies in the Interaction Zone, fostering collaborations and providing a unique networking opportunity for sustainability leaders of the textile industry in Europe. You can find more information about Archroma, Savio, Hohenstein, Trützschler, Hilton Bomonti Hotel and Conference Center, Uster and Pelizzardi, who participated in the Interaction Zone on the Sustainability Talks Istanbul website.





Sustainability Talks Istanbul has hosted many innovations as well as informative talks every year. In collaboration with STI and Transformers ED Foundation, university students were trained on sustainability in textiles. This training provided more than 100 university students with information on denim production, regulations, recycling practices, the importance of water in denim, the concept of circular fashion and circular design practices.

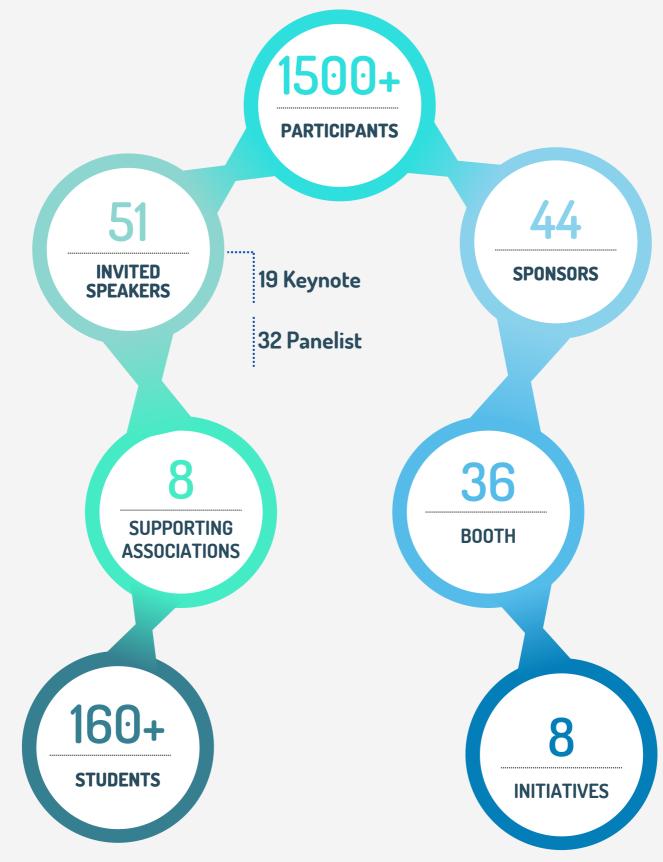
The SustainTech event, launched this year, aimed to connect startups with industry and investors. SustainTech introduced 11 startups that offer innovative solutions for sustainability in textiles to all parts of the industry, from textile manufacturers to distributors, and key investors. This event is considered as a unique platform in the world that deeply supports Interaction and Collaboration. We plan to continue supporting green initiatives with SustainTech, which we aim to grow in the coming years.



Bringing together more than 1500 global textile leaders, the 4th Sustainability Talks Istanbul focused on sustainable innovations in circular economies, next generation fibers, the latest textile technologies, green solutions with artificial intelligence and agricultural developments. Growing with side events such as Transformers ED and SustainTech, the event will maintain its momentum and continue to be Europe's largest sustainable textile platform next year.

Sustainability

STI 2023 WITH NUMBERS



Sustainability Talks

Futures Dedicated to Sustainability

At the conference, brands, government representatives, industry associations and NGOs presented and voiced their views on various sustainability issues. The themes of the conference speakers and their activities under these themes are presented below:



Due to the climate crisis; plants, animals and ecosystems as well as human communities are at serious risk as a result of factors such as the increase in the frequency and severity of extreme weather events, rising ocean and sea water levels, increasing acidity of the oceans, and the melting of glaciers. For this reason, the transformation of the textile and fashion industry, which is responsible for 10% of the world's greenhouse gas emissions, has become a necessity, not an option, and has led textile and fashion brands to increase their sustainability efforts.

One of the prominent names among textile companies committed to sustainability is **Ikea**. Combining sustainability and business to maximize positive impacts, Ikea spoke at STI23 about the importance of measuring and reporting impact at every level of their value chain. The polyesters Ikea uses are already 90% recycled, their cotton is 100% sustainably sourced, and they are actively working on regenerative agriculture and helping their partners eliminate the use of coal. Speaking about Ikea's sustainability commitments, **Calvin Woolley** said that by 2030 they aim to completely phase out the use of fossil fuels and produce exclusively from recycled materials.

Sustainability

4th Sustainability Talks İstanbul

Textile giant **Inditex** has similarly ambitious sustainability commitments. **Yasemin Gürek**, country manager for sustainability, explained that Inditex aims to have 25% of its fibers from organic and regenerative sources by 2025 and that they have established the Textile Innovation Center, which supports collaboration with more than 200 start-ups and chemical companies, to achieve these goals. In addition to their commitments, Inditex also announced that they will not accept new suppliers who use coal in their supply chain and that they have drawn a roadmap for existing suppliers to switch to alternative energy sources as soon as possible.

Juliane Nowakowski told a story about Tom Tailor's commitment to sustainability, detailing how they saved 36,000 pieces of defective denim. Tom Tailor's denim product, which is always in stock, becomes unusable due to a tearing problem during post-production inspections. In order to continue the life cycle of the products, they partnered with Kipaş to recycle and recover the products to be reintroduced back into Nynke production. Eggen, founder of the Sustainability Club dedicated to impact reduction, believes that brands should go beyond reporting with a similar sustainability philosophy and take action. According to Nynke, the EU's new environmental regulations pose a great opportunity for the Turkish textile industry because countries that understand and implement what is expected of fashion brands after the increasing restrictions will be able to get ahead in exports.

According to **Nicolas Prophte**, the speaker of the 'Circularity and Regenerative Practices in Textiles' panel moderated by **Sultan Tepe**, a global problem such as climate change requires cooperation and adopting systems thinking. Prophte emphasized the importance of strengthening collaboration between the private and public sectors to create clear and ambitious goals based on science, advancing R&D and innovation to create roadmaps to achieve these goals, and using education to change the culture of consumption. **Romain Narcy**, CEO of **Rematters**, announced that the 3-year Green Deal on Circular Denim project created 3 million denim products with 5% post-consumer recycled materials. Emphasizing the importance of leaving a







living space for future generations by improving the quality of the soil while practicing sustainable agriculture, **Onur Uçak** detailed the work of **EgeCot**, a regenerative agricultural area that provides micro-climate, natural pest control and disease protection. **ECOM**, which produces Organic Cotton, Regenagri, Better Cotton, Cotton Made in Africa and similar specialty cottons, works to increase positive impact by reducing fossil fuel use by moving away from polyester, as **Charles Jannet** underlined.

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Rehubs, a new project, aims to build an ecosystem to recycle at least 50% and at best 80% of textiles, of which only 1/3 is recycled today. **Chris Deloof** believes that the project to be followed under the name European Textile Recycle Roadmap will transform the textile industry from a linear economy to a circular economy. Another researcher working to create a circular economy by reducing textile waste is **Ali Harlin**, research professor at **VTT Finland**. Explaining Telaketju, Finland's textile recycling system, Harlin stated that R&D studies that will increase cooperation in the world, especially with their project with TÜBİTAK, will create more than €1.4 billion of renewable raw materials.

Another area where Finland is leading the rest of the world is in building an advanced national economic system that is sustainable and environmentally friendly by using water resources efficiently. **Arvo Nerman**, project director of the **Finnish Water Forum**, showed Sustainability Talks Istanbul participants how wastewater can be recycled back into the textile industry through the relationship between municipal wastewater treatment plants and industries close to the city.

Leading Brands and a Journey to Innovative Solutions



Sustainability

Sustainable Fibers

We are in a period where we have reached an unsustainable point due to the increasing population in the world as well as the increasing addiction to 'Fast Fashion'. **ibrahim Kara**, who aims to increase sustainable fiber production, underlines that the designer of a product determines its fate and says that as long as we produce natural fibers, we can save the planet by reducing the impact of the textile industry. With its Ecocell brand, **Karafiber** is one of the leading producers of Lyocell, one of the most sustainable options among manmade fibers. Karafiber aims to solve the sustainability problem starting from the raw material, offering manufacturers an alternative that has a lower carbon footprint, consumes less energy, uses less chemicals and water, and is longer lasting and biodegradable.

Fibers, a hot topic at Sustainability Talks Istanbul, were discussed in detail at the 'New Generation Fibers' panel. In the panel moderated by senior design consultant Lotta Ahlvar, brands offering innovative solutions in the field of sustainable fibers shared their solutions with the participants. Lenzing, which produces fiber from wood pulp obtained from sustainable forests, also reincorporates fiber waste back into its production processes. This is how they created Ecovero Viscose, which has a 20% recycled composition with post-consumer waste fiber. Krishna Manda explained that their current goal is to increase the recycled content rate in fibers to 50% by 2027. Ercan Sahin explained that as a result of the R&D studies of the Aksa Acrylic brand, they managed to create 36% biodegradable acrylic fiber in 18 months and that they aim to use this technology to develop sustainable fibers. The fact that their sub-brand OnceDye technology saves up to 30% energy, water, time and production space shows the success of Aksa's R&D commitments.

Eastman Naia™ aims to materially improve the quality of life with its Renew brand, made from 60% wood pulp and 40% acetic acid. **Ana Costa** announced that by investing in carbon renewal and polyester renewal for mainstream circularity, Eastman Naia[™] will reduce its carbon footprint by 30%-50% and divert plastic waste from landfills.





Another brand working to reduce plastic waste is **Unifi**. Unifi, a leading brand in the production of recycled polyester, has recycled 40 billion bottles to date with its Repreve brand and brought them back to the textile industry. It has been measured that Repreve can reduce greenhouse gas emissions by up to 60%, fossil fuel depletion by up to 76% and water scarcity by up to 76% in clothing production. Talking about the importance of durability in textiles, **Atakan Koru** emphasized that it is very important to use quality products that can be used for a long time.

In addition to the developments in sustainable fibers, the Next Generation Fibers panel speakers also underlined the importance of social sustainability in business life and the need to encourage interaction and ultimately collaboration within the industry to ensure the scalability of sustainable solutions.

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Next Generation Sustainability

The only way to move sustainability, one of the most important issues of today, forward in a way to meet the Paris Agreement targets is to adapt rapidly developing technologies to the textile industry. New developments that will support sustainability in the textile industry were shared under the roof of new generation sustainability, one of the main topics of Sustainability Talks Istanbul.



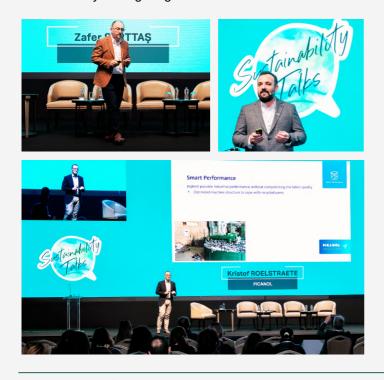
Karacasu Tekstil, one of the leading companies in innovation in the sector, supports sustainability by producing products that users can use for a longer period of time with quality raw materials and causes less damage to the environment by obtaining 40% of the energy they use in their production facilities from renewable sources. The Circular Dye machine, explained by Burak Orhan Arifioğlu, reduces the carbon and water footprint in reactive and disperse yarn dyeing processes much lower than the current situation. As a result of the measurements, it has been determined that the chemical and water savings in the disperse dyeing process is 35%, while the water savings in reactive dyeing is 94% and the dye and chemical savings rate is 35%. Thanks to these savings, it was determined that the Circular Dye machine has less impact on the environment compared to other machines.



One of the technologies advancing sustainability in the sector is the RCO100 machine designed by Kipaş Textile, Saentis Textile and Temsan. The RCO100 machine, which manages the recycling process from fabric to fiber, ensures that the length and quality of the recycled product is preserved by breaking the fiber less. In their speeches, Halil Gümüser, Anabelle Hutter and Cem Erdoğrul told their story of producing the world's first 100% mechanically recycled cotton; Kipaş, Saentis and Temsan have taken an important step in sustainability as a result of their cooperation. Another example of cooperation in the sector is the Sustainability Manager Supply Chain Module developed by Sun Textile and NTT Data. Introduced by Nur al Nobani Güryel and Utku Varol, the module helps suppliers directly measure and report their carbon, water and waste emissions and aims to create a more transparent and sustainable supply chain by facilitating environmental, social and governance reporting.

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One of the most important developments in technology is artificial intelligence. The artificial intelligence panel chaired by Bikem Kanık revealed that artificial intelligence, which has started to be used in every sector from social security to e-commerce, has a very high potential to contribute to sustainability in textiles. Smartex, which produces digital product passports that enable machines to produce less waste and reduce faulty production by evaluating production machines and increase traceability with QR codes, is one of the startups using artificial intelligence in textiles. Gilberto Loureiro, founder and CEO of Smartex, underlined that fully automating the textile industry is a big challenge due to the diversity of fabrics, but at the same time there are so many solutions dedicated to sustainability in textiles worldwide. Aiming to build a more efficient and sustainable ecosystem by supporting the industry, Mext Technology Center helps Turkish industry embrace digital transformation so that it does not fall behind in competitiveness. Ece Akın Armutak said that digital technologies enable and accelerate sustainability, and detailed various Mext projects, such as technologies that use artificial intelligence to determine the error rate of yarns by looking at the number of strings before they go to the customer and technologies that reduce carbon emissions. Another company using artificial intelligence is Jori. Founded by Selen Uğuroğlu, Jori aims to create a circular economy by analyzing the life cycle of a piece of clothing with artificial intelligence to reduce the 100 million tons of waste produced in the textile industry every year. Smartex, Mext and Jori continue to pioneer the journey of the textile industry to achieve sustainability through digitalization.





In addition to startups, large companies that have a big place in the sector are also embracing the new generation of sustainability. Working with the goal of achieving the same production with fewer resources, Pluvia aims to produce machines that will transform the washing process of fabrics and yarns, which causes a significant part of the consumption with its new technologies. Zafer Serttas said that they have achieved at least 50% water and 60% waste savings in the washing of medium and dark colored products with their new machines and announced that they have achieved 90% of their sustainability targets as Pluvia. **Dupont** is another brand that reduces waste water production by using bio-based components. Gökhan Duman said that they have created an innovative solution other than conventional fluorine-based compounds with Nomex Control with EcoForce technology, and underlined that they have also reintroduced 439 tons of unproduced Aramid fiber to the economy in both pre-consumer and post-consumer stages. Picanol, a weaving machine manufacturer, achieves sustainability by improving the machines already in use. Kristof Roelsraete explained in detail how, by using destination kits, they are able to increase the efficiency of their weaving machines and extend the economic lifetime of their output.

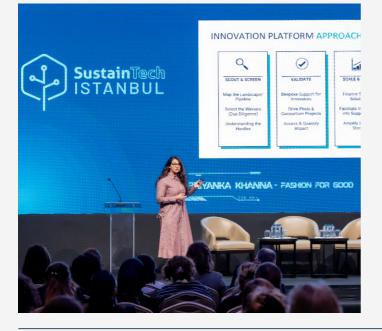




SustainTech

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Although Turkey is a leading country in the global textile industry, it needs to produce innovative solutions in addition to traditional textile production in order to maintain its strength under the pressure of developing technologies and increasing sustainability needs. The fastest way to reach these innovative solutions is to open up new opportunities by supporting initiatives based on science and technology. As SustainTech keynote speaker Ahmet Kileci said, Turkey's textile industry needs to keep its competitive edge, and to do this, it needs to support the initiatives that are trying to develop the industry. From building a circular economy to developing smart machines with artificial intelligence, 11 startups came together with industry and investors at the SustainTech event. You can find more information about SustainTech startups Biolive, Circ, Doktar, Glanco, Infinited Fiber, Jori, Myth, Rematters, Renewcell, Reverse Resources, Swatchloop and Worn Again on our website.

In addition to the participating startups, SustainTech talks touched on raising investments, empowering and growing startups to revitalize the ecosystem of startups creating green solutions for the textile industry. **Fashion For Good**, a platform that aims to accelerate and scale technology and innovation to change the supply chain and make fashion a force for good, has supported 170 organizations and 3000 technologies to date, helping to raise €1.9 billion in investments. **Priyanka Khanna** shared that Fashion For Good's current focus is to support projects ranging from new biosynthetics, protein fibers, to pre- and post-processing machinery, manufacturing and retailer technologies, and end-of-use technologies.

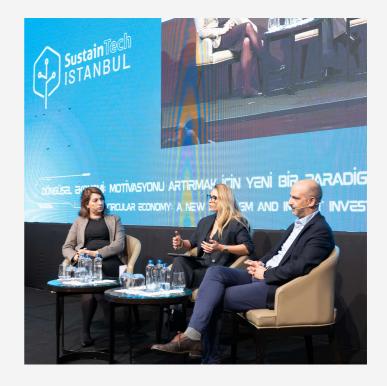






A topic that has recently come to the forefront in terms of investment is impact investing. In the , the 'Circular Economy: A New Paradigm to Increase Motivation and Impact Investing' panel moderated by Merve Zabci, ilkay Demirdağ underlined that we are going through a period of multiple risks and that we need business models that think about the long term, such as impact investing, as there are more risks than before and that trigger each other. In addition to this, she revealed that we can also create impact-oriented textile companies by supporting the circular economy, even though it is thought to be contrary to impact-oriented business models since the textile sector is basically a productionoriented sector. Cem Baytok, the other speaker of the panel, stated that the number of textile startups in the impact investing ecosystem in Turkey is very low and that there should be more startups in this field in a country where the textile sector is so developed. Since big companies do the innovation in textiles in-house, there are not many start-ups from outside, but according to Baytok, Turkish textiles is a big field and there is a huge opportunity here.

EBRD has been actively working to improve the quality of life in Turkey by supporting infrastructure, and has invested €19 billion in Turkey since its inception, making progress in enabling the transition to sustainable and open competitive market economies. By 2023, the projects they finance must be in line with the Paris Agreement, **Hande Işlak** explained, and shared that EBRD aims to be a pioneer in decarbonizing production processes and financing the transition to a new economic model.







The second panel of SustainTech was moderated by **Bikem Kanık** and was titled 'Energy Efficiency Redefined: Harnessing the Potential of Technology'. Panel speaker **Osman Şahin Köşker** underlined the fact that Turkey's energy market for just one year is \$20 billion and emphasized that he believes there will be great business opportunities and developments in energy storage. Köşker also stated that as **Kontrolmatik Technologies**, they will make priority investments in IoT, Energy Storage and Field Automation. **Fahir Han**, the other speaker of the panel, mentioned that investments in new technologies are always prioritized in energy efficiency, but it is also very important to raise awareness of technologies produced with old methods. Among the traditional technologies that **Faradai** wants to raise awareness of are LED lighting systems, building insulation and remote energy control and energy consumption measurement using IoT systems.

Supporting Associations Hall

Sustainability Talks Istanbul, which has become Europe's largest textile sustainability platform, brought together the outputs of ITMF, Dorbirn GFC and Textile Exchange annual conferences as well as its own talks and panels.



The ITMF conference, which was held with the theme of circularity and digitalization in textiles, analyzed the mega trends shaping the textile industry. Among the prominent trends are fiber use, recycling and circularity. With consumers and countries increasingly demanding sustainability, there is a trend in the industry to increase recycling, which can be seen in brands' impact and waste reduction commitments. This is how Christian Schindler summarized the recycling actions discussed at the ITMF Conference: "Chemical and mechanical recycling efforts should be increased, but they require a lot of energy and the only way to ensure that recycling is sustainable in the long term is to integrate renewable energy sources into these systems." At the same time, Schindler stated that recycling is a long-term nonrepeatable solution as it shortens filaments, and explained that the main focus to achieve circularity is on limiting use, waste management, repair and reuse, and landfill.

A Summit of Innovative Textiles Enterprises and Global Trends



With 550 participants and 125 sessions, the **Dorbirn GFC** conference addressed circularity, home textiles, innovation, start-ups and machinery, prioritizing the EU's changing textile regulations and legislation. Dorbirn GFC has succeeded in fostering collaboration and sharing knowledge by bringing together start-ups offering solutions in the field of textiles under the GFC Innovation Days event, which was held for the third time this year. **Andreas Dorner** explained that Dorbirn GFC's focus in 2024 will be on fiber innovations, circular solutions and recycling, energy solutions and emerging technologies.

Focusing on topics such as Unified Standards, Material Impact Calculation, Preferred Fiber and Material Matrix (PFMM), Cotton Life Cycle Assessment (LCA), Biodiversity Report and Regenerative Agriculture Results Framework, **Textile Exchange** brings the industry together to have important conversations in these areas with round table talks and workshops. With 7 workshops and 3 regional conferences this year, Textile Exchange aims to collect data, conduct research, develop resources and run pilot projects to provide continuous improvement and scaling solutions. Textile Exchange Cotton Manager **Gökçe Okulu** stated that they are working on improving the supply chains of all stakeholders on traceability and sustainability.

Sustainability

STI 2023 Testimonials



Kristof Roelstraete Picanol

Thank you for your excellent organization and support at Sustainability Talks Istanbul! I look forward to the next event.



Yasemin Gürek Inditex

I was very happy to participate in such an inclusive and full organization. Thank you very much to everyone who contributed.



Romain Narcy Rematters

We believe in building better systems rather than improving on past practices or maintaining existing ones. We are very proud to be affiliated with such an esteemed organization and to participate as a speaker on the panel "Creating a Circular and Regenerative Textile Industry" on the Sustainability Talks Istanbul Stage.



Hohenstein Türkiye

As Hohenstein Turkey, we played an important role as a sponsor of Sustainability Talks Istanbul, which was successfully completed with approximately 2000 participants, and we received great interest in our stand and our speech. We would like to thank our team and all our visitors.



Jori

We were happy to be at Sustainability Talks Istanbul! Many stakeholders in the textile ecosystem came together to discuss the future of the industry, digitalization and circularity. We were very pleased with the event where our CEO Selen Uğuroğlu gave panels on artificial intelligence for fashion sustainability and what we do as Jori.



Juliane Nowakowski Tom Tailor

I was very impressed with the number of people who attended the event. Everything about the organization and setup was really good, well done to all the teams involved! I really believe that Sustainability Talks Istanbul has the potential to become an even more international event.



Nicolas Prophte

The 4th edition of Sustainability Talks Istanbul went great again, with Orbit Consulting and Kipas Textiles Offical teams delivering a high quality event based on high level of organization and quality content for the audience. Congratulations to the whole team involved!



Ana Costa Eastman Naia

I am grateful for the opportunity to contribute to the 4th Sustainability Talks Istanbul by sharing my views on the Next Generation Fibers Panel. Participating in discussions with industry leaders such as Atakan Koru, Ercan Sahin and Krishna Manda and our insightful moderator Lotta Ahlvar highlighted the vital role these conversations play in leading the textile industry towards meaningful change.

We look forward to catalyzing further transformation next year at the 5th Sustainability Talks Istanbul!



Circular Textile Days

We would like to thank our valued partner Orbit Consulting for making it possible for us to participate in Sustainability Talks last Tuesday. It was an incredible experience where we not only made new connections but also met inspiring companies that share a passion for sustainability and circularity. We are truly grateful for this opportunity to share and learn, which once again emphasized how important trust, openness and education are for a more sustainable future.

Sustainability Talks



Zennure Danışman Transformers ED

Within the scope of Transformers Foundation ED Turkey; while hosting really valuable visitors, we enjoyed listening to highly informative speeches and panels from denim production to regulations, from recycling practices to the importance and dynamism of water in denim, from circular fashion concept to circular design practices. We look forward to meeting you at future events.



Christian Schindler

The location was great. It was also good to have booths from partners and sponsors.



Miray İnan Control Union

The event was very positive, beautiful and successful for us. We would also like to thank you for your work.



You are realising an event that is followed by our industry worldwide. The contributions of the event to both our industry and our country are truly invaluable.



Irene Lemmens CTD

We experienced STI as a valuable meeting place, with a variety of companies and experts present. And above all, well organised. We spoke to a number of companies who put you in touch with us. There was a lot of networking.



Zeynep Sıvar AKSA

We would like to thank you very much for the enjoyable event.. We had the opportunity to participate in many events with impressive content. Thank you to all contributors.



Ahmet Oruç MEM Tekstil

I would like to thank everyone who contributed to the event. We were very happy to take part in this event.



Mehmet Demir Dupont

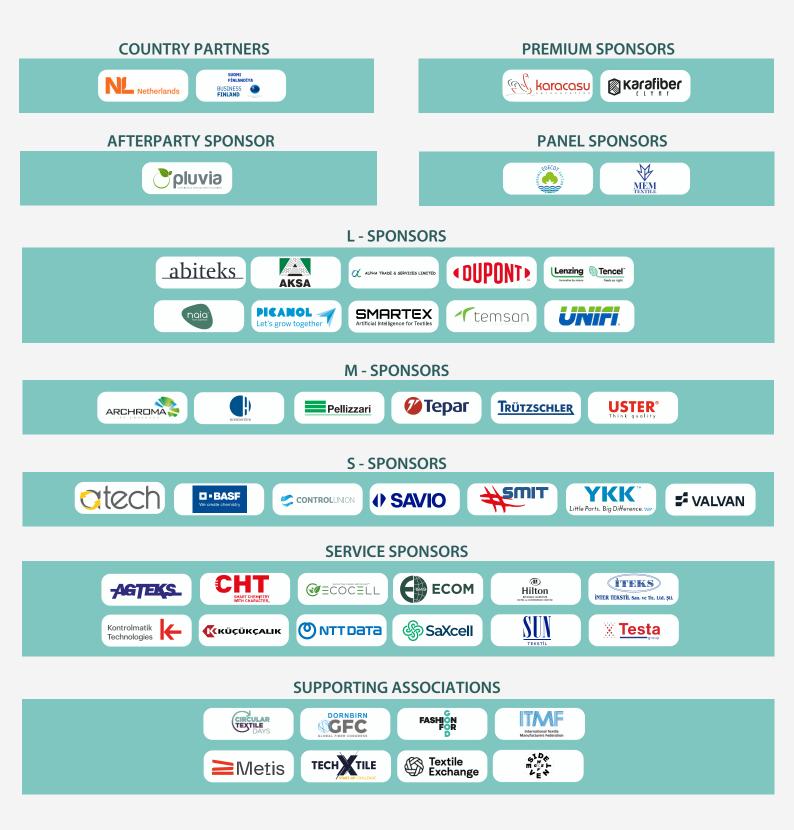
In this conference, which I attended for the first time, I encountered a very professional organisation. Almost all the details were well thought out enough to satisfy the participants. I heard similar comments from many people we talked to.



STI 2023 Video

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In cooperation with the Orbit Consulting and Kipas Textiles





Strategic Partner: Istanbul Textile and Raw Materials Exporters Association

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