YÜNSA

CREATION OF FABRICS

Sustainability Report 2022

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ABOUT OUR REPORT

About Our Report

We are proud to present Yünsa's sustainability report that reflects our economic, environmental and social performance for 2022 The aim of this report is to give our stakeholders the opportunity to assess the steps we take to measure, monitor and improve the way we manage the impacts resulting from our activities.

Our goal is to render our sustainability reports one of the major communication tools to examine the priorities of our stakeholders with regard to sustainability and to share our best practices towards solutions to issues today and in the future.

The Scope

Unless otherwise stated, the data in this report covers Yünsa's activities in Çerkezköy plant January 1, 2022 – December 31, 2022. We explain how we defined our report content and topic boundaries in the Strategy and Governance section of this report.

The Principles

This report has been prepared in accordance with the GRI Standards Core option. In the process of identifying our strategic sustainability topics, we took into consideration GRI's principles of materiality, stakeholder inclusiveness, sustainability context and completeness.

Next Report

We plan to publish our next report, which will cover our sustainability performance of 2023, in the first half of 2024.

(GRI 2-2, 2-3)

SCAN ME

Message from the Chairman of the Board

Distinguished Stakeholders,

At Yünsa, we believe that we need to share the economic value generated by sustainable growth not only with our shareholders, but also with all our key stakeholders, which mainly include our customers, employees and suppliers. Aiming to achieve sustainable solutions that add value, we closely follow-up international standards, and integrate our sustainability approach into all our business processes through our Total Efficient Management approach. We continue the growth of our company through R&D and innovation efforts.

In an era where the climate change causes certain economic, social and ecological risks, we have now focused our activities on innovation with a view to developing value-added and sustainable products and technologies that make a difference. The increased use of natural resources due to increasing demand, climate threats, and increasing level of awareness have prompted us to accelerate our sustainability efforts.

With Oeko-Tex® certificate, we provide our customers with products that are safe for the environment and human health. Being one of the five largest premium woolen fabric exporters of the world, Yünsa has continued its production activities also in 2022 achieving 99% ZDHC compliance (The Zero Discharge of Hazardous Chemicals Programme) and achieving 100% compliance with MRSL (Manufacturing Restricted Substances List) / Reach (Registration, Evaluation, Authorization and Restriction of Chemicals) standards.

We have increased the number of our employees by 24% compared to the previous year thanks to the investments we have made in 2022. This helped us contribute to the employment in our sector. We continue our environmentally, socially, and economically sustainable activities aiming to achieve clean production with energy and material efficiency. We started our investment, which will prepare our dyeing facilities for the dark dye house,

Message from the Chairman of the Board

increase employee ergonomics and color repeatability performance, and greatly contribute to our sustainability goals by cutting our water and energy use in half. Likewise, we also made investments to reduce modernization and technical waste by 50% in our weaving looms. Both two investments will help us ensure that Yünsa moves into the future with bold steps.

Our Economic Performance

We have achieved a 99% increase YoY in the total textile sales volume, reaching a sales volume of 6,766,000 meters. Our revenue in 2022, half of which we derived through exports, has grown as a result of the impact of increases in sales price per meter and unit sales price, as well as exchange rates, increasing to 74 million EUR0 from 33 million EUR0.

Yünsa, whose revenue was boosted by maximizing customer satisfaction with its collection, customer service and product quality, managed to increase its net profit by 1,222% compared to the previous year and continued to add value for its stakeholders during this period.

We take care to purchase our major supply items such as fibers, yarns, dyes, and chemicals from sustainable sources. With a view to ensuring animal welfare, we have ceased the use of hazardous chemicals whose production and use are restricted. We make use of our process waste in our production line in addition to recycled polyester, and contribute to circular economy by means of continuing our activities aiming to develop environment-friendly products made from recycled materials.

Our Social Performance

One of our internal stakeholders' top sustainability concerns is occupational health and safety. We have renewed our TSE Covid-19 Safe Production Certificate in 2022 to this end. Furthermore, customer health and safety continue to be one of our strategic issues as revealed by the feedback we receive from our consumers, our most strategic external stakeholder.

In terms of our other social impacts, we conduct regular performance assessments to ensure the long-term employment of our talented employees, and continuously support their personal and professional development through training programs.

In 2022, we provided scholarships to 24 university students studying at 9 different universities through the Innovative Productive Generations Association (YÜNDER), which was founded with the support of Yünsa employees and provides scholarships to its scholarship recipients.

Our employment priorities include ensuring diversity and equal opportunities for women employees. The ratio of female to male labor force in our company stood at 36% in 2022.

Our Environmental Performance

In 2022, we published our Yünsa Greenhouse Gas Policy with a view to ensuring the calculation, reporting and mitigation of climate change and greenhouse gas emissions and conducting verification activities, going beyond our environmental responsibilities. In this context, we have prepared our ISO 14064 Greenhouse Gas Emission Verification Procedure in order to reduce greenhouse gas emissions by consistently raising awareness among all of our stakeholders. Our 2022 Sustainability Report also includes the calculation results. We have prepared Yünsa Sustainability Roadmap in accordance with our 2025 and 2030 targets on the basis of the performance indicators of the priority areas identified in detail together with their environmental, social and economic aspects. We aim to be a pioneer in the field of sustainability in the textile industry with all these efforts.

We have obtained a green energy certificate for our entire power consumption in 2022. We take pride to have received our YEK-G (Renewable Energy Resource Guarantee System) certificate, which documents electricity generated from renewable resources. The relevant certificate contributes to a carbon neutral and sustainable future. Within the framework of green energy, we have neutralized 13,284.5 tons of CO2 equivalent emissions for 2022.

We dispose of all our waste in line with the legal legislation. In this context, we carry out production activities in compliance with standards such as RCS (Recycled Claim Standards) and GRS (Global Recycle Standards), which ensure traceability through recycling in order to reduce the environmental impact of production that requires energy, water and chemicals. We also certify our products with the RWS (Responsible Wool Standards) standard for wool, supporting best practices in raising sheep in good conditions and in managing and protecting the land. In 2022, our GRS / RCS certified fiber usage rate stands at 6%, while we have a RWS certified raw material usage rate of around 7%.

In 2022, the usage of 72 tons of REPREVE® fiber for the conversion of plastic bottles into fabric helped us prevent 94,406 kg of CO2 equivalent emissions, and save 1,116,796 kWh of energy, and 310,893 liters of water.

Within the scope of the CDP (Carbon Disclosure Project) which we have been participating in since 2010, we have achieved a score of B in the category of water safety with our performance that exceeds the global, regional and industrial average.

In addition to our exports, we also continue our efforts to support the provision of raw materials with a view to reducing emissions by means of adding economic value through the materials we provide and thus contributing to circular economy. With the aim of supporting the use of domestic wool, a starter flock of Karacabey Merino sheep was created at the farm of Faculty of Agriculture of Tekirdağ Namık Kemal University in cooperation with the University, which will be used in the production of worsted woven fabric, and worsted yarn and woven fabric were manufactured on Yünsa production line using the wool sheared from the flock, and jackets were produced using the designed fabric.

I would like to express my sincere gratitude to all my colleagues who have helped us progress towards our goal of becoming the leading wool fabric brand in Europe by 2025 and the world by 2030 by adding value to life with their sustainable, technological and innovative approach.

Yours Sincerely, ,

Mustafa SÜRMEGÖZ
Chair of the Board of Directors

02

CORPORATE PROFILE

CORPORATE PROFILE

Yünsa, founded in 1973, is the largest integrated woollen fabric manufacturer in Europe and is also one of the five top high-segment woollen fabric manufacturers in the world. Yünsa has a share of 40% in the Turkish woolen fabric exports in 2022.

With its sales and marketing organization, production flexibility, cost structure, vision and experience, Yünsa stands out in the woolen fabric sector both in Turkey and in Europe.

Producing and using its own yarn, Yünsa has an annual worsted yarn manufacturing capacity of 4,500 tons along with a fabric weaving capacity of 10 million meters.

Being one of the world's leading companies in the production of premium woolen fabrics, Yünsa has Europe's largest integrated wool woven fabric production facility under one roof. With its contemporary and technological facility infrastructure, the Company performs all of its spinning, warping and weaving, dyeing and finishing procedures in-house.

Management System Standards Certificates		
Name of Certificate	Valid at	Since
ISO 9001:2015 Quality Management Systems	Factory + HQ	1998
ISO 14001:2015 Environmental Management System	Factory	2004
ISO 45001: 2018 Occupational Health and Safety Assessment Series	Factory	2019
ISO 27001:2017 İnformation Security Management System	Factory + HQ	2016
ISO 50001:2018 Energy Management System	Factory	2016

Corporate Memberships
Turkish Textile Employers' Association
KALDER Turkish Quality Association
İSO İstanbul Chamber of Industry
İTO İstanbul Chamber of Commerce
Çerkezköy Chamber of Commerce and Industry
Çerkezköy Industrial Zone
İİTKİB İstanbul Textile and Apparel Exporters Association
Business Council for Sustainable Development Türkiye
Borsa İstanbul
Central Securities Depository of Turkey
Istanbul Textile and Raw Materials Exporters' Association
Corporate Governance Association of Turkey

GREENHOUSE GAS POLICY

In accordance with our Corporate Sustainability principles, we have made our arrangements in 2022 in order to obtain an ISO 14064: 2018 Carbon Footprint Verification Certificate for our Greenhouse Gas Emissions within the scope of our environmental, social and economic performance. In this connection, we have developed ISO 14064: 2018 Greenhouse Gas Emission Verification Procedure, Greenhouse Gas Policy and Greenhouse Inventory Quality Team.

YÜNSA FACTS AND FIGURES

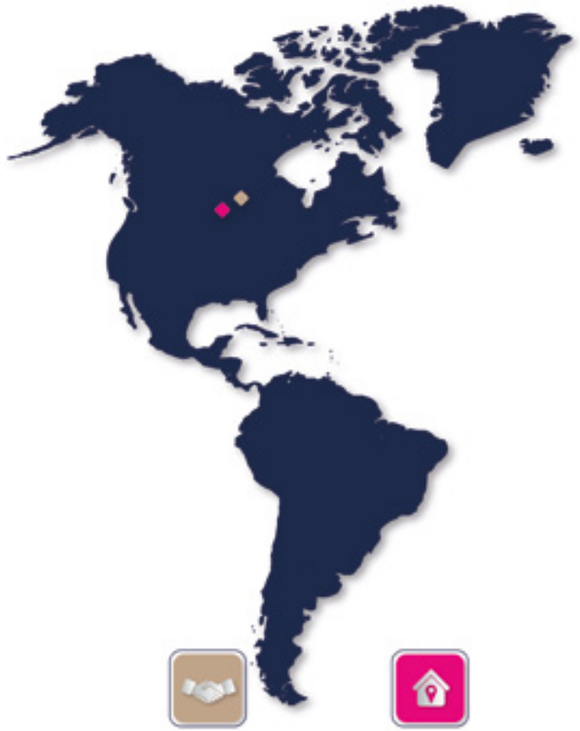
SUSTAINABILITY PROFILE	CORPORATE PROFILE	
2022: 653 % Operating Profit Growth For 2022: Europe 56 % / Turkey 33 % North America 7 % / The Far East 1 % Other 3 %	Net Sales 2022 : 73,746,883 Euro Total Production 2022 : 7,031 Km 50+ Country Sales Marketing 2022: 38,060,784 Euro Export income	ECONOMIC
Women 2022: 35,4 % *Training Dissemination Rate 2022: 76 %	Employees 2022: 1077 Total Training Duration 2022: 68,1 Hours	SOCIAL
2022 emission accounts were verified by an accredited institution. Environmental Expenditures / 2022 - Wastewater disposal 53 % - Waste disposal 7% - Personnel 18% - Maintenance, repair, cleaning machinery and installations 0,10 % - Consulting and technical assistance 22% - Search 0,07 % - Environmental cleaning tax 0,33 %	Indirect greenhouse gas emissions (Scope 2): 13,284.5 CO2 equivalent emissions were neutralized. 2022: Euros 117.500 Total amount of our environmental expenditures	ENVIRONMENTAL

PRODUCTS AND MARKETS

The leading markets of Yünsa are the EU countries, North America and Far East. Our product range includes suit and uniform fabrics for women's and men's wear and upholstery fabrics.

Besides 100% woollen fabrics, we also manufacture polyester, viscose, nylon, spandex fibre, cashmere and silk blended fabrics. Since the beginning of 2015, we took our place in apparel industry with the fabrics we manufactured by producing the models our customers requested from us.

Leading fashion trends with its innovative products developed with an emphasis on sustainability, Yünsa meets increasing comfort expectations with functional fabrics with high elasticity, and a wide range of colors and patterns that appeal to people of all ages and styles.



Overseas Sales Offices

Germany, England, United States of America, Italy

Agencies

United States of America, France, Italy, Slovakia, Poland, China, Japan, South Korea

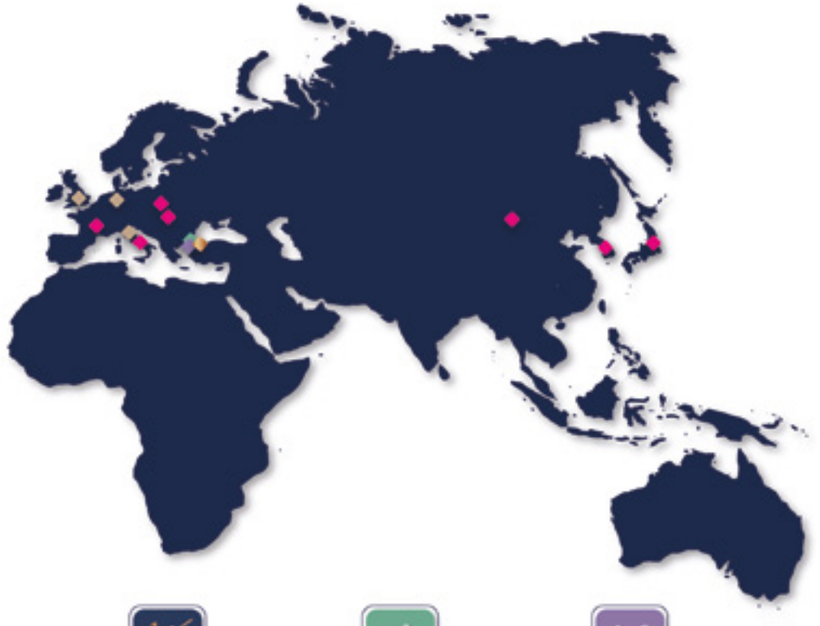
(GRI 2-1)

PRODUCTS AND MARKETS

1074
Employee

400+
Customer

50+
Export to Country



Head Office

İstanbul - Turkey

Production Facility

Çerkezköy - Turkey

Design Office

Çerkezköy - Turkey

(GRI 2-1)

CUSTOMER SATISFACTION

In order to maximize and maintain "Customer Satisfaction", the main purpose of the products and services we provide, we have adopted the following principles:

- to adopt a customer-oriented approach when designing and implementing our products and services;

- to know our customers, correctly analyze their needs or expectations, meet their expectations on time, and ensure and improve continuously and systematically superior customer experience and customer satisfaction with the belief that quality involves "fulfilling customers' requests and needs";

- to continuously improve our channels through which we receive feedback from our customers;

- to assess our customers' feedback in line with the principles of fairness, impartiality and confidentiality and provide necessary support for solution, determine the root cause of the problems and make necessary process changes to ensure that similar problems are not encountered in future;

- to complete the works in the fastest and most economic manner as we resolve the problems encountered by our customers while adhering to the terms of agreements signed with them, without causing them to spend additional time and efforts and to assume financial obligations;

- to provide the necessary facilities for the continuous improvement of quality and the production of final products and services in accordance with the quality specifications, as well as to ensure that all personnel continue their training activities and participate in quality team work;

- to act in line with the principle of responsibility towards the environment and society while carrying out our activities; and

- to encourage our employees to act with this sense of responsibility under the leadership of senior quality management and the supervision of all employees.

CUSTOMER SATISFACTION

Our Yünsa Finished Goods Testing Laboratory is accredited by Next, Marks & Spencer and Hugo Boss. Our documents are renewed every year, and the laboratory and laboratory staff are subjected to a rigorous audit during this process, as are test techniques, materials, and instrument calibration. Certificates of conformity are granted as a result of the correlation tests performed. Our laboratory received a passing grade and our certificate was renewed in 2022 as a result of our correlation efforts conducted in cooperation with Marks & Spencer and Next. These certificates are a great source of prestige for Yünsa, and we take gride pride in being an accredited laboratory for our customers.

YÜNSA
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SUPPLY CHAIN

At Yünsa, we create an important economy with our supplies both abroad and in Turkey.

In 2022, our local suppliers account for 88% of our total suppliers. Our local suppliers constitute 24% of our purchasing expenditures with EURO 528,903 in 2022.

Wool fiber, our main raw material, which we supply all from abroad, accounts for 62% of our supplier expenditures for 2022. Following wool fiber, the materials we supply the most from abroad are other fiber types (polyester, nylon, elastane, etc.), yarn types, dyes and chemicals.

Spare parts, packaging, various administrative equipment is purchased from domestic suppliers. We evaluate all our suppliers within supplier evaluation scope regularly using a digital platform; the Supplier Evaluation System.

We did not terminate contracts with any of our suppliers. We started doing business with 30 foreign and 245 domestic suppliers in 2022.

Shares of Purchasing	2022
Imports	71 %
Local Purchasing	29 %

Breakdown of Suppliers by Geography	2022
China	62 %
Europe and Other	28 %
South America	10 %

AWARDS AND ACHIEVEMENTS

Golden Export Award to Yünsa

Yünsa received the gold award for its export performance in 2021 at the Adding Value to Exports Award Ceremony organized by the Istanbul Textile and Raw Materials Exporters' Association (ITHIB)..

Turkey 100 2022

Yünsa kept its brand value within the top 100 companies

Yünsa also increases its brand value as a result of its successful efforts. According to the Brand Finance Turkey 100 - 2022 report published by Brand Finance, one of the world's leading brand valuation and strategy consultancy organizations, which evaluates the brands operating in the sector in Turkey, Yünsa maintained its position in the top 100.

AWARDS AND ACHIEVEMENTS

TECHXTILE İNOVASYON LİGİ

Yünsa received an award in the Techxtile Innovation League in 2022

Yünsa ranked among the top 10 companies in the Techxtile Innovation League with its successful R&D projects focusing on innovation and technology. In 2021, Yünsa joined the Techxtile Innovation League, ranking among the top 10 most successful companies contributing to the textile industry with its successful efforts in R&D and innovation. Yünsa received an award in the TechXtile Innovation League as an R&D Center in 2022.

AWARDS AND ACHIEVEMENTS

TOTAL PRODUCTIVE MANAGAMENT

Total Productive Managament (TPM) is basically a system that we implement since 2012 to reach zero-accident target, to preserve quality problems and to identify root causes of recurring failures and to develop permanent solutions and eliminate them.

TPM, which involves a management approach that serves all our targets under sustainability management, is the starting point of all our efficiency works overseen during the reporting period. We present some of these projects in the relevant sections of our report. We annually reward the projects with positive contributions on Yünsa's economic, social and environmental performance.

Economic

- To prevent labor and machine loss
- To reduce costs based on increase in machine efficiency

Social

- To improve our employees' knowledge, skills and competencies in monitoring, analyzing and taking timely action about their responsibilities
- To increase efficiency and productivity
- To create positive working environment with zero- accident and zero quality defect targets

Environmental

- To increase perception of employees on energy efficiency, waste management and environmental protection.

TPM Excellence award was received from JIPM (Japan Institute of Plant Maintenance) in 2020 for the Total Productive Maintenance (TMP) activities that were launched in 2012 with the goals of Zero Work Accidents, Zero Quality Defects, Zero Failures, Zero Downtime and Zero Pollution as a result of continuous and effective efforts.

The improvement recorded in some of our parameters in 2022 after we received TPM Excellence award in 2020 is as follows:

- Workplace accidents with lost workdays were reduced to zero.
- Raw material efficiency was improved by 12%.
- Weaving equipment losses were reduced by 9%.
- 1st Quality losses were reduced by 48%.
- Machine downtime due to breakdowns was reduced by 30%.
- Employee training deployment rate was doubled.

03

STRATEGY AND GOVERNANCE

At Yünsa, basis of our sustainability strategy is to comply with laws and our ethical values. While determining the scope our strategy, we took the views of our employees into consideration, in addition to those of executives from all our departments. Thus, we created our materiality map with a holistic approach.

CORPORATE GOVERNANCE

At Yünsa, we perform all operations in conformity with the Corporate Governance Principles published by the Capital Markets Board which are transparency, fairness, responsibility and accountability.

INTERNAL STAKEHOLDER VIEW

74 % of our employees who responded to the sustainability assessment survey think that...

Yünsa manages all its business processes in line with corporate governance principles, being transparent, fair, accountable and responsible.

CORPORATE GOVERNANCE

Our Board of Directors consists of six members in total where two of them are independant members. Only the Chairman of the Board and the Deputy Chairman hold executive functions. Audit, Early Risk Identification and Corporate Governance Committees function under the Board of Directors.

Details on the committees, their aims and functions are given in our 2022 Annual Report, pages 36-57.

Yünsa 2022 Annual Report

https://www.yunsa.com/files/document/4944-2022.pdf

Committees Reporting to the Board	Responsibility on Economic Impacts	Responsibility on Social Impacts	Responsibility on Environmental Impacts
Audit Committee	All economic topics	-	-
Corporate Governance Committee	-	All social topics	-
Early Risk Identification Committee	All economic topics	All social topics	All environmental topics

CORPORATE GOVERNANCE

BUSINESS ETHICS

Yünsa acts in accordance with the provisions of the ILO (International Labor Organization), to which Turkey is a party.

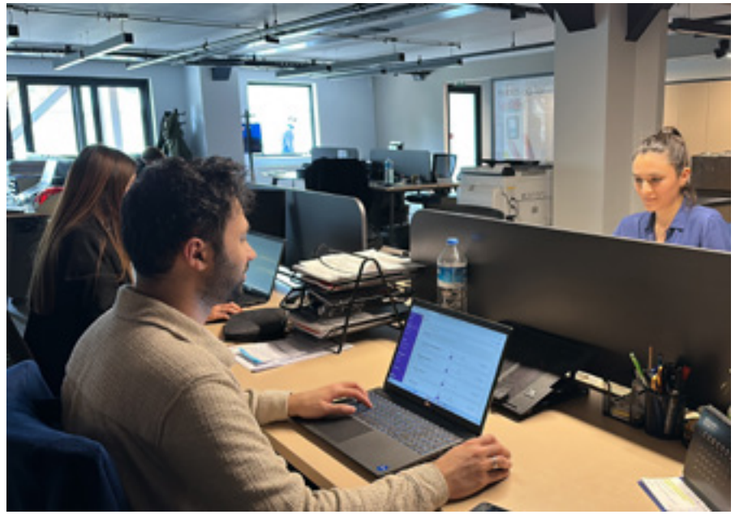
At Yünsa we naturalize Ethic Principles that aim to create and sustain a fair work environment. Besides being a protector of employees, our Ethic Principles is a guideline as well as a set of rules, regulations and procedures that are indicative to all our decisions and actions and has four major topics including legal responsibilities, integrity, confidentiality and conflict of interest.

New hires of white-collar employees complete Ethic Briefing Training via e-learning and blue collars complete it via orientation program within the first month of their entries. All employees undersign that they have read and understood ethic rules.

In addition to violations of ethical rules, there is an ethics committee where complaints about human rights can be reported**.** Any stakeholder willing to share and complain can reach Ethics Compliance Officer, **etik@yunsa.com**

Compliance Management

Legal responsibilities subtopic under Ethics Rules frames our compliance management



principles.
We execute all our domestic and international activities and procedures within the framework of local and international laws. Timely monitoring of current developments and changes in procedures is a hard process that needs accuracy and attention, and is managed through Yunsa Corporate Risk and Compliance Portal, Quality Document Integrated Management System and Corparate Risk Management – Priority Risks.

Our aim is 100% compliance to all legislation we are liable to. By the end of 2022, we do not have any discorformity.
At Yünsa, we had no cases of non-compliance and/or administrative and monetary penalties regarding environmental act. Besides, no cases from non-compliance resolution mechanisms occurred.

In addition, there was no case brought through the dispute resolution mechanisms.

SUSTAINABILITY MANAGEMENT

At Yünsa, our sustainability approach is based on the goal of creating value for all our key stakeholders by considering our social and environmental responsibilities beyond creating economic value for our shareholders and investors.

Management Structure

At Yünsa, Board of Directors is the top responsible of all operations of the company. As CEO takes the execution role, Yunsa's board level oversight for sustainability issues belongs to Pre-Determination of Risk Committee (PDRC). PDRC, consisting of the Board members reports to Board of Directors bimonthly based on the regular feedback from the CEO. The Board, the PDRC and the CEO together manage the economic performance of the company. The final decisions regarding targets, actions and the necessary investments to manage sustainability topics are made by the CEO with the necessary consent of the Board of Directors.

Environment, Health and Safety Committee (ESHC), Energy Committee (EC), and Chemicals Management Committee (CMC) who report to the Operations Director, makes periodical meetings separately to evaluate the performance results of their responsibilities. Risks and opportunities are analyzed regularly by these committees and necessary actions are taken for high risk and high opportunity areas. Indicated risks and opportunities and action plans are reported to the CEO.

EHSC prepares environmental risk assessment regarding waste management including emissions, water consumption within the scope of ISO 14001 Environmental Management System. EC runs energy audits and conducts energy efficiency projects in line with the requirements of ISO 50001 Energy Management System. CMC is responsible with managing the risks regarding chemicals within the production processes in compliance with Zero Discharge of Hazardous Chemicals (ZDHC), Oeko-Tex Standard 100 and Ready to Manufacture (RTM) requirements.

Sustainable Clothing Coalition's Higg Index Environmental Management Module (SAC Higg Index FEM), Zero Discharge of Hazardous Chemicals (ZDHC), explains greenhouse gas emissions and water management with a transparent approach within the scope of the Carbon Disclosure Project (CDP).

SUSTAINABILITY MANAGEMENT

We manage all material issues beyond relevant legal responsibilities and by taking into consideration the expectations of key stakeholders. Our corporate and ethical values are the main aspects to lead our employees in our journey of reaching our sustainability goals.

OUR VALUES AND SUSTAINABILITY

Our corporate values support our vision to grow through making a positive change. The priority topics that shape our sustainability strategy match perfectly with our corporate values. Our sustainability priorities listed below include both risks and opportunities depending on how well we manage them.

Vision

To become the leader woolen fabric brand in Europe by 2025; and in the world by 2030.

Mission

To offer textile solutions with a sustainable, technological and innovative approach to add value to life.

OUR VALUES	OUR SUSTAINABILITY PRIORITIES
Reliability and Honesty	Business Ethics and Compliance (Basis of our strategy)
Costumer Focused	Economic Performance Customer Health and Safety
Continuous Development and Creativity	Training and Development
Speed and Flexibility	Materials
Active Participation	Employment
Team Work and Collaboration	Diversity and Equal Opportunity
Social Responsibility	Occupational Health and Safety Customer Health and Safety Materials Energy Emissions Water Wastes

SUSTAINABILITY MANAGEMENT

We describe our stakeholders as people and organizations that are influenced by our activities, and at the same time, who possibly have impacts on our company in achieving our business targets. Since the day our company was established, we meet with all our stakeholders in various platforms in parallel with our interaction frequency targets and inform them regarding our activities and business results.

Within the framework of our sustainability reporting works, we reviewed all our stakeholders and grouped them with regards to our material topics through a strategy work we organized with the participation of our top management who represent all our departments at Yünsa.

As a result, we made a list of the key stakeholders to engage with regarding sustainability management.

Our stakeholders who stand out among our key stakeholders in 2022 report; We included the feedback of our employees and customers. We carried out focus group studies within the scope of the preparation of the sustainability report in order to receive the opinions of our employees. We were in dialogue with our customers on sustainability issues throughout the year. We steered our sustainability activities in line with the demands of our customers.

Sustainability Communication with Our Employees

We conducted a sustainability assessment survey to raise awareness of our employees on sustainability and our company's impacts. We share our employees' priorities and their views on Yünsa's sustainability performance in the relevant sections of our report.

The communication platforms with our employees and the rest of our key stakeholders, together with their content and communication frequency, are presented in the Communication Platforms with Our Stakeholders table.

INTERNAL STAKEHOLDER VIEW

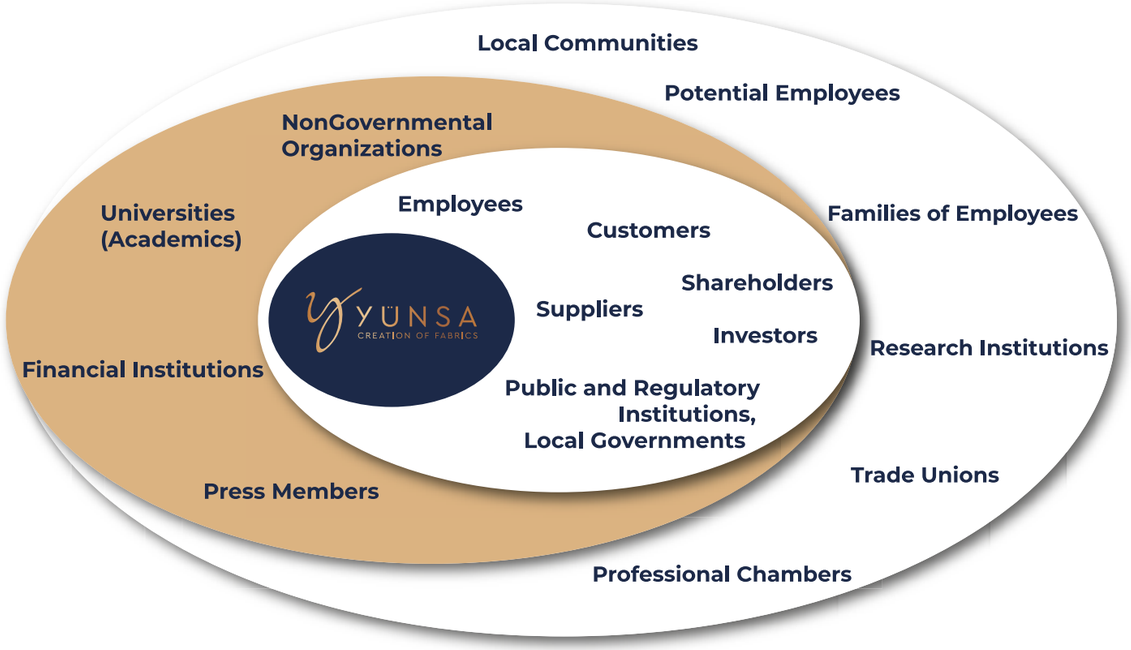
81% of our employees who responded to the sustainability assessment survey think that...

Yünsa's communication platforms to find out about the ideas/suggestions or expectations of key stakeholders (excl. employees) are adequate.

SUSTAINABILITY MANAGEMENT

Sustainability Communication with Our Key Customers

We have determined that our customers, who represent international textile brands that have targets within the scope of sustainability management, attach more importance to the use of materials obtained from sustainable sources, chemical management and the use of wastes as raw materials, as well as the effective use of energy and water resources compared to our other priorities. Our explanations on these issues are in the Economic Performance and Environmental Performance sections of our report; We include it under the headings of Material, Energy, Water, Waste and Customer Health and Safety Management.



SUSTAINABILITY MANAGEMENT

Communication Platforms with Our Stakeholders

Stakeholder	Platform	Communication Content	Communication Frequency
Employees	Sustainability Assessment Survey	Prioritisation and performance assessment	Once a year
	Yunsada.com (internal social platform)	News, announcements, greetings, special days, social posts	Daily
	CEO meetings	Company financial status, targets and practices	Bimonthly
	Employee activities	Dinners and events	Monthly
	Social clubs	Sailing, cycling, football, table tennis, traveling	To be reactivated in 2023
Customers	Sustainability Feedback Survey	Prioritisation and performance feedback	Once a year
	Meetings, audits	Sustainability performance	A few times a year
	Customer Satisfaction Survey	Satisfaction level	Once two years
	E-bulletin	Company news	Four times a year
	Overseas exhibitions	Sales and one-to-one interviews	15-20 times a year
Suppliers	Supplier scorecards	Supplier performance evaluation	Once a year
Shareholders/ Investors	Annual Reports	Company financial status, targets and practices	Once a year
	KAP (Public Disclosure Platform) disclosures	Company financial status, important changes	Four times a year
Public, Regulatory Bodies and Local Administrations	Visits, one-to-one meetings	Social and environmental regulations, legal permissions, private partnerships, incentives	When necessary
All Stakeholders	Social media accounts (Instagram, Youtube, Facebook, Twitter, Linkedin)	Products, services, news and activities	2-3 times a week
	Media, press and internet news	Products, services, news and activities	10-15 times a year

SUSTAINABILITY MANAGEMENT

Prioritization Studies

At Yünsa, we determined our priorities within the scope of sustainability management during the preparation process of our first report and we review them every year.

Stage 1:

We examined the issues in the Global Reporting Initiative (GRI) Standard and conducted a sustainability strategy survey to determine the priority issues for our company among these issues. In this survey, we asked the participants to prioritize the impacts of economic, environmental and social issues, the risks and/or opportunities that will arise, and the issues that will significantly affect the evaluations and decisions of key stakeholders regarding the company. The results of the strategy survey formed the basis for our sustainability matrix.

Stage 2:

We review our sustainability priorities every year and update them if necessary, taking into account the results of the review meeting we held with our General Manager, who directs the sustainability strategy of our company, the results of the materiality survey attended by our employees, and the feedback from our customers.

Stage 3:

All our sustainability issues are divided into three groups according to their priorities and are included in our strategy matrix. In the first group in the upper right part of the matrix, there are issues that are of higher importance for both our employees and Yünsa and that directly and significantly affect our company's performance. These issues form the main headings of the relevant sections of the report, and we describe our company's performance in detail in the report with data. The main purpose of us wanting to create such a matrix is to clearly identify the issues that our key stakeholders care about as well as our company, and to set our targets within the framework of these issues. In the coming period, we aim to exchange ideas with more of our stakeholders and, accordingly, to develop our focus areas and related targets.

Stage 4:

The subjects in the first group in the sustainability matrix are the subjects we cover in detail in the report. While determining our sustainability strategies and targets, we focus on these issues and monitor our sustainability performance within the framework of these issues. We try to push our sustainability performance forward every year with the R&D and Total Productive Management (TPM) practices we carry out.

Stage 5:

We aim to write and publish the sustainability report every year with the collected data.

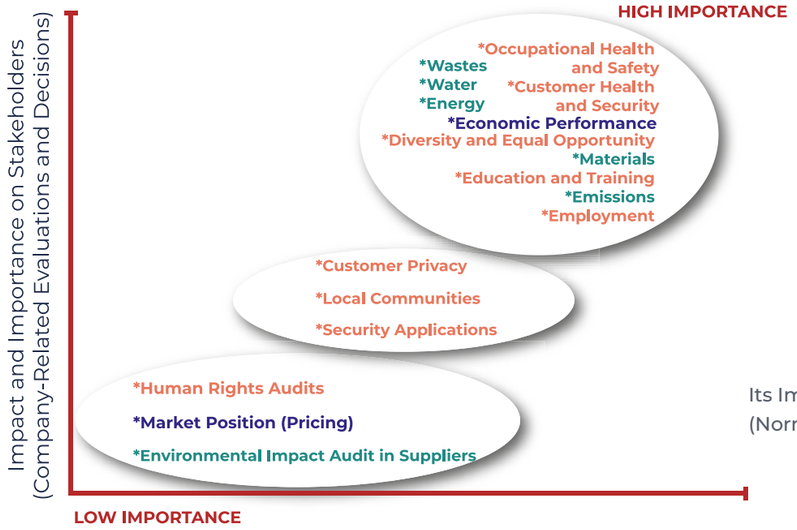
(GRI 3-1)

SUSTAINABILITY MANAGEMENT

YÜNSA STRATEGİC SUSTAİNABİLİTY ISSUES MATRİX

Matrix Explanations
Group 1: Yünsa's and key stakeholders' priority topics which are disclosed in the report in detail.
Group 2: Yünsa's and key stakeholders' second tier topics which are not disclosed in the report
Group 3: Yünsa's and key stakeholders' third tier topics which are not disclosed in the report

Yünsa Strategic Sustainability Issues Matrix



(GRI 3-1, 3-2)

SUSTAINABILITY MANAGEMENT

Boundaries of Topics and Reporting Constraints

Topics that we include in our materiality matrix are valid for all production and management activities in Çerkezköy.

In our supply chain, the topics that we monitor and record are; data for health and safety of our subcontractors working in our factory, calculations for emission monitoring employee transportation vehicles that we outsource and also recycled and environmentally friendly materials that we supply. We plan to manage our impacts for the rest of the topics regarding our supply chain including sub-contractors, in the coming years.

We Contribute to UN Sustainable Development Goals!

As we determine our material sustainability topics we also took into consideration the Sustainable Development Goals (SDGs) launched by UN in 2015. As we aligned our best practices and R&D projects with global goals, we saw that our material topics are directly related to 9 of the SDG's

	UN 2030 Sustainable Development Goals	Yünsa's Relevant Material Topics	Departments Working for The Corporate Goals
3 GOOD HEALTH AND WELL-BEING	SDG 3: Good Health and Well-Being	Materials Occupational Health and Safety Customer Health and Safety Employment Effluents and Waste	OHSE R&D
4 QUALITY EDUCATION	SDG 4: Quality Education	Training and Development	Human Resources
5 GENDER EQUALITY	SDG 5: Gender Equality	Diversity and Equal Opportunity	Human Resources
6 CLEAN WATER AND SANITATION	SDG 6: Clean Water and Sanitation	Water	OHSE
8 DECENT WORK A D ECONOMIC GROW	SDG 8: Decent Work and Economic Growth	Economic Performance-Materials Occupational Health and Safety Employment-Training and Development Energy-Water-Effluents and Waste	OHSE Human Resources R&D Finance and all the rest
9 INDUSTRY, INNOVAT O AND INFRASTRUCTUR	SDG 9: Industry, Innovation and Infrastructure	Materials Energy and Emissions	R&D
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	SDG 12: Responsible Production and Consumption	EEconomic Performance Customer Health and Safety Materials-Energy-Emissions-Water Effluents and Waste	Purchasing OHSE, R&D All Departments Participating TPM Activities
13 CLIMATE ACTION	SDG 13: Climate Action	Economic Performance Materials Energy Emissions	OHSE R&D
17 PARTNERSHIPS FOR THE GOALS	SDG 17: Partnerships For The Goals	All environmental topics	R&D

R&D AND INNOVATION MANAGEMENT

At Yünsa R&D Center, we carry out our design processes using environment-friendly chemicals and raw materials in order to offer textile solutions that add value to life through technological and innovative approaches, with a view to creating value for all our stakeholders while also observing our social and environmental responsibilities.

We will continue our work in 2023 in full respect towards the environment with the understanding that the fundamental aspects of good governance are transparency, openness, accountability, inclusion, efficiency, compliance, and social responsibility.

We are witnessing an era of uncertainty in global economies and significant changes in the world of business and labor. We felt the impact of the pandemic, followed by changes in people's lifestyles and shopping habits, in many areas both across our company and around the world.

A Sustainability Platform was formed in the Research and Development Center to ensure the company's sustainable development, and we had the chance to strengthen our works on sustainability in several areas with Technology, Raw Materials, and Innovation Platforms. As we left behind 2022 in which we adopted a management approach that is focused on transformation into a model in which mutual interactions are prominent, the transition to a partnership approach developed with the involvement of all parties has made our works more sustainable also in environmental terms.

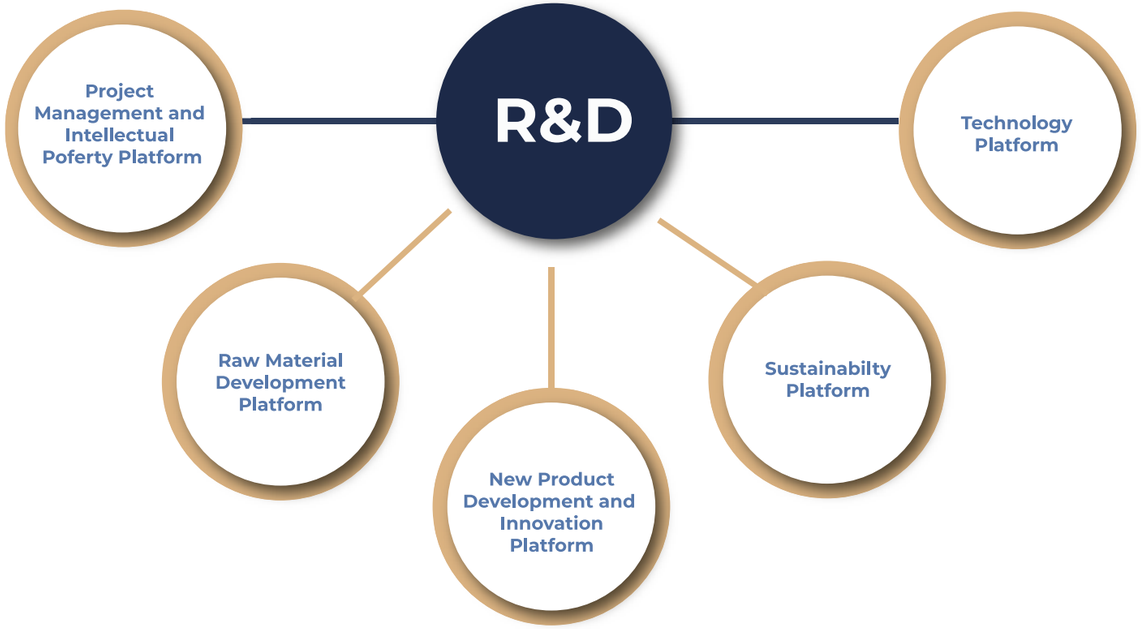
We continued to develop our future plans during this process with the support of all our employees. We completed a very successful year with increases in sales, production volume, productivity and net profit. At Yünsa R&D Center, we carry out our design processes using environment-friendly chemicals and raw materials in order to offer textile solutions that add value to life through technological and innovative approaches, with a view to creating value for all our stakeholders while also observing our social and environmental responsibilities.

While every firm seeks to differentiate itself from competitors, the real challenge is determining how to do so and in which areas to differentiate. It is possible to embrace innovation by means of adapting innovation approaches to our own business and working with these methods in a planned manner.

In collaboration with our R&D team, we are deepening our search for areas in which we can expand Yünsa's existing competencies, and on how to solve our chronic problems, and what we will produce in the future. Our top priorities include enhancing Yünsa's accomplishments in the field of innovation by means of using major global trrends and our strategies as input, in addition to the feedback we receive from our customers.

In 2022, we spent efforts in various areas including sustainability projects, recycling of pre- and post-consumption waste, filtering and testing materials in the field of technical textiles, wearable technologies, and reducing energy consumption. We increased our CDP program score in the water safety category to B.

R&D AND INNOVATION MANAGEMENT



Facts And Figures of R&D	2022
Number of Empleyees in R&D Center	35
Number of R&D Projects Approved By Ministry of Industry And Technology	30
Number of Patent Applications	1
Cooperations with Universities	Master Thesis (2 people) , 7 Projects, 4 Articles, 8 Presentations
R&D Expenditures [Capex and Opex Included]	682.916,77 EURO

R&D AND INNOVATION MANAGEMENT

Our R&D team participated in the Emission calculations training program in 2022 and gained competence in this area. Calculations were completed in six areas within the scope of ISO 14064-1:2018 standard for 2022, and ISO 14064 Greenhouse Gas Verification was carried out with an accredited organization. We have obtained a green energy certificate for our entire power consumption in 2022. We take justified pride to have received our YEK-G (Renewable Energy Resource Guarantee System) certificate, which documents electricity generated from renewable resources. The relevant certificate contributes to a carbon neutral and sustainable future, and we have neutralized 13,284.5 tons of CO2 equivalent emissions for 2022. In 2023, water footprint calculations will again be included in the training program, and we will be organized for verification studies.

We are about to commission our dye house investment, which will ensure great progress towards the goal of increasing employee ergonomics and color repeatability, and greatly contribute to our sustainability goals by cutting our water and energy use in half. Quality plans have been developed by identifying the input quality control tests of the chemicals to be used across Yünsa and ensuring their dissemination across the entire range of dyestuff and finishing chemicals. Yünsa Chemical Entry Control System was established and implemented under the leadership of the R&D Center.

TechXtile Start Up Change aiming to establish an entrepreneurship ecosystem in Textile and Ready-Made Clothing industries under the leadership of Uludağ Textile Exporters' Association contributes to raising entrepreneurship awareness in our country. Having been evolved in response to the sector's and entrepreneurs' needs, this structure has been expanded further and now continues its activities under the name of TechXtile Platform commissioned last year with all its activities consolidated under a single roof. At the TechXtile award ceremony organized by the TechXtile Platform in cooperation with the Ministry of Trade of the Republic of Turkey, Ministry of Industry and Technology of the Republic of Turkey, Turkish Exporters' Assembly (TIM), Uludağ Exporters' Association (UTİB), Uludağ Ready-to-Wear Apparel and Clothing Exporters' Association (UHKİB), Bursa Chamber of Commerce and Industry (BTSO), Bursa Eskişehir Bilecik Development Agency (BEBKA), and Bursa Technology Coordination and R&D Center (BUTEKOM), Yünsa ranked among the top ten companies which have contributed to the textile industry with its successful activities in the field of R&D and Innovation, and was awarded the 2022 Innovation Award in the Innovation League Champion Company category. We are honored to have received an award in the Innovation League for the second year in a row.

We can produce works of great commercial value thanks to the competition in R&D efforts both in engineering and academic terms. This is why we attach priority to developing the competencies of our employees working in Yünsa R&D Center, and relate the subjects of their graduate theses to the fields of activity of Yünsa.

To this end, the Master's Thesis titled "Determination of Performance Parameters in Double Layer Stenter Machine and Investigation of Their Effects on Energy Saving," co-supervised by Dr. Duygu Yavuzkasap Ayakta, R&D Center Officer, was accepted at Kırklareli University's Department of Mechanical Engineering, whereas the thesis titled "Investigation of the Effects of Different Fiber Types and Fabric Structures on the Performance of Woven Filters" was accepted as a Master's Thesis in Tekirdağ Namık Kemal University, Department of Textile Engineering in July. With the publication of master's theses of two R&D employees, we have now provided support for a total of 2 PhD theses and 6 master's theses.

Our Wool Road Journal, which is published quarterly to help employees understand the importance of R&D activities and to raise awareness of our employees in order to receive their contributions and involve them in projects, has been opened to external stakeholders as of 2022 to ensure that the works of our R&D Center, and the projects and activities carried out, as well as the contributions made to the company's knowledge base can be followed by the employees. You can access the magazine at the address of

https://www.yunsa.com/ar-ge-dergisi

R&D AND INNOVATION CENTER

5 Utility Model Registration

75 Publication (Article, Paper)

5 Patent, Tescil

35 Successfully Completed Project with National Supported

2 Successfully Completed Project with International Supported

R&D Project

Development of Filter Fabric Structures

Technical textiles, the fastest growing segment of the textile business, are used in a variety of applications including health care, transportation, protective clothes, agriculture, sports equipment, packaging, geotextiles, construction, and industry. Filtration textiles, which fall within the scope of technical textiles, are used in many sectors today. Filters can be defined as materials used for the elimination (filtration) of solid particles from a fluid.

What have we done ?

We have adopted the goal of ensuring that wastewater management and solid/liquid separation methods used commonly in mining activities can be understood better, as well as contributing to the production of the relevant filter fabrics at the national level. We have developed the filter fabric whose performance was improved for use in mining sector. The project application filed within the scope of Tübitak ARDEB 1002 was accepted.

Results and Gains

Economic

Commercialization of the filter fabric resulted in a substitute for imported products, as well as a product with the potential to be imported. Its use was made possible in various sectors in the long run.

Social

The thesis of an R&D Center employee was accepted as a master's Thesis at Tekirdağ Namık Kemal University, Department of Textile Engineering, and was published in 2022. This is still ongoing as Tübitak ARDEB 1002 project.

Environmental

Separating solid particles from liquids or gases using textile filter structures will allow the recovery of important substances, increasing product purity, saving energy, improving process efficiency, and recovering valuable materials for a variety of industrial processes.

R&D Project

Tender Follow-up System with Natural Language Processing

Tender follow-up is an important step of the procurement process. As there may be many tenders and contracts involved to follow-up, larger business organizations should employ an advanced tracking system. However, problems caused by human error may be encountered while traditional approach is used. This may cause inefficiency and delay in the works, resulting in certain losses for the business organization.

What have we done ?

Tender texts used in the past were introduced to the system in order to create a network training data set. Then, the network robot was obtained, various libraries were implemented, text vectors were obtained, and classification using a specific network was accomplished. Finally, the tender follow-up system was activated and tested

Results and Gains

Economic

The network robot will allow the company to become aware of tender announcements, which will eliminate dependence on individuals in the end. Product awareness was raised and information was obtained on standard expectations related to products with the provision of information about the product content subject to the tender.

This helped our company that attaches priority to developing value-added products create a knowledge base

Social

The information gathered by the network robot will be preprocessed using Turkish and English natural language processing techniques before being employed in the project's artificial neural network-based classifier. Since this neural network approach is being used for the first time in the sector on theme basis, it will contribute to the enhancement of the goodwill of the Company.

Environmental

A tender follow-up system was established, which allowed the creation of a support system that is independent from individuals.

R&D Project

Development of a New System to Ensure Simultaneous and Objective Assessment in Fabric Abrasion Resistance Testing

Durability of textile surfaces is a measure of their performance and usability. One of the aspects of durability is abrasion resistance, which is defined as the textile product's resistance to friction.

Due to the influence of the forces, the position of the yarns in the fabric can also change, resulting in twisting, distortion and therefore significant deteriorations in the fabric appearance.

Since these deteriorations cause losses in other mechanical characteristics of the fabric, abrasion resistance of fabrics is considered to be one of the most important parameters determining the usage performance of the garment. It is vital to determine this parameter before the garment is used, and there are various test setups in which real-world situations are attempted to be created in the laboratory.

What have we done ?

An abrasion test instrument will be designed and manufactured in the project we conduct under the leadership of Assoc. Prof. Gonca Özçelik Kayseri of Ege University, which will automatically detect the amount of abrasion on the abrasive surface of the fabrics whose abrasion resistance will be assessed using image processing.

Results and Gains

Economic

A domestic company will manufacture the device during the commercialization phase of the device to be developed. As a result, production and hence additional value created will remain in Turkey.

Social

TÜBTAK ARDEB 1001 included the project in their support scope.

Environmental

Work and waste burden will have been reduced during testing processes.

R&D Project

Development of Antimicrobial and Antifungal Fabric through Electrospinning Method Using Pva-Chitosan Solution with Balsam Pear Extract

Bacteria and viruses that are resistant to antibiotics emerging in recent years, as well as the fact that side effects not encountered or rarely encountered in naturally derived drugs are significantly higher in synthetic drugs have prompted scientists to investigate naturally derived drugs. Since balsam pear is a tropical fruit that requires specific climate, it grows easily near the sea and on appropriate soils. It can be grown mostly in cities like Bursa and Yalova in Turkey.

What have we done ?

Cooperation was established with Muğla University, and plans were formed for the production of fabric in partnership. The intention of this collaboration was to create fabric with antibacterial and antifungal qualities, as well as excellent mechanical properties using encapsulation and electrospinning methods, and production was performed in the laboratory.

Results and Gains

Economic

We aimed to ensure collection diversity through high-value-added, multi-functional product designs, and seize the opportunity to earn export share in various sectors.

Sosyal

Antimicrobial and antifungal fabric production is added to the Yünsa knowledge base, and as part of the collaboration with Muğla Sıtkı Koçman University, support is provided as an Industrial Advisor to the undergraduate student's thesis in the TÜBİTAK 2209-B University Students Industry-Oriented Research Projects Support Program.

Environmental

Through the use of domestic natural plant extracts, it becomes possible to treat patients without causing them to be exposed to the adverse effects of pharmaceuticals.

R&D Project

Development of Flame-Retardant Upholstery Fabrics Using Recycled Raw Materials

People's safety has become an increasingly important issue with the development of industry. The flame retardant textile industry is shaped by the production of flame retardant fabrics that are environment-friendly, non-toxic and that complement the comfort properties of textiles through the use of state-of-the-art technology.

What have we done ?

The upholstery textiles that are currently in use are produced using sustainable raw materials. Flame retardant qualities were added to the produced fabrics at the desired test standards.

Results and Gains

Economic

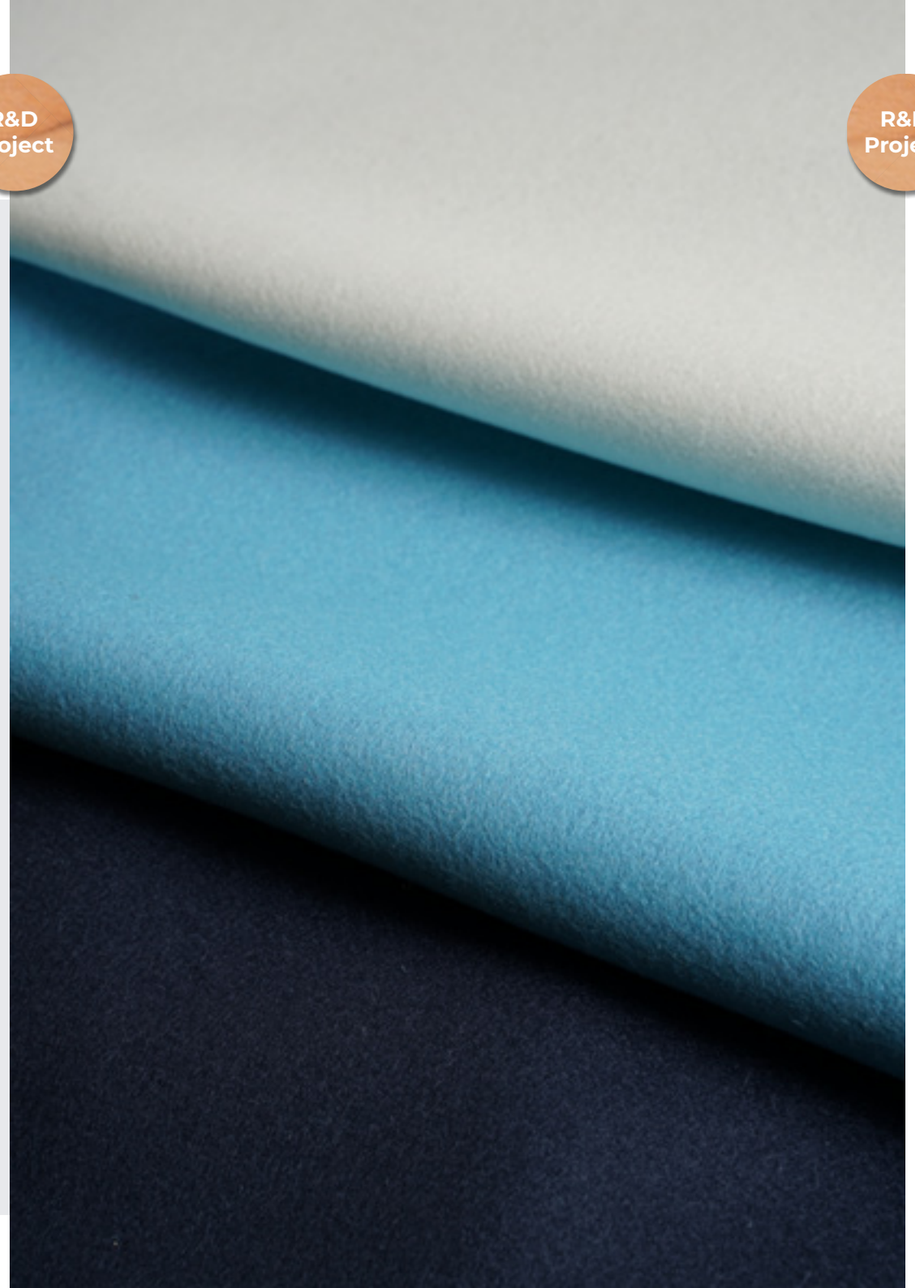
Upholstery fabrics with flame retardant properties were developed, and the company has gained know-how on the issue. A new market has been created where the company will offer the newly developed product for sale.

Social

Regardless of where we are in our everyday lives (home, school, office, or transportation vehicles), the most critical attribute we expect from the items or equipment around us in terms of life and property safety is that they should not ignite when exposed to flame for any reason. Therefore, fire safety has become increasingly important in recent years in many different industries. Smoke and heat detectors, pulverized water spray systems, and other early alert systems are now being developed for flame exposure. However, the efficiency of all these systems may be increased only when the materials in all these environments have flame retardant properties.

Environmental

Sustainable raw materials are used for the production of flame retardant textiles. Flame retardant qualities were added to the textiles produced, which will help protect the occupational health and safety of employees.



R&D Project

Development of Artificial Intelligence for Fabric Analysis

It was aimed to develop a system capable of image processing analysis that can undertake fabric analysis in the textile industry without the assistance of humans. Artificial neural networks are computer systems designed to derive new knowledge, create new information, and discover new information through learning, which are properties of the human brain, automatically and without human intervention. Furthermore, comparable to the functioning properties of the human brain, they can be successfully used in learning, association, classification, generalization, feature detection, and optimization. They create their own experiences based on the information they learn from the examples, and then make similar decisions on similar issues.

What have we done ?

Within the scope of the project, a method was developed to create a program that can do fabric analysis through the use of deep learning in artificial neural networks via a scanner in a short period of time. A patent application was filed on 3 November 2022 for the design of this method under No. 2022/016678. Because of computer-aided design, the user will automatically prepare information such as warp-weft color report sequence, warp-weft density, knitting report, and so on during the fabric design.

Results and Gains

Economic

The amount of reprocessing will be reduced by easily processing image analysis with a portable tablet and performing fabric analysis with a 1% error margin. The commercialization of the application to be developed will provide economic benefits to our country both in the national and international markets by boosting our competitiveness.

Social

Yünsa gained know-how through the use of artificial neural networks. With the development of a measurement system in fabric analysis for the first time, a program using the image as input will be developed, and the fabric weave report analysis will be performed without human intervention. It is expected to pioneer R&D projects conducted in the industry.

Environmental

The consumption of natural resources and workload will be decreased if the project is completed successfully.

TPM Project

Determination of Digitalization Roadmap

For Yünsa to achieve its Industry 4.0 objectives, a high level of automation, pervasive connectivity, and smart systems are required, and we employed the SIRI (Smart Industry Readiness Index) Assessment Matrix to that end. This matrix identifies the objectives as Technology building block, automation, connectivity and intelligence.

What have we done ?

We have developed our Digitalization roadmap in 2022 on the basis of SIRI evaluation matrix. We have set objectives for 2023, 2024 and 2025. We have developed project proposals in accordance with these objectives..

Results and Gains

Economic

Reducing labor and material burden with automation system

Social

Strengthening goodwill

Environmental

Reducing emissions by promoting energy savings with automation systems

Creating Patterns with Robot

At Yünsa, we use various technical information during the design phase, and it can take a lot of time to enter such information into the ERP system used. To this end, arrangements were made to employ the design program in an integrated manner with the ERP system.

What have we done?

Thanks to the Penelope robot, we allow the creation of patterns using with the data received from ERP. This allowed the reduction of the workload of the designers, and helped the sales team to increase its sales using this in our application.

Results and Gains

Economic

As the design processes are completed more quickly, this has resulted in an increase in our sales volume, and we can now get back to our customers faster.

Social

The workload of our employees has been reduced.

R&D Project

Establishing a Merino Starter Flock with Quality Wool Yield in Turkey and Revealing the Potential for Production of Worsted Woven Fabrics with High Added Value from the Wool of These Sheep

The project is a Tübitak 1005 project and a University project, and an intellectual property and confidentially agreement was signed between Prof. Rıza ATAV of Tekirdağ Namık Kemal University and TÜBİTAK. Yünsa participates in the project as a supporting organization, and such support is noted in various project work packages. There is also a support letter signed by Yünsa.

What have we done ?

Wool fiber suitable for the worsted line is supplied from Australia, and a starter flock was formed to ensure that it is produced in Turkey in order to ensure localization and reduce emissions. The sheep with a fineness of less than 24 microns were identified by means of visiting purebred Karacabey Merino sheep farms in the Thrace region. Then, a starter flock of 30 females and 3 males was established at the Tekirdağ Namık Kemal University, Faculty of Agriculture farm. Yünsa supported the construction of the farm for the sheep to have a comfortable and safe living space. The sheep raised for 1 year were sheared, and fiber tests were performed for controlling purposes. Wool obtained from sheep with an average fineness of 22 microns was used to make yarn and fabric at Yünsa facilities. Then, the final fabric was garmented and a jacket was produced.

Results and Gains

Economic

The wool derived from sheep in Turkey is not suitable for the creation of thin worsted fabrics with high added value due to its quality characteristics. This is why high-quality fleece has to be imported to Turkey every year for use in textiles. According to 2018 data, Turkey imports approximately 7,999,674 tons of wool for $88,875,863 per year. Within the scope of the project, a domestic-national prototype was created by producing worsted woven fabric from the fleece of our domestic sheep and making men's suit jackets from these fabrics. This prototype was unveiled during a meeting bringing together academics, business leaders, government officials, and members of the press. It will be possible to benefit not only from the meat and milk but also from the fleece of the sheep raised in Turkey. Our current reliance on imported fine wool fiber will end, which will help create a self-sufficient production model.

Social

In the long run, Turkey's demand for high-quality merino wool will be supplied domestically rather than through imports with the new projects to be conducted.

Environmental

Emissions will be significantly reduced if raw materials can be sourced domestically

04

ECONOMIC PERFORMANCE

We continue our production and sales activities for approximate 50 years with our responsibility approach towards people and environment. Our export value sums up to half of our annual turnover and we provide products to more than 400 customers in over 50 countries.

We believe that sustainable growth can be achieved by sharing the economic value we create for our shareholders as well as with our key stakeholders, our employees, customers and suppliers.

ECONOMIC PERFORMANCE

INTERNAL STAKEHOLDER VIEW

92% of our employees who responded to the sustainability assessment survey think that...

Yünsa creates significant economic value for its key stakeholders.

In 2022, our turnover, half of which we realized through the export channel, increased from 33 million EUR0 to 74 million EUR0, increasing with the effect of the increase in the sales meters and unit sales prices.

Net Sales

Gross Profit

Net Profit

Total assets

Gross Profit Margin

Net Profit Margin

Management Approach	
Policy	Our Vision
Responsible Managers and Departments	Board of Directors, Company Management
Measuring and Monitoring Mechanisms	Evaluations at the meetings held with the Board twice a month.
Target	EBITDA 2022: 16,65 % and Euro 8,12 million
Performance Results	EBITDA 2022 30,76 % and Euro 22,70 million

FINANCIAL PERFORMANCE

Being one of the most valuable brands of Turkish textile industry and Europe's largest integrated wool fabric manufacturer under a single roof, Yünsa continued to add value to its stakeholders also in 2022, through both the economic value it created and its investments. Its fixed asset capital expenditures totaled 3.5 million Euros in 2022.

We continued to contribute significantly both to the economic growth and industrial development of our country also this year. Our export revenue totaled 38 million Euros in 2022. Our total turnover also increased drastically to 74 million Euros in 2022. Yünsa, whose revenue was boosted by maximizing customer satisfaction with its collection, customer service and product quality, managed to increase its net profit by 1,222% compared to the previous year and continued to add value for its stakeholders during this period.

During the period, the Company reinforced its financing structure by repaying its short-term f/x financial liabilities. As regards incentives, we benefited from state support of approximately 2.46 million Euros in 2022.

Stock, cost, and financing operations were properly managed throughout the year in order to maintain efficiency. An examination of the working capital turnover periods, which have increased in nominal terms, reveals a significant improvement. The company's short-term foreign currency loans were completely settled in 2022, and its finance structure was reinforced.

As an export-oriented company, we took all necessary measures to mitigate the impact of global market uncertainties on our business results throughout the year. As a result, our exports doubled on foreign currency basis compared to the previous year.

On the one hand, we successfully addressed the negative effects of the global supply crisis with the right strategies related to raw material and inventory management, while on the other, we adopted a series of strategic initiatives to boost operational efficiency and profitability. As a result of these systematic and focused efforts, our company has once again demonstrated its strength by increasing its profitability by 1222% compared to 2021 despite all uncertainties.

We will continue our production and sales activities focusing on our financial targets and efficiency-based operational excellence also in the upcoming period.

Digitalization Project

Actual Calculation of Product Costs

We aimed to calculate the actual costs by analyzing the product trees of our produced products.

What have we done ?

Standardized costs were generated at the order stage by using the costing simulation so that the cost of the product to Yünsa is estimated with the calculated costs, making pricing easier and avoiding time loss.

Results and Gains

Economic

During the costing stage related to production expenses, analytical reporting was made, and real costs could be determined.

Social

The calculation of the actual costs resulted in access to the right product, production trends and the right markets.

RP Allows Controlled Follow-up of Customers' Orders

We aimed to perform customer analyses and follow up our clients in ERP from a single screen.

What have we done ?

We allowed our relevant departments to easily perform follow-up through the use of data analytics and data visualization, and we set monthly and annual sales targets.

Results and Gains

Economic

We allowed clarification of realistic targets by determining the closest sales target.

Social

We enabled detailed analysis of the customer portfolio in the market through data visualization.

MATERIALS MANAGEMENT

INTERNAL STAKEHOLDER VIEW

88% of our employees who responded to the sustainability assessment survey think that...

Yünsa's practices to use recycled raw materials and efforts to recover process waste in the production are adequate.

Providing all supply processes within the framework of Yünsa's sustainability approach, primarily including occupational health and safety and environmental protection, is among the basic responsibilities of supply chain team.

Together with fiber and yarn, dyes and chemicals are the main inputs of production. For sustainable and clean production, we run the selection and use phases of these materials efficiently and carefully. We disclose our efforts towards our chemical management performance under Customer Health and Safety topic.

Our goals in production are; producing same quality products with less input by efficient use of raw and other materials, reusing materials and using them in ways to minimize their environmental impacts.

Our goal in purchasing is to provide materials in requested quality, time, quantity and the most competitive price conditions. These criteria directly influence production efficiency and fabric quality. The most difficult part of purchasing is to supply wool, which is the major input to our production, in long lead times.

Management Approach	
Policy	Supply Chain Policy
Manager	Supply Chain Director
Our Team	2021: 10 people 2022: 15 people
Management System	ISO 9001-14001-45001 Integrated Management System ISO 27001 Data Security Management System
Measuring and Monitoring Mechanisms	Internal and external audits Annual performance evaluation Supplier performance evaluation
Target	Maximum 14% scrap material loss (including fiber, yarn, fabric)
Base Year / Target Year	2016 - 2022
Performance Results	2016: 17,14% 2021: 13,73% 2022: 12,67%

MATERIALS MANAGEMENT

Fiber and Yarn

Our raw material expenditures, consisting of fiber and yarn, constitute 69% of our total material purchases in 2022. We continue to use the wastes from our own processes as raw materials and to expand the waste groups that can be used as raw materials. We aim to obtain a higher share of similar raw materials from production in the coming years. We contribute to the circular economy by increasing and diversifying the content of recycled raw materials.

At Yünsa, we give priority to the supply of raw materials obtained through animal welfare. Working with our suppliers in Uruguay and Argentina, we supplied approximately 129 tons of "non-mulesed" wool in 2022. In addition to the non-mulesed criterion, we started to supply wool fibers in accordance with the requirements of the SResponsible Wool Standard (Responsible Wool Standard), which brings various criteria in terms of animal welfare and good management of animal farms. In the coming years, we aim to gradually increase this amount depending on the supply possibilities.

("Mulesing": It is the process of cutting the wool and leather parts of the tail of the sheep to prevent the infestation of wolfflies.)

Purchasing Shares of Materials	2021	2022
Fiber	62%	62%
Yarn	7%	7%
Dyes and Chemicals	10%	9%
Other	21%	22%

MATERIALS MANAGEMENT

Global Recycled Standard (GRS) ve Recycled Claim Standard (RCS)

Global Recycled Standard (GRS) and Recycled Claim Standard (RCS) Global Recycled Standard (GRS) and Recycled Claim Standard (RCS) that we received the certifications of in 2017 for the first time are product standards created to trace and confirm the recycled ingredients in the product throughout supply chain. Recycled materials in products with GRS certification should be at least 20%.

This ratio for RCS is 5%. We use recycled polyester (r-Pet) and process driven wool and wool blended waste that we recycle in our factory.

RCS certified fiber accounts for 2.47% of the total raw material we used in 2022.

GRS certified fiber accounts for 3.7% of the total raw material we used in 2022.

Responsible Wool Standard (RWS)

RWS is a collection of certificates and practices that oversees the animal welfare, certifies wool production made in farms that respect animal rights, and takes the supply chain under control thereof.

What triggered us to take this certificate was our desire to support advanced farming practices that respects animal rights, restricts the use of pesticides and artificial fertilizers in the grazing fields, and protects the soil health, biodiversity and endemic species. In the light of recent customer demands due to increasing awareness in this field, we decided to begin the process. RWS certified fiber accounts for 6.77% of the total raw material we used in 2022.

Despite the fact that the RWS fiber is a higher cost material, we started to give priority to the supply of raw materials produced while animal welfare is maintained. We created a dedicated product number for RWS fiber and added “Made by using RWS fiber.” on the identification cards for easier tracking. We keep a record of and verify the content of the RWS we use through transaction certificates.

The main obstacle before us which limits the increase in our use of RWS products is the limited number of RWS certified suppliers that are compatible with our production standards.

MATERIALS MANAGEMENT

Results and Gains

Economic

We have received significant amounts of orders from our key customers. A new product line was added to Yünsa collections, providing clients with a diverse range of products.

Social

We have turned animal rights advocacy into a cultural practice. We will become a more favorable supplier in the eyes of our customers by steadily increasing the proportion of raw materials produced from sustainable sources.

Environmental

We participated in an initiative to protect soil health by limiting the use of pesticides and artificial fertilizers, and turned this into a common practice.

The Responsible Wool Standard is an independent and voluntary global standard that addresses the welfare of sheep and of the land they graze on. On farms, the certification ensures that sheep are treated with respect to their Five Freedoms and also ensures best practices in the management and protection of the land.

Through the processing stages, certification ensures that wool from certified farms is properly identified and tracked.

Five Freedoms

1. Freedom from hunger and thirst
2. Freedom from discomfort
3. Freedom from pain, injury and disease
4. Freedom to express normal behaviour
5. Freedom from fear and distress


SCOPE CERTIFICATE

YUNSA YUNLU SANAYI VE TICARET ANONIM SIRKETI

CERKEZKOY SUBESI

Responsible Wool Standard (V2.2)


SCOPE CERTIFICATE

YUNSA YUNLU SANAYI VE TICARET ANONIM SIRKETI

CERKEZKOY SUBESI

Global Recycled Standard (V4.0)


SCOPE CERTIFICATE

YUNSA YUNLU SANAYI VE TICARET ANONIM SIRKETI

CERKEZKOY SUBESI

Recycled Claim Standard (V3.0)

R&D Project

Development of Eco-Friendly, Sustainable Outdoor Fabrics Offering Thermal Comfort

Yünsa aimed to develop fabrics for the outdoor industry using natural and biodegradable raw materials with a view to contributing to sustainability.

What have we done ?

We intended to add thermal comfort, high strength and environment-friendliness to the sustainable products we develop. Design studies were conducted in order to make sure that the wool to be used in outdoor industry has the features of biodegradability, four-season wearability and flame retardancy. Arrangements were made to create an outdoor collection with products such as shirts, trousers, vests, and overalls featuring wool combinations of new sustainable fibers.

Results and Gains

Economic

Following the global trend, Yünsa will process and turn into products sustainable fibers and high-strength raw materials for the outdoor sector.

Social

Contribution to brand perception through product diversification

Environmental

Environment-friendly green product designs that make use of recyclable and biodegradable raw materials

R&D Project

Development of Worsted Fabric Designs from Recycled Plastic Bottles

In an era where climate change has caused economic, social and ecological risks, the increased use of natural resources due to increasing demand, climate threats, and increasing level of awareness have prompted us to accelerate our sustainability efforts. Raw materials obtained from recycled plastic bottles are merged with four-season wool within the scope of sustainable product designs, and designs continue to be diversified.

In line with its eco-friendly production approach, Yünsa attaches importance to offering products that use fewer natural resources and make use of recycled materials in its collections.

What have we done ?

In this context, we continue to produce special REPREVE® fiber blended fabric designs produced by recycling waste pet bottles in collaboration with Unifi, one of the most effective recycling companies of the world, with a view to offering sustainable environment-friendly product designs that make use of recycled raw materials. In 2022, 3,651,886 plastic bottles were transformed into fabric replacing 72 tons of synthetic raw materials. Life cycle analysis was used to calculate emissions, energy, and water savings.

Results and Gains

Economic

In 2022, our rate of use of R-Pet helped us prevent 94,406 kg of CO_2 emissions, and save 1,176,796 kWh of energy, and 310,893 liters of water.

Social

Energy savings equal to one year's worth of energy use for 41 households were ensured.

Environmental

The equivalent of 426 people's one-year drinking water needs was saved, while CO_2 emissions from 219 barrels of oil use were avoided.

R&D Project

Development of Ecovero Environment-Friendly Green Fabric Structures

EcoVero viscose fibers are produced from natural and renewable wood raw materials. EcoVero fibers are produced in an ecological manner using sustainable timber resources.

What have we done ?

Fabrics for use in the apparel industry have been designed using Ecovero raw material to meet customer's sustainability expectations. The fabrics developed fulfill the demands of the fashion industry.

Results and Gains

Environment-friendly innovative fabric structures have been developed with a view to offering sustainable products. Natural resources were used less in the production of the developed fabrics. Because the developed fabric's raw material is made of wood pulp, it degrades in nature within a few months.

Economic

The fabrics created using Ecovero raw materials met client expectations and improved the rate of conversion to sales.

Social

Social awareness of sustainability has been raised in the textile industry.

Environmental

EcoVero Viscose is a type of fabric that has approximately 50% less water impact and emissions compared to regular viscose. EcoVero Viscose is more sustainable and biodegradable since its raw material is derived from renewable wood resources.

TPM Project

Improvement of Bobbin Dyeing Process through the Elimination of the Problem of Non-absorption of Dye Related to 9/1 Linen Yarns

Energy resources are rapidly depleted as a result of the developing world and the increasing population. Since these resources are limited, they must be used efficiently. This is why it is critical to avoid reprocessing in businesses and to produce 1st quality products at once.

What have we done ?

We have initiated efforts for analyzing the current situation. Some spots were encountered on 9/1 linen yarns which did not absorb dye after dyeing process was completed. This resulted an uneven appearance after the fabric was woven, making it necessary to retouch the fabric using tweezers and markers. The chemical characteristics of linen yarn were examined. Parameters affecting the dying process were revealed. Laboratory trials were tested in the business environment.

Results and Gains

Economic

The experiments done resulted in a reduction of around 80% in mending times.

Social

The optimization study investigated the effect of raw materials on dyeing parameters and provided new insights on dyeing procedures.

Environmental

More sustainable procedures were achieved with reduced energy, time, and raw materials as a result of the reduction in labor time and reprocessing operations.

TPM Project

Elimination of Machine Belt Breaking Failures

Energy and raw material resources are rapidly depleted as a result of the developing world and the increasing population in parallel to the increasing consumption trends. Since these resources are limited, they must be used efficiently. This is why machine efficiency in the organization is critical in terms of the lifecycle of machine parts and resource use.

What have we done ?

An analysis of the existing situation revealed that machine No. 426 had the greatest number of breakdowns due to belt replacement. In this connection, a warning was placed next to the belt cabinets to ensure that checks are performed at gear belt standards, ensuring that the incoming belts are subjected to supervision. Cleaning and control points were determined for belt zones. Gaps and wear in the transmission gears and shafts have been repaired. Spinning position gauge settings were configured and tagged, and operators were notified. Kaizen work was performed for the control of the lubrication of the extension gearbox with a view to standardizing the work performed. Standards were defined for spinning position gauge settings.

Results and Gains

Economic

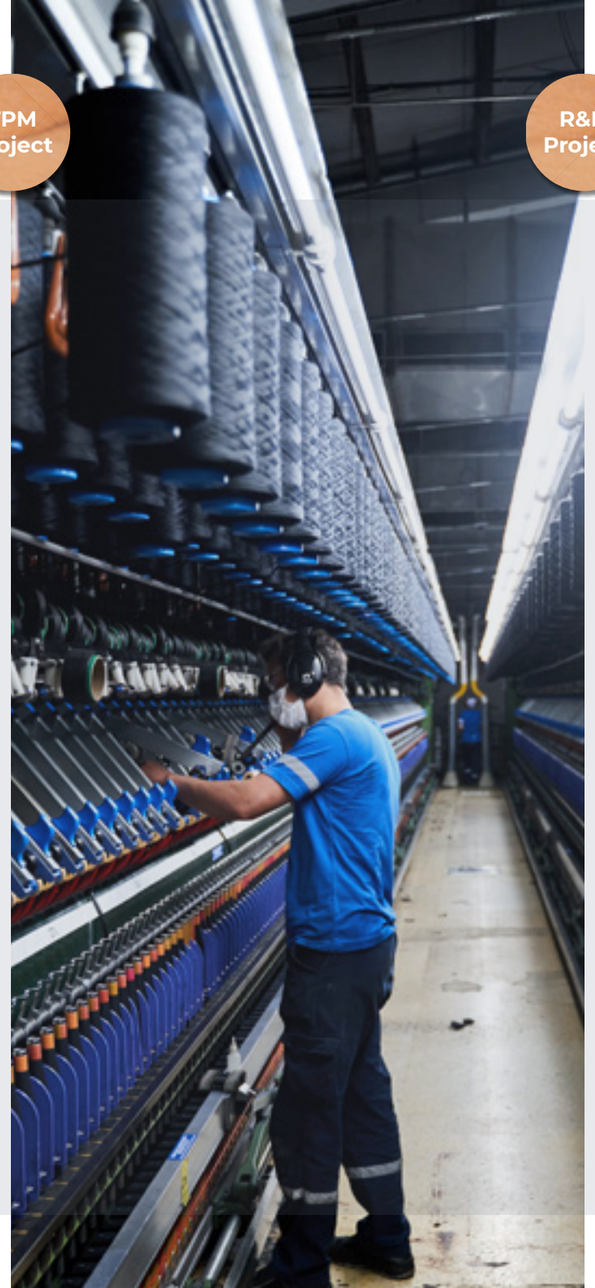
The changes and procedures implemented resulted in a yearly savings of TL 7,750.67.

Social

Different perspectives on similar or different machines were created as a result of the optimization study.

Environmental

Extended lifespan of parts resulted in reduced consumption of raw materials



R&D Project

Development of Recycled Yarns and Fabrics from Wool Yarn Production Line Waste

In order for our company to maintain its current position among woolen fabric manufacturers and increase its share in the market day by day, it is important to listen to the voice of the market and production and to turn to innovative, innovative and high R&D studies. In this direction, within the scope of the research carried out by the R&D Center, it has been seen that it is important for Yünsa to maintain its current leadership by producing yarn with different spinning methods from fiber, open yarn and fabric waste formed within Yünsa, creating different fabrics to test its usability, and thus producing sustainable products by evaluating all possible waste.

It was aimed to produce yarns and fabrics with high added value from the waste generated in the yarn and fabric production lines of Yünsa company, which can be used in Yünsa's production lines. In this context, it was also aimed to prepare a collection by testing different yarn production methods and producing yarn and fabrics with different properties. Wool is the fiber with the highest global warming potential (GWP) among all textile fibers.

It is also among the aims of the project that the company enters the developing environment-friendly products market, especially in the EU and North America, by creating a collection with a reduced carbon footprint by using recycled wool. As it is known, the wool used in the fine wool yarn industry is imported. Fine wool yarn import amounting to 45.5 million USD was realized in Turkey in 2016. The fact that wool is an expensive fiber and is imported is also important in terms of reducing the production costs of the company, which is the leader in wool fabric production and export.

What have we done ?

Classification and determination of physical properties of wastes produced at all stages of the company,

Providing trainings to create environmental awareness,

Production of yarn and fabric in different yarn counts with waste that can be used in worsted yarn production line,

Making yarn trials and making fabrics in different yarn counts with waste that can be used in the Straygarn production line,

Life Cycle Assessment (LCA) analysis and evaluation of environmental performance of products,

Evaluation of the results and creation of the "recycle product collection.

Results and Gains

Economic

With this project, Yünsa was able to produce innovative woolen fabrics with recycle feature from their waste, meeting the expectations of its customers.

As it will maintain its leading position in Turkey, it will also accelerate its leadership in the world in the field of woolen products. With the evaluation of their waste, raw material expenses will decrease, they will be able to take place in new markets such as green products, and their production and earnings will increase. It will directly make positive contributions to the country's economy as it will continue its economic growth by producing value-added products.

Social

It has brought new findings to the existing literature on improvements in efficiency and costs.

Environmental

In this context, life cycle analysis was carried out. Work continues on the development of fabric structures with an increased recycle rate and less chemical and water consumption.

R&D Project

Developing Wool Fabric from Pre-Post Consumer Wastes with Physical and Chemical Opening Processes

The global population has now reached 8 billion people. However, growing population and our irresponsible use of resources are threatening our future. The textile sector is one of the leading sectors that consume our resources. Consumption of our resources in a controlled manner contributes to sustainability in a manner to allow the inclusion of our wastes generated during production/usage processes back into production. Reuse of pre-consumer and post-consumer textile wastes is a critical issue. We can assume more responsibility for responsible consumption of resources in order to have a chance to live and fight one day more in our home planet.

What have we done ?

Wool fiber has not been produced in regenerated form yet such as cellulosic raw material. In this connection, we continue to investigate the possibilities for potential cooperation with international institutions and organizations. In addition to investigations carried out for chemical bleaching operations related to wool wastes, we have conducted bleaching processes through mechanical operations. Yarn production was carried out and fabrics were produced by the use of different yarn production methods.

Results and Gains

Economic

The post- and pre-consumer wastes generated were reused, contributing to circular economy.

Social

Recycling efforts were supported, and national collaborations were founded.

Environmental

The use of colored waste on the post-consumer side helped us avoid the dyeing stage, saving water, chemicals, and energy. The reuse of waste generated on the pre-consumer side helped us contribute to the proper management of resources.

R&D Project

Production of Colored Woolen Fabric Without Using Chemicals

Every day, more and more attention is given to new environmentally friendly issues and new products. By reducing the use of products that cause environmental pollution, the tendency towards nature-friendly natural products is increasing. Wool fiber, which is known as the perfect fiber in textile and is usually supplied as ecru, is dyed in the form of yarn or fabric. Dyeing is a grueling process that has a very important place in the textile industry. The high levels of paint chemicals and water usage during this process were the triggers for the project.

It was aimed to prevent both the use of high amounts of water and the disposal of environmentally harmful chemicals by eliminating the dyeing process.

What have we done ?

The supply of self-colored natural wool has certain difficulties. The suitability of rare raw materials to the production track is just as important. It has been provided to be used in the same tones with wools that can be supplied in brown or anthracite, or by blending them with ecru wool in certain proportions, reaching different colored tones. In the post-weaving finishing processes, natural extracts from plants were used and final products were obtained that could be presented as overcoats or upholstery.

Results and Gains

Economic

In the process of obtaining the fabric, the dyeing step was completely eliminated. In this way, paint, water and labor costs in the paint process were also eliminated. It also saved time.

Social

Thanks to nature-friendly and sustainable products, we contributed to creating a more livable world and raising more productive and happier individuals in this world.

Environmental

Nature-friendly products are obtained by not using chemicals that are harmful to the environment and reducing water consumption by more than 50%, which have been emphasized in recent years and serve the issue of sustainability. Since naturally colored wools are used in our project, the dyeing process was completely eliminated, contributing to sustainability. In addition, during the finishing processes, softening environmentally friendly chemicals obtained from plant extracts were used; thus, an environmentally friendly low-cost product was obtained.

CUSTOMER HEALTH AND SAFETY

INTERNAL STAKEHOLDER VIEW

100% of our customers who responded to our sustainability engagement platforms think that...

Yünsa's shall use sustainable chemicals in production to assure customer health and safety.

The selection and use of chemicals, which have a high impact on the health of both our employees and our customers and are among the main inputs of fabric production, are meticulously managed in our enterprise under the leadership of the chemical management committee.

Management Approach	
Policy	Chemicals Management Policy
Manager	Operations Director
Our Team	2022: 11 people
Management System	Chemical Management System ZDHC Waste Water Guideline Customer Manuals Standard 100 by Oeko-Tex OHSAS 18001 and ISO 14001
Measuring and Monitoring Mechanisms	Internal and external audits Annual performance evaluation Supplier performance evaluation
Target	100% Compliance to ZDHC 100 % Compliance to MRSL/Reach
Base Year / Target Year	2019 – 2022
Performance Results	ZDHC: 2019: 99% 2022: 99.3% MRSL/Reach: 2019: 100% 2022: 100 %

CUSTOMER HEALTH AND SAFETY

Dyes and Chemicals

Dyes and chemicals are among the inputs we use most intensively in production. Our expenditure for these materials takes up 9% of our total material purchases. While the efficient and correct use of dyes and chemicals in particular is important for their impact on cost, the selection of correct materials for environment and human health is the most important aspect for Yünsa.

We cooperate closely with our suppliers and have the chemicals we use in our production processes checked before we purchase them, and we make sure that the manufactured restricted chemicals are only used in compliance with the allowed limit values.

Chemical Substance Management Policy

In line with its strategic priorities, Yünsa aims to create a safe and healthy working environment with a Chemical Management System based on continuous improvement in order to protect human health and the environment.

Principles;

- To comply with legal obligations and other requirements for the management of chemical substances,
- To comply with the regulations of the customers regarding chemicals,
- To orks s the health and safety risks that may arise during working with chemicals,
- To organize training activities in order to create and improve occupational health and safety and environmental awareness in employees while working with chemicals,
- To perform an effective management in the process from purchasing to disposal of chemicals.

In line with these principles;

- To make chemical substance management a corporate culture,
- To use chemicals that are not harmful to humans and the environment in production and new product design,
- To comply with legal obligations, other requirements and customer regulations in the purchase of chemicals,
- To minimize the health and safety risks that may arise during the use, transportation and storage of chemicals,

By managing the chemical management system in an integrated manner with the goal of "Zero Occupational Accident and Zero Pollution", we are committed to working with all our strength to become an exemplary organization in terms of chemical substance management in the textile industry.

Within the scope of the ZDHC Program (The Zero Discharge of Hazardous Chemicals Program), which directly focuses on Yünsa's activities as a fabric producer, the evaluation of chemical materials begins at the procurement stage. Suppliers are informed about ZDHC requirements, SDSs containing transparent cas nos are requested, and suppliers that attach importance to ZDHC criteria are pursued during the search for alternative chemicals.

Chemical input, process and output controls are carried out in the factory.

All incoming materials are approved by the evaluation of chemical management, OHS (Occupational Health and Safety) and health units.

Chemical entry control tests were started carried out in the last quarter of 2019 in the R&D (Research and Development) chemistry laboratory. The used chemicals can be tracked on a batch-based basis from the time of entry, and the witness samples are kept for minimum 6 months. The test follow-up of chemical and dye groups is currently carried out over the internal network.

Having an effective chemical inventory is one of the most important requirement of the process control system. A new batch number is given to each chemical by entering the factory in accordance with the batch-based tracking system. Thus, the movement of the chemicals in the desired date range can be monitored in detail.

CUSTOMER HEALTH AND SAFETY

The consumption of the chemicals are submitted on Bve3 (Bureau Veritas Environmental Emission Evaluator) platform every month. The downloaded reports from the Bve3 platform and the ZDHC Gateway Incheck reports are combined and taken actions are directed in this way. As a result of the taken actions, the ZDHC compliance rate in 2020-2021 is 100% on a monthly basis.

For the ZDHC-Gateway Wastewater Module, a sample of wastewater is taken twice a year and sent out to an independent laboratory for testing. The wastewater report is published on the ZDHC and IPE (Institute of Public & Environmental Affairs) platforms.

Within the scope of JoinLife program, Ready-to-Manufacture (RTM) audit is occurred twice a year and Green-to-Wear (GTW) audit is occurred once; The conformity of the process to human and environmental health is confirmed by independent institutions. In addition, HIGG-FEM (Higg- Facility Environmental Module) verification is performed by an independent company once a year.

CUSTOMER HEALTH AND SAFETY

Control mechanisms at Çerkezköy facility:

- MSDS (Material Safety Data Sheet) and TDS (Technical Data Sheet) control
- CAS (Chemical Abstracts Service) number compliance check
- Fulfillment of transparent MSDS requirements
- ZDHC MRSL 2.0 conformity check
- Collection of regulatory documents
- Access control tests
- Lot batch tracking system
- Accumulation of witness samples
- Aryl amine in paints, Formaldehyde and APEO (Alkylphenol ethoxylates) tests in chemicals
- Effective use of chemical inventory
- Conducting wastewater tests
- Taking actions to eliminate nonconformities in wastewater
- Making chemical tests on the fabric according to customer demand

ZDHC Zero Discharge of Hazardous Chemicals Program

ZDHC is a collaborative program of brands' value chain members and affiliates committed to completely removing harmful chemicals from the textile and footwear value chain. The aim of these organizations is to advance towards the goal of zero harmful chemical waste in the value chains by investing in technology and innovations, and to protect the environment and human health.

The first step in preventing wastewater contamination is for facilities to stop using harmful chemicals, using chemical formulas that comply with the Production Restricted Chemicals List (ZDHC MRSL). Facilities must then ensure that the wastewater is treated physically, by chemical reaction, or by biodegradation to remove chemicals prior to discharge.

Oeko-Tex® 100 Standard

Oeko-Tex® 100 is a worldwide standard test and certification system that covers raw materials, semi, and finished goods during all process stages of textile products.

Yünsa, whose aim is to provide problem-free products in terms of health to its customers, renews Oeko-Tex® 100 certificate For Recycle and Conventional Products every year which was first received in 2006, as required by the standard.

SCAN ME

R&D Project

Development of Hygienic Fabrics Providing Anti-Allergic Protection Against Dust and Pollen

Dust mites negatively affect human health. They are commonly found in indoor environments. Dust mites can trigger diseases such as flu infection, migraine and asthma. We are constantly exposed to dust mites at home. In this connection, we carry out efforts to reduce the number of dust mites that form on the fabric's surface.

What have we done ?

Works were carried out to fill the holes on the fabric surface and thus avoid dust gathering on the surface. In addition, a test setup was developed to visually assess the amount of dust accumulated on the fabric surface. On 30.12.2021, a patent application was filed with the application number 2021/021806 under the title of "Dust Retention Rate Determination Method on Textile Surfaces". We have developed a product group to provide protection against dust mites, which will have a positive impact on human health. The product developed allows prevention of dust accumulation on fabric surface. This offers benefits to people who are allergic to dust mites.

Results and Gains

Economic

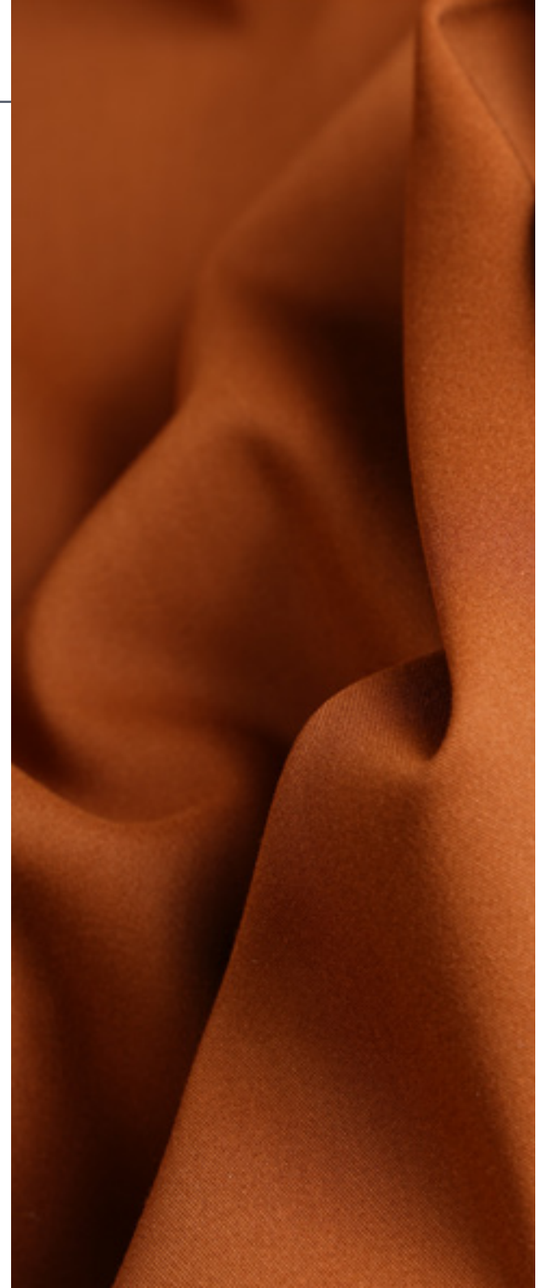
Development of fabric surfaces with anti-dust properties allowed creation of new markets for the home textile business segment of Yünsa.

Social

A special type of fabric has been developed to prevent dust and pollen-related health issues such as hay fever.

Environmental

Fabrics that resist dust collection on the surface of apparel fabrics and upholstery have been developed.



R&D Project

Development of Multifunctional Fabrics with Microcapsule Technology

Various methods have been used in recent years for coating solid particles and liquids. Microencapsulation is one of these methods used. Microencapsulation implies the application of polymer films either on the surface of liquid or solid particles or droplets. Microencapsulation technique is widely used in the pharmaceutical, food, agricultural pesticide, cosmetics, textile industries and other related fields. These efforts involve the production of textile materials with the desired construction (structure), followed by the addition of various functional qualities to the fabrics via finishing techniques. These functional qualities include the addition of vitamins to the textile material, a soothing effect, the absorption of undesirable odors, the improvement of skin tone, and the acceleration of blood flow.

What have we done ?

CBD, seaweed, aloe vera, thyme oil, and vitamin treatments were applied on the cloth surface within the scope of these activities. Optimization activities were carried out using microcapsules suitable for the fabric surface, and investigations were carried out for various application methods.

Results and Gains

With a view to offering functional products, innovative microcapsules have been applied to textile surfaces. R-vital processed textile products will help our immune system to be balanced and powerful, eliminating the need for external supplements and drugs to improve our immune system.

Economic

Our clients' and end-users' expectations were met by carrying out activities within the scope of which bio-based microcapsules were integrated into the fabric surface.

Social

Microcapsules with diverse functional qualities were applied to textile surfaces in order to address the company's possible new product demands.

Environmental

Natural and sustainable microcapsules were applied to textile surfaces in order to add functionality to the textiles.

Digitalization Project

Privatization of Hayat Eve Sığar (HES) Application for Company Employees

The HES codes, which are the Ministry of Health application, collected from our employees were matched with the software application developed by our Information Technologies department from our own team. It has been ensured that the information of our employees whose HES code has turned into a risky situation is automatically informed by e-mail. At the same time, This process was continued until the end of March 2022, and all personnel were screened for the 2nd dosage vaccination card. In addition, immunoglobulin was made to all employees in the company.

Results and Gains

Economic

Increasing the workforce

Social

Contagion has decreased. In addition, our employees who were vaccinated after recommending at least two doses of vaccination were rewarded.

Environmental

Awareness has been raised on the importance of human health, and medical waste has decreased because of the decrease in the use of masks due to the significant decrease in disease rates resulting from the widespread use of vaccines

05

SOCIAL PERFORMANCE

At Yünsa our leading social sustainability impacts cover health and safety of all our employees and their professional development. We run our operations with the goal of zero accidents, see diversity in human resources as part of our corporate culture and provide equal development and career opportunities for all.

OCCUPATIONAL HEALTH AND SAFETY

INTERNAL STAKEHOLDER VIEW

92% of our employees who responded to the sustainability assessment survey think that...

Yünsa takes necessary measures sufficient to oversee and secure health and safety of its employees.

Here at Yünsa, we made it our purpose to apply, develop and turn into a life style the preventive work health and safety systems in everything we do. We ensure everyone's participation in risk reduction efforts, taking measures one step ahead of the legal requirements.

OHS Trainings	2016	2021	2022
Hours	10,3	17,2	20,22

Management Approach	
Policy	Occupational Health and Safety
Manager	Human Resources Manager
Our Team	2022 : 6 people
Management System	ISO 45001: 2018 Occupational Health and Safety Assessment Series
Measuring and Monitoring Mechanisms	Internal audits SHE Pillar Committee of TPM System External audits: quarterly
Target	Zero Accident / Zero Occupational Disease
Performance Results	Number of Recordable Cases 2021: 2 2022 : 0

OCCUPATIONAL HEALTH AND SAFETY

At Yünsa, health and safety of our employees comes first among our company's strategic sustainability priorities. The core goal of all the people and departments in charge of occupational safety is to attain zero occupational accident and disease.

Responsibilities

Basic responsibilities of our OHS team is to specify the potential hazards from within and from outside our facilities, analyze and rate the risks of these hazards and take the necessary precautions.

Performance Improvements

In 2022, our accident frequency rate climbed to 100%, our accident severity rate increased to 100%, while our absenteeism rate was reduced to zero.

Trainings

In order to raise awareness of our employees and to deploy consciousness to protect themselves, colleagues and visitors, every year we provide trainings that range from basic first aid to principles on working with chemicals In 2022, we provided 20.22 hours of OHS training to our employees under 8 main topics.

Risky Jobs

5% of our employees work in jobs that involve a high risk of accidents or diseases in finishing, dyeing or strayghan departments.

Employee Representation

We have Health, Safety and Environment, Chemicals Committees and SHE Pillar. 100% of our workforce is represented in these committees. 17% of the collective bargaining agreement we signed with the labor union covers OHS topics.

TÜRK KIZILAY

Within the scope of the campaign launched in 2022 titled "Give Your 15 Minutes to Give Life to Others", our 48 employees have made blood donation to the Red Crescent Organization.

COVID-19 SAFE PRODUCTION CERTIFICATE TO YÜNSA

As Yünsa, we received TSE COVID-19 Safe Production Certificate with the COVID-19 hygiene, infection prevention and control practices we applied in our facilities during the pandemic period for the health and safety of our employees.

OCCUPATIONAL HEALTH AND SAFETY

Development of Flame Retardant Worsted Fabric

Arrangements were made for the development of flame retardant fabric to prevent potential work accidents caused by flying sparks during welding works carried out by our staff undertaking welding work in the Yünsa Mechanical Workshop Department

What have we done ?

In this connection, a project was initiated in the New Product Development and Innovation Platform at the R&D Center. Suitable raw materials were selected, and yarn and fabric construction designs were completed in line with the structures of uniforms. Tests performed for the assessment of fabric performance for finished good development were successful.

Results and Gains

Economic

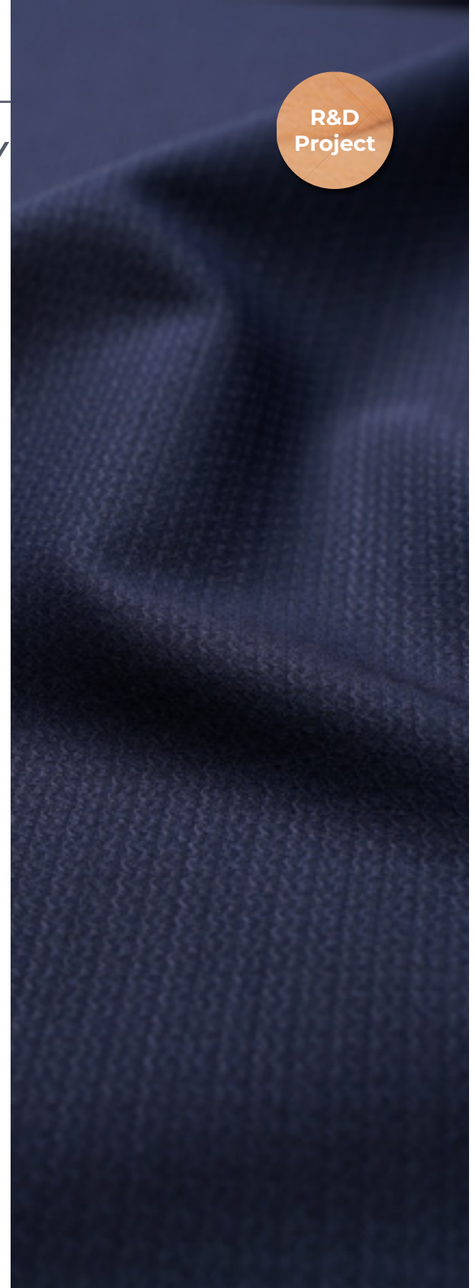
The knowledge gathered on the issue with the project allowed us to meet specific demands of customers.

Social

The knowledge gathered on the issue with the project allowed us to meet specific demands of customers.

Environmental

Occupational health and safety were ensured by means of using sustainable raw materials with thermal comfort features.



EMPLOYMENT

INTERNAL STAKEHOLDER VIEW

72% of our employees who responded to the sustainability assessment survey think that...

At Yünsa, the communication channels for employees to share their ideas and opinions with the management are adequate.

Average Length of Tenure (Year)	2021	2022
W. Collar	8,5	7,9
B. Collar	10,2	8,6
All	9,8	8,4

Our authentic internal communication brand "Not Without You" and the approach behind it summarizes Yünsa's team spirit, represents the strength of all departments from executive level to production, sales to occupational safety acting together with mutual faith, unity and solidarity, in order to fulfil our responsibilities and business targets.

Management Approach	
Policy	Yünsa Sustainable Work Life Principles
Manager	Human Resources Manager
Our Team	2022 – 23 people
Measuring and Monitoring Mechanisms	Comparison studies based on department and sector Ethics Committee studies recommendation system Recruitment and placement process internal customer satisfaction survey
Target	Keep turnover rate under 8 %
Performance Results	2016 Turnover Rate: 3,8 % 2022 Turnover Rate: 15,77 %

The formation of a remote and/or hybrid working environment during the post-pandemic period, the new generation of employees having different priorities, the desire to gain experience in different sectors, the desire not to be dependent on a single company at the same time, and the increase in the number of freelance working models all contributed to the increased labor turnover rate in 2022.

EMPLOYMENT

At Yünsa our priorities are to protect our employees' health and safety, to enhance their personal and occupational development and to provide them with an equitable work environment where all their rights are fully assured.

Union Rights

Our constitution includes blue-collar union rights and we do not have any facilities or suppliers where this risk is present in their countries. 100% (849 people in 2022) of our blue-collar employees are under the scope of collective bargaining agreement.

Additional Benefits

Additional benefits are the same for part-time and full-time employees at Yünsa. We provide health services, health insurances and retirement plan for all our white-collar employees.

Parental Leave

In 2022, 19 female employees and 21 male employees became entitled to parental leave. 18 of our female employees and all of our male employees returned to work after parental leave. 18 female and 21 male employees continued to work for us for at least 12 months after their leave.

Local Employment

We have chosen 50% of our senior managers working in our Çerkezköy facility from the local community in 2022.

Performance Evaluation

All of our Yünsa white-collar employees are subjected to performance and career development assessments. The ratio of our white-collar employees to all our employees is 21% in 2022. Managers and employees provide each other with mutual feedback via face-to-face meetings during the goal setting, revision and year-end evaluation stages. With the organization and human resource planning process carried out every year, we determine the organizational structure and positions that are critical in ensuring the long-term success and continuity of the company. We review the potential and performance of our employees, and prepare backup and development plans.

Regular Performance and Career Development Assessments	2022
White-Collar Employees	228
CEO and Directors	4
Managers	14
Middle Managers	25
Leaders	34
Specialists and Engineers	79
Assistant Specialists	-
Staff /Technicians /Assistants	72

EMPLOYMENT

At Yünsa, we reward the owners of ideas and projects with economic, social and / or environmental results and gains.

Yünsa Sustainable Work Life Principles

We sustain our ethical values.

We ensure mutual trust.

We embrace our responsibilities.

We appreciate success.

We respect diversity and variety.

We consider ideas and expectations.

We favour work – life balance.

We conduct policies and practices exceeding legal necessities.

At Yünsa, we reward our employees for their successful projects, practices and suggestions on a regular basis.

The employees type in the issues they spot along with their suggestions how to fix them in electronic format, which are then evaluated by related committees, and rewarded if found to be applicable.

Employees win points for contributing to the organizational development with their suggestions. These points are collected within the system and loaded onto their personal reward cards in electronic format every month. Almost all of our employees participate in this suggestion scheme, which is organized by the Organization and System Development Department.

Recommendations for improvement reach our Organization and System Development Department through error cards, before/after kaizen and suggestion platforms. A total of 1048 suggestions were received in 2022 from these three platforms that contribute to the culture of continuous improvement. While approximately 76% of the suggestions we receive serve our sustainability priorities, there is a 12% share that indirectly affects our economic targets due to their efficiency and operational improvement content. Of the remaining recommended, 12% is the part that is not deemed appropriate to be implemented.

Suggestions by Topic (%)	2022
Environment and Energy	43
OHS	143
Minor Stoppages and Process Productivity	94
Cost Reduction	97
Cleaning and Visual Management	189
Production and Quality	186
Zero Breakdown	46

DIVERSITY AND EQUAL OPPORTUNITY

During the recruitment process, employment and career planning, we provide our female employees with a fair work environment as well as facilities such as kindergarten, and private health insurance that cover birth clause for white-collars.

At Yünsa, we practice an equal opportunities policy from employment to retirement provided to everyone within the constitutional and legal framework regardless of their language, race, colour, gender, political affiliation, beliefs, religion, creed, age, physical disabilities and such particulars. We support the Equality at Work Platform Principles that we joined in 2013.

Our employees on temporary hire have the same rights with our employees on payroll. We generally employ these people to fill in when our female employees take their maternal leave, until they return.

Employees by Gender	2021	2022
Female	33%	35%
Male	67%	65%

INTERNAL STAKEHOLDER VIEW

86% of our employees who responded to the sustainability assessment survey think that...

Yünsa promotes employee diversity and provides equal opportunities regardless of gender.

DIVERSITY AND EQUAL OPPORTUNITY

Innovative Productive Generations Association (YÜNDER)

Founded by our employees in 2018 with the purpose of providing equal education opportunities by helping students with inadequate financial circumstances continue their education. With the fund consisting of waste revenues, revenues from the hairdresser/barber in our factory and donations from our employees, we provided a total of 120.000 TL scholarships to 22 university students studying at 9 different universities in 2022

We experienced difficulties in the diversification of revenues in order to be able to reach out to more students. In the upcoming terms, we will run fundraising projects in order to bring in more revenues and reach out and help more disadvantaged students.

We are contributing to equal opportunities in education and helping students with dire financial circumstances continue their education.

YÜNDER

https://yunder.com.tr

Management Approach	
Policy	Ethical Practices Procedure and Equality at Work Platform Principles
Manager	Human Resources Manager
Our Team	2022 – 23 people
Measuring and Monitoring Mechanisms	Employee Satisfaction and Engagement Survey Department and industry based comparison works Ethics Committee works Suggestion System
Target	Maintain female employee ratio above 30%
Performance Results	2016: 32% 2021: 33% 2022: 35%

TRAINING AND DEVELOPMENT

INTERNAL STAKEHOLDER VIEW

74% of our employees who responded to the sustainability assessment survey think that...

Yünsa's personal development and training programs provided for its employees are adequate.

In the sections designated to the production priorities in our factory, we aimed to reduce errors by having the instructors reply to instant questions of employees on the job. This practice both contributed to our business results and also increased employee satisfaction.

Management Approach	
Policy	Continuous Improvement Principles
Manager	Organisation and System Development Head
Our Team	2021 – 9 People 2022 – 9 People
Measuring and Monitoring Mechanisms	Training Management System, Measurement and Evaluation Modul, Different tools to assess the contributions of trainings to knowledge, skills, attitude and business results
Target	2021: 30 hours/person Training deployment ratio: 65% 2022: 45 hours/person Training deployment ratio: 65%
Performance Results	2016: 28.4 hours/person Training deployment ratio: 64% 2021: 30 hours/person Training deployment ratio: 56% 2022: 68,1 hours/person Training deployment ratio: 76%

TRAINING AND DEVELOPMENT

Trainings	2021 (%)	2022 (%)
Career Development	60	79
Occupational Health and Safety	25	17
On the Job / Orientation	13	1
TPM, Processes and Systems	2	2
Single Spot	0	0
IT, HR, Personal Development	0	0
Environment and Energy	2	1
Other	3	0

Health Trainings Provided at Yünsa in 2022
Cancer Awareness Information, Yünsa Company Physician, Dr. Alper Yazıcı
Importance of Blood Donation, Yünsa Company Physician, Dr. Alper Yazıcı
Gynecological Diseases Information Training, Yünsa Company Physician, Dr. Alper Yazıcı
Self-Respect and Self-Compassion Seminar - Yünsa Company Physician, Dr. Alper Yazıcı
Oral and Dental Health Information Training, Çorlu Sevgi Oral and Maxillofacial Diseases Hospital
Breast Cancer Awareness Training, Yünsa Company Physician, Dr. Alper Yazıcı
Diabetes Awareness Training, Yünsa Company Physician, Dr. Alper Yazıcı

Yünsa Organisation and Systems Development Department offers a variety of trainings each tailored to a particular requirement in order to support our strategic priority of Corporate Development and help our employees develop skills that will support them in executing their jobs in the most effective way.

Leadership Development

Programs aimed at top and middle management in line with the corporate strategies and targets.

Skill Development

Programs executed toward the development of employees under skill and career management practices scope.

Occupational Development

Programs executed toward the development of employees from all tiers in occupational topics according to the training necessity analysis.

Personal Development

Programs executed toward the development of employees from all tiers in various areas according to the training necessity analysis, independent from their current roles within the company.

TRAINING AND DEVELOPMENT

Development Academy

We carry out our activities in the Development Academy using the Enocta platform, which has proven to be quite successful among training firms.

We provide various company trainings for our company employees. Facilitating distance learning, the platform eliminates time and space constraints, and reduces corporate training costs. Offering solutions such as LMS, webinars and meetings, the Development Academy also makes it easy for our company to access thousands of digital company trainings. This allows us to manage the entire process using a single platform, and follow-up various trainings such as corporate development trainings and report the results.

TRAINING AND DEVELOPMENT

Our Training and Organisational Development Practices

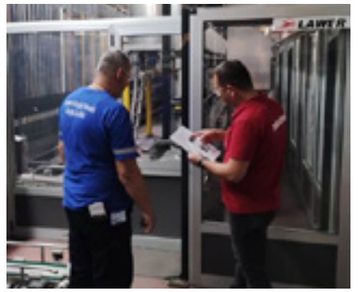
In-house Instructor School

We founded an In-house Instructorship School under the leadership of our Organization and Systems Development Department with the aim of producing in-house instructors who will facilitate the knowledge and skills transfer within our company, and have their instructorship skills developed in. We have achieved many personal and corporate gains out of this program which was devised with learning tools such as in-class training, role playing, case studies, online training, video filming, games, and mobile and social learning platforms.

Individual gains:

• Our employees found opportunities to develop and enrich the work they do.
• They boosted their self-confidence in expressing themselves before a crowd.
• They improved their presentation and communication skills.

Corporate gains:
• Reduced outside dependency in training practices.
• Maintained daily information supply regarding corporate requirements.
• Fast solutions provided to training requirements.
• Maintained the efficiency and prevalence of in-house instructorship system.
• Improved employee development and motivation.



First Step Into the Future Internship Program

We conducted benchmarking studies by analyzing internship programs of various firms and developed the First Step Internship Program to improve the existing internship process at Yünsa. We provide project execution trainings to candidates chosen through the promotion, application, and selection processes conducted at universities. Project leaders coach students during the project execution phase. Upon the completion of the process, students graduate from the program by presenting their projects. Total 28 students participated in the program in 2022.

The Company fulfilled its responsibilities through the Social Responsibility projects offered to the company employees and their families, and cooperated with ITU (Istanbul Technical University) in 2022 as part of the First Step into the Future Internship Program. Total 33 students completed their internship at Yünsa.

06

ENVIRONMENTAL PERFORMANCE

At Yünsa, we believe that protection of the environment we operate in and the natural resources as our corporate responsibility. By utilizing energy and water resources efficiently, we also improve our economical performance.

ENVIRONMENTAL MANAGEMENT

We invest in clean technologies that will constantly increase energy and water efficiency and reduce our emissions and other wastes in its source gradually; and in practices to recycle our wastes. We have not received any penalties for any violation of laws and regulations during this reporting period. Our environmental expenditures in 2022 totalled Euro 117.500.

Management Approach

Zero Waste

Policy

Yünsa aims to implement and develop all its environmental activities, which it carries out within the framework of the sustainability principle, in an integrated manner with Quality, Occupational Health and Safety Management Systems, and to make this a lifestyle for everyone.

Our Principles;

To carry out policies and practices one step ahead of legal requirements,

To use the diminishing natural resources efficiently with the awareness of the future,

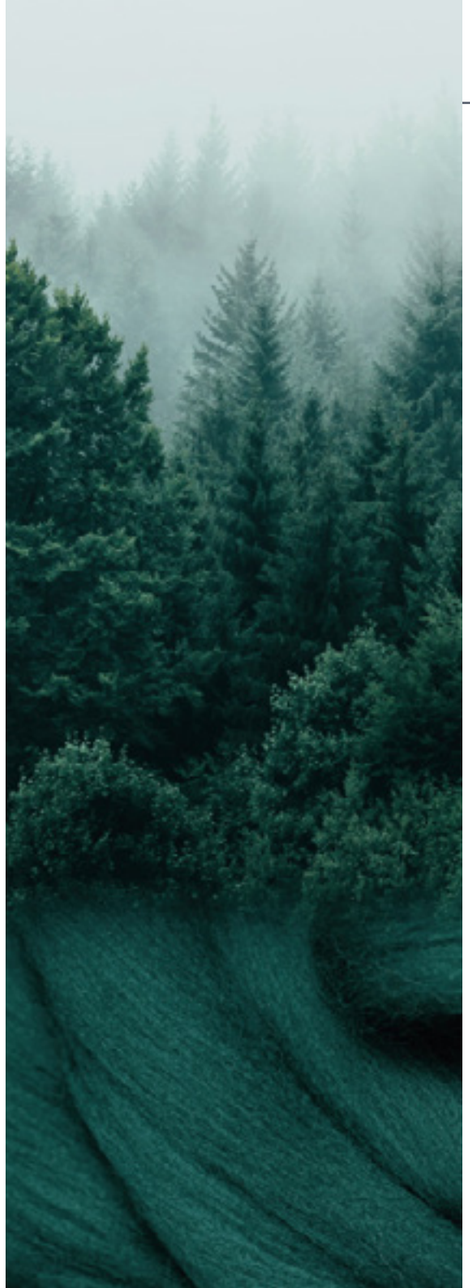
To develop methods to reduce pollution at its source,

To carry out waste recovery studies

In line with these principles;

We are committed
To create environmental protection awareness in all our employees,
To continuously improve the environmental studies,
To ensure that environmental protection activities are spread to all employees and to adopt that everyone is a common responsibility,
To leave a clean and livable environment to future generations,
To develop methods to protect natural resources such as energy and water,
To manage a solid relationship with all our stakeholders,
To be a corporate culture that supports continuous improvement and development,
To review systems, processes and communication channels and restructuring them in line with needs.

Department and Managers	Health, Safety and Environment Department Occupational Safety and Environment Leader Maintenance and Energy Managers
Our Team	2021: 3 people 2022: 3 people
Management System	ISO 14001
Measuring and Monitoring Mechanisms	ISO 14001 Internal and external audits TPM System SHE Pillar Committee External audits Customer audits



ENVIRONMENTAL MANAGEMENT

Facility Environment Management Module of Sustainable Apparel Coalition (SAC)

We are using the Higg Index Facility Environment Management (FEM) module developed by The Sustainable Apparel Coalition (SAC), which is a platform established for sustainable manufacturing through which the member brands, retailers and manufacturers in our sector share their best practices transparently. This module is a control system through which the environmental sustainability performances of the companies are measured and reported, where the environmental, energy, water, waste water, emissions, waste and chemicals management data are entered at least once every year and then inspected for compliance on the field

The system, which also has a social impact module (FSLM), offers important opportunities for meaningful improvements in our sector. We purchased and verified the social impact module in 2022 as planned, and our final score is 74.5%.

Environmental Expenditures %	2022
Wastewater disposal	53%
Waste disposal	7%
Personnel	18%
Maintenance, repair, cleaning, machinery and installment	0,10%
Consultancy and technical support	22%
Research	0.22%
Environmental tax	0,33%

R&D Project

Development of Fabric That Cleans the Ambient Air

Air pollution is one of the most serious environmental issues. We spend most of our time at home, in an office or in another indoor space. The air quality of our environment has a negative impact on our health. The efforts we spent on the issue help us eliminate odors generated by ammonia (pets, sweat, bacteria, etc.) and formaldehyde (cigarettes, furniture paints, plastics, etc.).

What have we done?

Finishing activities using daylight technology were carried out to remove odors resulting from ammonia and formaldehyde from the surroundings. The efforts spent helped us eliminate odors resulting from ammonia and formaldehyde benefiting from the impact of sunlight. The efficacy of the study was tested by an accredited laboratory. Innovative ambient air-purifying fabrics were developed with a view to offering functional products.

With the fabric developed, the effects caused by air pollution that will have a negative effect on human health have been eliminated. This helped us reduce the air pollution factor that would have a negative impact on human health. The results of the studies were evaluated in academic platforms (articles, papers, etc.).

Results and Gains

Economic

We have developed a new product that cleans ambient air. A new market has been created where the company will offer the newly developed product for sale.

Social

The development of fabrics that clean the ambient air has made it possible to provide a more hygienic environment by eliminating the unpleasant odors in social environments.

Environmental

Unpleasant odors in the environment that will adversely affect human health are degraded.

R&D Project

Use of Recycled Raw Materials At Industrial Scale and Product-Based Certification Studies

With a view to meeting the demands of sustainability-conscious customers, we aim to make use of sustainable raw materials in production and to set up a system within the company for the use and certification of traceable fibers with specific labeling.

What have we done?

The use of recycled and sustainable fibers was intended to develop fabrics that are more environment-friendly by meeting relevant quality requirements, and to meet market demand for sustainable products; as well as to become a sector leader in this regard. Studies were conducted on recycled wool, polyester, polyamide, and elastane. Biodegradable fibers and other products that utilize fewer natural resources and have no detrimental influence on the natural balance have been investigated, tested, and approved for introduction to the market after all tests and production have been completed.

Results and Gains

Economic

Customer satisfaction was enhanced by meeting the recyclable and sustainable fabric expectations of our customers and end users.

Social

Our company has earned a reputation in the industry for producing environment-friendly fabrics. Increases are expected in sales volumes as sustainable and environment-friendly new fibers that can be used in fabric production were investigated, made available for use in our products, and their performance was optimized.

Environmental

Reduction was ensured in plastic wastes, which is increasing in nature, and environment-friendly and sustainable products were ensured to be used.

RECYCLED 100 claim standard

RESPONSIBLE WOOL STANDARD R·W·S CERTIFIED

Global Recycled Standard

ENERGY MANAGEMENT

INTERNAL STAKEHOLDER VIEW

84% of our employees who responded to the sustainability assessment survey think that...

Yünsa's investments and projects to assure energy efficiency are adequate."

Textile sector is among the most energy demanding sectors. Natural gas and electricity are the main energy sources that we use at Yünsa. We also use diesel in our forklifts and similar work machinery, as well as in passenger vehicles used by our employees.

Taking proactive measures after energy consumption measurements and evaluation, thereby using less energy per each meter of fabric produced is strategically important for Yünsa.

We managed to reduce our energy intensity by 3.5% by the end of 2022 compared to 2015 base year. In 2022, we achieved our objectives in terms of energy consumption. In 2023, we aim to reduce our energy intensity by 7% compared to our base year of 2015, which also means a 3.5% reduction in energy intensity compared to 2022.

We have conducted necessary projects and feasibility studies to achieve this ratio. Furthermore, we have been awarded the YEK-G certificate for all of our total energy consumption in 2022, and at Yünsa, we will continue to support the use of green energy.

Management Approach	
Policy	Energy Policy
Target	13% decrease
Base Year / Target Year	2015 - 2023
Performance Results	2015: 97.095.210,8 kWh 2021: 40.461.545,1 kWh 2022: 69.366.903,7 kWh

ENERGY MANAGEMENT

In addition to renewable energy studies in 2022, as Yünsa, we have energy saving projects, the titles of which are given below.

- Switch to the driver-operated system for fans of various machines,
- Extending the use of energy-efficient motors,
- Switch to efficient fan applications in built-in type air conditioners,
- Measurement of baseload of machines and conduct of activities to reduce such load,
- Continued expansion of waste heat utilization points,
- Continued investment in compressors to increase the efficiency of compressed air handling
- Studies to increase efficiency in fluid transfer pumps,

R&D Project

Increasing Energy Efficiency in Air Handling Units with Structural Changes in Fans

The purpose of axial fans is to circulate the desired amount of air in the system. To move the air, the fan has to overcome system resistance, defined as pressure loss. The fan output is the product of air flow and the pressure loss.
It is intended in this context to reduce friction force and save energy by modifying the structural form of existing air conditioning fans and improving their aerodynamic structure.

What have we done ?

Our project titled “Improvement of Air Handling Unit System” conducted at Yünsa became entitled for support from the Ministry of Energy and Natural Resources, Energy Efficiency and Environment Department within the scope of the EIP (Efficiency Improvement Project). Energy measurements were made in the current status. The average linear velocity before the application was 8.25 meters per second, the flow rate was 50,490 cubic meters per hour, and the active power was 14.85 Kilowatts.

After the fans were installed for testing purposes, the average linear velocity was 7.895 meters per second and the air flow rate of the system increased by 4.88%, and the active power stood at 11.70 Kilowatts. According to the measured values, a 21.21% decrease was observed in active power.

The measurement values will be used to replace the fans (36 units) in the air handling units with fans with differing aerodynamic structures. The energy system will be monitored with the automation system to be installed. After the installation of the entire system is completed, energy measurements will be performed again for verification purposes. This has been done in one air handling unit currently, and expansion is planned for other plants.

Results and Gains

Economic

The aerodynamic wing structure and reduced energy consumption are expected to result in an annual energy savings of 20% or 598,607.54 Kilowatt hours.

Social

Different perspectives on similar or different machines were created as a result of the optimization study. The relevant project is supported by the Ministry of Energy and Natural Resources.

Environmental

Energy savings will reduce the tCO2 equivalent emissions emitted into the atmosphere. Reduced energy consumption will directly reduce greenhouse gas emissions. The automation system to be installed will allow monitoring the energy system. Our project plays a critical role for the development of our Yünsa Sustainability Roadmap in order to provide energy savings and traceability.

R&D Project

Determination of Performance Parameters in Double Layer Stenter Machine and Investigation of Their Effects on Energy Saving

Energy resources are rapidly depleted as a result of the developing world and the increasing population in parallel to the increasing consumption trends. Since these resources are limited, they must be used efficiently. At the same time, increases in energy prices increase the share of energy in the cost items of products.

What have we done ?

Saving efforts are critical in departments and machines where electricity or natural gas usage is high inside the organization.

Results and Gains

Economic

By reducing the machine operating temperature from 120°C to 105°C, 14% natural gas savings were achieved. There is no investment cost involved since this is already provided with existing facilities.

Social

Different perspectives on similar or different machines were created as a result of the optimization study. The shareholder’s equity project titled “Determination of Performance Parameters in Double Layer Stenter Machine and Investigation of Their Effects on Energy Saving” was accepted by the Department of Mechanical Engineering of Kırklareli University in May.

Environmental

Natural gas savings have reduced the tCO2 emissions emitted into the atmosphere.

R&D Project

Switch to the Driver-Operated System for Lid Suction Fans of Finishing Machines and Suction Optimization

Spinning department consumes approximately 50% of the electricity consumed on a department basis, whereas the preparation line consumes 25% of this 50%, and the finishing machinery consume the other half. The energy consumed by the fan motor subject to the project is nearly half of the total energy consumed on machine basis. Considering the positive impact on energy costs and product quality, an energy project was planned to be developed in the spinning department, and the finishing machines were selected in this context.

What have we done ?

The project intends to save energy by altering the air suction pressure of the machines by changing the fan motor frequency rather than controlling it with the throttle. Furthermore, the engine powers of the Finishing Machine2, Finishing Machine3, and Finishing Machine4 machines were determined to be different from the other machines, as was the suction between the spindles on the machine, and it was determined that energy savings could be made by equalizing the suction among the spindles.

Results and Gains

Economic

Currently, six of the finishing machines are currently ready for driver operation. The 2022 data were extracted from the MES system used for ensuring accurate savings calculation of the machines. The total annual savings ensured by 6 finishing machines in the enterprise is TL 36,923.02.

Social

The system implemented in the pilot machine will be extended to the other 7 machines.

Environmental

95,747 kWh/year savings were achieved, preventing 46,341.55 t CO2 equivalent emissions.

R&D Project

Development of an Automatic Lubrication System Based on Blends for Controlling Static Electrification in Worsted Yarn Production

The project was initiated with the aim of minimizing the amount of oil and water used in production, labor, time, production-quality problems. A system has been developed in the project that measures the static electrification values of the fiber and activates the predetermined production steps accordingly.

What have we done ?

Investigations were carried out to determine which product is responsible for how much of the current oil and water mixture used in production. Plans were made for operation within the range of such values. Then, a sensor was found for the lubrication system depending on the static electrification value and a suitable circuit was designed. A lubrication system was then designed based on the quantity of static electrification using the code supplied in the circuit design. Comparisons are made between the functioning state of the pilot machine and that of another machine performing the same job, as well as the parameters to affect the quality. The project is in a trial phase for roll-out.

Results and Gains

Economic

Quality-related downtime in production will be prevented. Labor savings will be achieved as it will be an operator-independent system. In addition, the minimum amount of oil and water to be consumed can be set automatically for each product.

Social

We will raise awareness on sustainability by minimizing water and chemical consumption in line with our environmental responsibility and in a future-conscious manner.

Environmental

Minimizing the amount of oil and water consumed is crucial when it comes to using our geography's natural resources.

TPM Project

Mapping the Electric Energy Consumption of the Machines in the Factory and Determining the Specific Electric Energy Consumption Values of the Machines

Production costs are also increasing due to rising electricity costs. The efforts intend to determine the specific electrical energy consumption values of the machines and then to develop new electrical energy saving projects with a view to reducing energy costs. The suggested electrical energy saving measures are intended to contribute to cost reductions in production.

What have we done?

The yarn department accounts for 50% of the electrical energy consumption in the factory. Ring machines were found to consume 50% of the electrical energy consumed in the yarn department. Thus, specific electrical energy measurements were started from Ring machines. Afterwards, measurements were continued on the preparation machines, winding machines and twisting machines.

The consumption distribution rates of electrical energy consuming equipment in the machines, energy consumption values based on machine output, and electrical energy “baseload” values of the machines were determined.

Different brands of machines producing the same product were compared with each other, and the most energy-efficient ones were determined. Projects were developed for shutting down equipment that unnecessarily consumes energy by continuing to operate when machines are not in production.

Projects were selected to ensure that energy-consuming equipment runs at optimal values according to production specifications during the production of machines. Total 4 projects were completed. Expansion of the projects to other machines is ongoing. A 6.5% improvement in specific electrical energy consumption (kWh / kg. Nm) was achieved on ring machines compared to previous values.

Results and Gains

Economic

Electric energy costs are reduced through energy saving efforts, and customer satisfaction is increased.

Environmental

Carbon footprint is reduced.

Social

Awareness is raised among employees on energy efficiency.

Saving Energy in Ring Machine

The CDS and pneumofil suction fans run continuously when the ring machine is not producing, resulting in unnecessary energy consumption.

What have we done?

The electrical circuit was modified so that the CDS and pneumofil fans do not work when the ring machine is not producing. A time relay was also added to the electrical circuit so that the CDS and pneumofil fans would run before the main engine.

Results and Gains

Economic

Approximately TL 307,000 was saved.

Social

The operator’s awareness of the ring machines was raised.

Environmental

The electrical energy supplied helped us to reduce emissions.

TPM Project

Minimization of Speed and Quality Performance Differences Due to Process Changes in Sizing Machines

Sizing processes used in Yünsa are divided into two: internal sizing and surface sizing. Approximately 10% sizing is applied with internal sizing and approximately 3% sizing is applied with surface sizing. The typical application method used is internal sizing, which prolongs production times and generates bottlenecks. In internal sizing process, the goal is to improve the maximum operating speed of 14 meters per minute to greater speeds.

Results and Gains

Economic

The speed value was enhanced by roughly 40% by increasing the operating speed from 14 meters/min to 19 meters/min. This improvement increased the quantity of warp to be subjected to sizing during the day and helped us to alleviate the bottleneck. As it provides the same heating impact, this allowed more efficient use of natural gas. Furthermore, the chemical modification efforts eliminated the need for supplementary raw materials previously used in the new sizing recipe. There has been a shift from imported to domestic products, which both resulted in the sizing chemicals becoming cheaper.

These benefits have resulted in lower product costs in addition to increased machine speed.

Social

Different perspectives on similar or different machines were created as a result of the efficiency study.

Environmental

Natural gas consumption per product has been decreased by keeping the heating need constant. As a result, the product’s carbon footprint has been lowered, which contributes to sustainability.

The energy consumption caused by the requirement to operate the Biella Decatizing Machine in order to produce narrow width templates and to switch the machine on and off since it is not used in bulk production

The decatizing machine is used for the production of narrow width template production. The machine is activated for 200 m of fabric every working day. Heating time for the machine to reach the process conditions: 20 minutes. Processing time: 45 minutes. Cooling time: 60 minutes. It was intended to make investigations on the energy, air, and steam consumption for these operations.

What have we done?

It was investigated in which machines used for bulk production the narrow width template decatizing procedure may be performed alternatively. Wool Power 1-2 machines were found to be suitable for this operation. However, the machine was not suitable for narrow width (50 cm - 60 cm) due to its working principle. The unique guide pin designed ensured that narrow width fabrics could pass through this machine. Optimization studies resulted in energy, air, and steam usage savings.

Results and Gains

Economic

Earnings of 223.500 TL per year were ensured for 300 days of work

Environmental

Energy savings resulted in reduced emissions

EMISSIONS MANAGEMENT

INTERNAL STAKEHOLDER VIEW

79% of our employees who responded to the sustainability assessment survey think that...

Yünsa's projects and preventive measures to reduce emissions are adequate.

We have reset Scope 2 in ISO 14064-1:2018 Greenhouse Gas Verification.

EMISSIONS MANAGEMENT

In our facilities, we have 49 emission sources such as process chimneys, ventilation and combustion flues.

It is our priority to make sure that the CO, NOx, SOx, dust and VOC parameters do not exceed the limit values set for human health and comply to the standards set by Industry Sourced Air Pollution Control Directive.

Our R&D team participated in the Emission calculations training program in 2022 and gained competence in this area. Calculations were completed in six areas within the scope of ISO 14064-1:2018 standard for 2022, and ISO 14064 Greenhouse Gas Verification was carried out with an accredited organization. We have obtained a green energy certificate for our entire power consumption in 2022. We take justified pride to have received our YEK-G (Renewable Energy Resource Guarantee System) certificate, which documents electricity generated from renewable resources. The relevant certificate contributes to a carbon neutral and sustainable future, and we have neutralized 13,284.5 CO2 tons of equivalent emissions for 2022. We have reset ISO 14064-1:2018 Greenhouse Gas Verification Scope 2.

The energy efficiency projects that help reducing our emissions are explained in their respective sections in our report.

Green House Gas Emissions	2019	2021	2022
Scope 1 (Direct)	43%	44%	61,24%
Scope 2 (Indirect)	54%	56%	0%
Scope 3 (Other)	3%	-	38,76%

Management Approach	
Target:	Reduce GHG intensity by 10%
Base Year / Target Year	2016 - 2023
Performance Results	Green House Gas Emission Intensity (Kg CO2e/meters produced)* 2016: 2,90 kgCO_2/meter 2021: 3,63 kgCO_2/meter 2022: 1,73 kgCO_2/meter

*In order to monitor the real improvement of intensity reduction, this data is provided excluding contract manufacturing.

TPM Project

CDP Carbon Disclosure Project

We started to prepare our Carbon Disclosure Project (CDP) Climate Change report in 2010 by raising our emission management studies, which we started at Yünsa on the basis of compliance with the law, to internationally accepted measurement and monitoring standards. In 2022, we received a B- score in the Climate Change and Water categories. We are aiming to get 2023 B Ace crowns.

Saving Energy in Warehouses

In our factory, we use 15% of our natural gas consumption for heating in the winter season. The steam mechanism in the warehouses consumes only 10% of the natural gas used for heating.

What have we done?

Weekly programmable control thermostats were integrated into the manually operated steam apparatus fans, allowing the fan to be activated at the desired time and temperature, while keeping warehouse operating hours in mind.

Results and Gains

Economic

Steam consumption of steam apparatus was reduced by 50%.

Social Impact

Improvements were made, helping us raise awareness among employees.

Environmental

Ensuring natural gas savings emissions were reduced.

WATER MANAGEMENT

INTERNAL STAKEHOLDER VIEW

67% of our employees who responded to the sustainability assessment survey think that...

Yünsa's practices to manage and efficiently use water resources are adequate.

In an era where climate change has caused economic, social and ecological risks, the increased use of natural resources due to increasing demand, climate threats, and increasing level of awareness have prompted us to accelerate our sustainability efforts. In this connection, utilizing recycled R-Pet raw material instead of polyester fiber in 2022 saved 310,893 liters of water and saved 426 individuals from wasting a year's worth of drinking water.

The quality and accessibility of water has a critical importance in the continuity of business in our factory where the entire water is supplied from underground water sources (wells).

We are working on increasing the water efficiency in our factory and offices and recycling the water for the industrial use.

In 2022, the share of reused water in total water consumption at our Çerkezköy facility totaled 336,697 tons.

Our primary goal at our facility is to determine the processes of domestic and industrial wastewater generation and to minimize the quantity of water consumption and industrial wastewater.

Since our factory is in an Organized Industrial Zone (OIZ), it is located outside the conservation areas and the living environments of endemic species. Since we send the entire wastewater to the OIZ's own treatment facility, there are no water resources or natural living environments affected by the wastewater discharge.

Withdrawal (m3/year)	2021	2022
Well water	270.282	506.572

Management Approach	
Target:	0,06 m3/metre
Base Year / Target Year	2016 - 2022
Performance Results	2016 : 0,10 m3/metre 2021 : 0,085 m3/metre 2022 : 0,072 m3/metre

In 2022, 395962 m3 waste water was discharged to the waste water treatment facility of the industrial zone of Çerkezköy

TPM Project

WATER MANAGEMENT

Reduction of Water Consumption per Meter in the Finishing Department

Savings potentials in water use were explored in the finishing department, which has the greatest water consumption throughout the firm.

What have we done?

A map of water consumption in the finishing department was developed in order to ensure efficiency in resource utilization and to meet the demands of international brands. Meters have been introduced in the energy monitoring system in Continuous washing machines and other machines in the finishing room that use water. The machines were programmed using raw material-based routines, and optimization activities were performed.

Results and Gains

Economic

Energy cost savings were offered in addition to water savings.

Social

These efforts helped us meet the expectations of sustainability-sensitive customers.

Environmental

Water consumption has been reduced by 25%.

Installation of Aerators on the Faucets Used throughout the Business

Aerator is an apparatus installed on the end of a faucet that increases the intensity of the flow by allowing the water to come into contact with air. In addition, it also improves the wetting effect by making the water coming out less but with increased density.

What have we done?

Aerators were installed on the faucets and shower heads used in the factory. Cleaning guidelines were developed for the installed aerators, and a cleaning interval was determined.

Results and Gains

Economic

Water savings of TL 1231.23 per month, and electricity savings of TL 1451.19 per month

Environmental

Water savings of 390 tons per month, and electricity savings of 475.8 KWh ensured by the submersible pump equivalent to the water savings ensured

Year	January	February	March	April	May	June	July	August	September	October	November	December	Total
2021 (m3)	11.411	8.189	9.652	11.964	12.275	11.567	12.690	20.085	27.058	27.101	28.623	29.115	209.730
2022 (m3)	24.880	26.015	28.509	30.699	31.761	33.251	30.323	39.809	39.394	36.848	37.740	36.733	395.962

In 2022, 395962 m3 waste water was discharged to the waste water treatment facility of the industrial zone of Çerkezköy

TPM Project

Use of a Water Gun in the Finishing Room

This is a project implemented to prevent the use of excess water in machine and area cleaning in the finishing department, which is one of the wet processing departments. Within the scope of this project, a pressurized water gun was installed on 9 hoses used during the finishing process. This resulted in controlled use of water resources. Responsible consumption was ensured by providing employees with trainings on water consumption.

Results and Gains

Economic

Water consumption was reduced (the reduction in consumption has yet to be confirmed). Statistical data can be presented when a fully efficient operation is ensured)

Environmental

Reductions were ensured in unnecessary water consumption.

Social

Awareness on water use has been raised among operators

Reduction of Water Consumption per Meter in the Dyeing Businesses

The dyehouse was responsible for the consumption of approximately 42% of the water used in our factory in 2021. In addition to reducing water consumption in dyeing businesses, it was aimed to improve environmental sensitivity and customer satisfaction by saving energy and minimizing wastewater consumption.

What have we done?

The dye house that used the most water was identified, and the process-based flotations were examined. As a result of the tests performed, changes were made in the washing processes. Processes have been updated in Orgatex software to ensure process continuity. In addition, the cleaning process was almost completely eliminated by arranging the color transitions in the boiler cleaning processes in Fabric and Bobbin Dyeing, and by adding the PES dyeing program at the Tops Dye House. At Orgatex, data was started to be extracted using RPA (robotic process automation) to predict batch-based consumption and see how much water was utilized.

Results and Gains

Economic

Too much water is used in textile dyeing operations both in Turkey and around the world. To produce one kilogram of textile products, approximately 95-400 liters of water are needed. Water is one of the most vital natural resources. Thus, businesses are working to reduce the amount of their water consumption. These efforts spent have ensured a 22% reduction in the water used by the dye house in our plant.

Environmental

Reduced water consumption will result in reduced wastewater.

Social Impact

Reduced use of water will trigger reduced use of natural gas, which will have a positive impact on sustainability and thus customer satisfaction.

TPM Project

Installation of Aerators on the Faucets Used throughout the Business

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What have we done?

Aerators were installed on the faucets and shower heads used in the factory. Cleaning guidelines were developed for the installed aerators, and a cleaning interval was determined.

Results and Gains

Economic

Water savings of TL 1231.23 per month, and electricity savings of TL 1451.19 per month

Environmental

Water savings of 390 tons per month, and electricity savings of 475.8 KWh ensured by the submersible pump equivalent to the water savings ensured

WASTE MANAGEMENT

INTERNAL STAKEHOLDER VIEW

78% of our employees who responded to the sustainability assessment survey think that...

Yünsa's practices to reduce waste and wastewater to dispose them as to protect human and environmental health are adequate.

Our efforts on utilizing recycled materials as raw material continue within the scope of combating climate change. The stage that mainly affects climate change in wool production is the raw material stage due to the release of methane gas. Therefore, increasing the ratio of recycled materials also contributes to the fight against climate change.

Management of the waste from its generation to its disposal without posing a threat to the environment and human health is our main goal in our factory. We dispose 100% of the wastes, including wastewater, generated at our plant through recycling, recovery and/or other methods specified by national regulations.

We segregate our waste in two groups according to hazardous and non-hazardous criteria. This waste is temporarily stored in a designated waste storage area in our factory, and then regularly collected by licensed companies. In the reporting period, we did not have any cases of spills or leakages.

In 2022, production meters increased by 123%, while wastes increased by 45%. The quantity of waste generated for one meter of fabric in 2021 was 55.71 grams, whereas it was 42.93 g/m in 2022, which means that the amount of waste for the amount of fabric produced was reduced by 22.94% compared to 2021.

Wastes	2021	2022
Non-hazardous	70%	%72,21
Hazardous	30%	%27,78

Management Approach	
Target	0,056 kg/metre
Base Year / Target Year	2016 - 2022
Performance Results	2016: 0,072 kg/metre 2021: 0,072 kg/metre 2022: 0,042 kg/metre

WASTE MANAGEMENT

Solid Waste Management

The types of waste generated in all areas related to waste management are defined and colored with containers of appropriate color, and awareness on this issue has been increased. In this context, the wastes are collected in the required containers. Afterwards, it is kept to be shipped in the temporary storage area where legal requirements are met. As stated, in this period, the separation of wastes at the source has been largely successful by turning it into a culture in all our facilities.

Year	2021	
Wastes by Disposal Method (tons)	Non-hazardous	Hazardous
Energy Recovery	-	67.385
Material Recovery	79.180	-
Recycling	78.440	-
Medical Waste Disposal	-	8
Total Waste Disposed	157.620	67.393

Year	2022	
Wastes by Disposal Method (tons)	Tehlikesiz	Tehlikeli
Energy Recovery	36.200	54.420
Material Recovery	94.022	29.220
Recycling	87.300	0
Medical Waste Disposal	-	60
Total Waste Disposed	217.522	83.700

TPM Project

Digital Archive

Accounting entry slips, invoices and related documents, which are required to be retained for 10 years under the law, used to be printed out and retained in the archive. This results in wasting a lot of time in accessing important documents and is not sustainable.

What have we done?

Documents were allowed to be archived in digital folders created automatically by the ERP program.

Results and Gains

Economic

Equipment and archiving costs were saved by 90%.

Social

Access to documents has become faster, and approximately 152,776 minutes were saved.

Environmental

Reducing paper footprint

Creating Product Scorecard

It was intended to assess product performance at every stage from raw material procurement to sales and to use a scoring system in product processes. In this context, it was ensured that the product specification system was created using proper tolerance values.

What have we done?

The screens utilized on the ERP (CANIAS) system for product-related and production details were thoroughly analyzed. A draft was developed for the new module to be designed in the CANIAS system. Data entry screen drafts were provided to the relevant operation departments for menus with no extra data. Needs were identified. Scores were provided for each criterion in order to create the scoring system. Works are ongoing on how the scoring system will be implemented and how it will work. These efforts will contribute to the production of the right product at the first time.

Results and Gains

Economic

Increase in sales

Social

Contributions were made to operational excellence efforts. Digitalization was achieved in the product scorecard. Within the scope of activities related to TPM (Total Productive Maintenance) early product pillars, we contributed to the creation of the product design with the right tolerance values at the first time. This increased the success of the product design.

Environmental

Contributions were made to sustainability

TPM Project

Reduction of Dense and Sparse Defects in Piconal Weaving Looms

The dense and sparse defect is the most common defect encountered in the weaving department in 2021, accounting for 10% of all defects. Considering the impact of the high number of defects on workmanship and quality, a project was completed on the issue.

What have we done?

An analysis of the current situation has revealed that the problems were concentrated in a specific quality and in a specific machine group. We focused on the operating principle of the machine and investigated whether the machine was working correctly.

Machine parts were examined, and a root cause analysis was made. Following the analysis, it was revealed that the roller and insert bearings were damaged at particular spots, and so the defect developed due to roller bearing sticking when the warp meter became smaller. Since the machine did not display any malfunction or error notifications, it could be understood only upon the initial assessment that the machine was malfunctioning. After the examination, it was understood that the bearings should be lubricated at certain intervals or replaced if necessary.

Following the enhancement, the project was deployed in 42 machines, 170 bearings were replaced, and bearing lifecycle tracking was initiated. Single spot trainings were developed, and provided to the relevant units.

Results and Gains

Economic

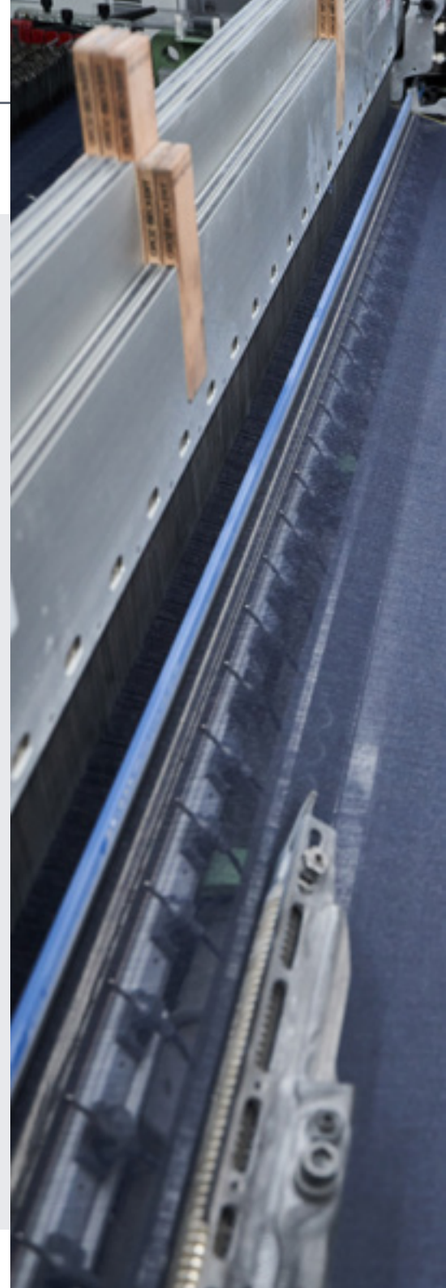
Fabric waste was decreased, and second-quality fabrics were avoided.

Social

Different perspectives on similar or different machines were created as a result of the optimization study.

Environmental

The project completed allowed the production of 1st quality products at one time and the consumption of raw material and energy in the most efficient way. Fabric waste was eliminated.



Development of Fabric Structures with New Generation Sustainable Raw Materials

Aquaculture accounts for 35% of the fishing industry, which reached a volume of 180 million tons by 2020. Most of the waste from fish is fish scale. The amount of waste fish scale generated is 1-5% of the total volume of the fishing industry. When factories bury the waste from fish products in the soil, it causes acidification of the soil, or if the waste is incinerated, it causes air pollution. At this point, the use of fish scales in textile fibers contributes significantly to the transition from linear economy to circular economy in the textile industry, creating an environment-friendly alternative for our planet..

What have we done?

Umorfil ® fiber is a fiber that makes use of fish scales. The word “Umorfil” originates from the combination of Latin “Umor” and French “Fil”, and “Umor” means moisture and “fil” means yarn. Umorfil fiber contains amino acids just like wool and silk. It is easier to use for consumers compared to wool. The fish received from the fish farms are cleaned in the factory, then the scales are separated, cleaned, extracted with chemicals, and blended with the fiber. 750-800 g fish scale is used in 1 kg Umorfil ® Beauty Fiber

Umorfil ® Beauty Fiber is biodegradable and has deodorizing and antistatic features, contains collagen peptides, aids in moisture recovery, is non-irritating to the skin, and gives customer comfort. Shirt fabric containing 30% Umorfil ® viscose / 70% wool was developed using Umorfil ® Beauty Fiber.

Results and Gains

Ekonomic

Development of environment-friendly and functional fabric contributed directly to circular economy.

Social

Experience was gained in the development of new-generation sustainable Umorfil ® raw materials and product design.

Environmental

Instead of polluting the air and soil by burying and burning organic waste, wastes were employed in product design as raw materials, ensuring contributions to environmental sustainability within the scope of green product development.

07

PERFORMANCE INDICATOR

ECONOMIC PERFORMANCE INDICATORS

Financial Indicators (Euro)	2020	2021	2022
Revenues	37,143,809	32,747,198	73,746,883
Gross Profit	1,037,747	9,730,223	28,142,733
Sales			
Textile	35,926,873	31,168,713	71,528,666
Apparel	1,216,936	1,578,485	2,218,217
Production Indicators			
Worsted Yarn (tons)	1.545	1.102	2.566
Fabric (km)	4.860	3.154	7.031

"*EURO amounts are calculated by using yearly average fx rates."
SOCIAL PERFORMANCE INDICATORS

SOCIAL PERFORMANCE INDICATORS

EMPLOYMENT	2021	2022
Men	582	696
Women	286	381
TOTAL	868	1.077
By Type of Contract and Gender	2021	2022
Permanent Employees - Women	582	695
Permanent Employees - Men	282	381
Temporary Employees - Women	4	0
Temporary Employees - Men	-	1
TOTAL	868	1.077
By Type of Contract and Location	2021	2022
Permanent Employees - Çerkezköy	819	1026
Permanent Employees - İstanbul	45	50
Temporary Employees - Çerkezköy	4	1
Temporary Employees - İstanbul	-	0
TOTAL	868	1.077
By Employment Type and Gender	2021	2022
Full-time Employees - Women	581	379
Full-time Employees - Men	285	696
Part-time Employees - Women	1	2
Par-time Employees - Men	1	0
TOTAL	868	1.077

Subcontractor workers are not employed.

SOCIAL PERFORMANCE INDICATOR

EMPLOYMENT AND TURNOVER	2021	2022
TOTAL - Hires	84	419
TOTAL - Dismissals	296	210
By Location	2021	2022
Çerkezköy Factory - Hires	58	376
	6,7%	34,9%
Çerkezköy Factory - Dismissals	262	173
	34,1%	19,5%
İstanbul - Hires	26	43
	3,0%	4,0%
İstanbul - Dismissals	34	37
	3,9%	3,4%
By Gender	2021	2022
Men - Hires	43	232
	5,0%	21,5%
Men - Dismissals	195	118
	22,5%	11%
Women - Hires	41	187
	4,7%	17,4%
Women - Dismissals	101	92
	11,6%	8,5%

SOCIAL PERFORMANCE INDICATORS

OCCUPATIONAL HEALTH AND SAFETY	2019	2022
Injury Frequency Rate	1,05	0,00
Occupational Disease Rate	0,00	0,00
Number of Fatalities	0	0.00
Lost Day Rate (Accident Severity Rate)	36,80	0,00
Absentee Rate (As a result of illness etc.)	3,25%	2,41%

First aid level accidents are not calculated within the accident frequency rate.
Fatal accidents are calculated within the accident frequency rate.
Lost days are calculated based on calendar days.
Lost day count starts the day after the accident.

Accident Frequency Rate: (Number of recordable case / Total working hours) x 200.000
Accident Severity Rate: (Number of lost days / Total working hours) x 200.000

ENVIRONMENTAL PERFORMANCE INDICATORS

Direct Energy Purchased and Consumed from Non-Renewable Energy Sources	2021	2022
Natural Gas (GJ)	92.897	146.965,40
Diesel (GJ)	1.874*	4.673,40*
Total Dırect Energy Consumption	94.772	151.638,8
Indirect Energy Purchased and Consumed from Non-Renewable Energy Sources	**2021**	**2022**
Electricity (GJ) (1 kWh= 0.0036 GJ)	52.764	0
Total Indirect Energy Consumption	52.764	249,86
Total Energy Consumption (GJ)	147.536	151.888,6

* Forklifts, generators and business travels are included. Employee commuting is not included

Energy Intensity*	2021	2022
Total Energy Consumption (GJ)	147.536	25.069.895
Total Production Amount (metres) (Except Contract Manufacturing)	3.137.448	6.999.104,17
Energy Intensity	0,0470	0,035

*Total Energy Consumption (GJ) /Total Production (m)

Greenhouse Gas Emissions (t CO2e)	2021	2022
Direct Greenhouse Gas (GHG) Emissions (Scope 1) **Emissions from natural gas and diesel consumption**	5.035	7.427.72
Indirect Greenhouse Gas (GHG) Emissions (Scope 2) Emissions from electricity consumption	6.348	0
Other Greenhouse Gas (GHG) Emissions (Scope 3) Indirect and services-related emissions	-	7.384,12
Total CO2e Emissions	11.383	14.811,80
GHG Intensity*	3,63	0,001733

*Total GHG (kg CO2e) /Total Production (m)

Emissions from diesel consumption of forklifts, generators and vehicles for business travels were included in Scope 1 and emissions of the employee transfer vehicles were included in Scope 3.

Çerkezköy factory consumption is included, İstanbul head quarter consumption is not included.

Emissions Factor Basis:
IPCC 2006 Guidelines for National Greenhouse Gas Emissions Inventories
Calculation Basis:
IPCC 2006 Guidelines for National Greenhouse Gas Emissions Inventories
IEA Electricity Grid-Factors, 2007
IEA National Heating Values, 2007

This report, prepared within the framework of "TS EN ISO 14064-1:2018 Greenhouse Gases-Part 1: Principles and features regarding the calculation and reporting of greenhouse gas emissions and removals at the organizational level", covers the calculation according to categories. The Carbon Footprint Calculation Report has been planned according to the 9.2 article of the TS EN ISO 14064-1:2018 Standard. The content of the report has been prepared in accordance with TS EN ISO 14064-1:2018 article 9.3.

Total Waste by Type	Unit	2021	2022
Hazardous Waste	Ton	98.496	83.700
Non-hazardous Waste	Ton	450.460	217.522
Total Waste	Ton	548.956	301.222
Waste Intensity	Ton / m	0,071	0,043

Hazardous Waste	Contaminated packaging, organic solvents, lab chemical mixes, contaminated absorbents, filter equipment, organic waste that contain hazardous substances, waste fluorescent, waste cartridge, toner, other hydrolic oils, medical waste
Non-Hazardous Waste	Wooden packaging, plastics, metals, plastic packaging, paper packaging, wooden pallet, textile fiber waste

08

ANNEXES

GRI CONTENT INDEX

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

Statement of use	Yünsa has reported in accordance with the GRI Standards for the period 01.01.2022-31.12.2022
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI Sector Standard(s)	None.

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			
			REQUIREMENTLS(S) OMITTED	REASON	EXPLANATION	GRI INDUSTRY STANDARD REF. NO.
GRI 2: General Disclosures 2021	2-1 Organizational details	Page 12-13, 133	A gray cell indicates that reasons for omission are not permitted for the disclosure or that a GRI Sector Standard reference number is not available			
	2-2 Entities included in the organization's sustainability reporting	Page 5				
	2-3 Reporting period, frequency and contact point	Page 5, 134				
	2-4 Restatements of information	No restatements.				
	2-5 External assurance	Page 135-136				
	2-6 Activities, value chain and other business relationships	Page 9, 12-13, 16				
	2-7 Çalışanlar	Page 115				

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GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	DAHİL ETMEME			
			REQUIREMENTLS(S) OMITTED	REASON	EXPLANATION	GRI INDUSTRY STANDARD REF. NO.
GRI 2: General Disclosures 2021	2-8 Workers who are not employees	Page 115				
	2-9 Governance structure and composition	Page 22, 25				
	2-10 Nomination and selection of the highest governance body	Page 24				
	2-11 Chair of the highest governance body	Page 22				
	2-12 Role of the highest governance body in overseeing the management of impacts	Page 22, 24				
	2-13 Delegation of responsibility for managing impacts	Page 22, 25				
	2-14 Role of the highest governance body in sustainability reporting	Page 24				

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GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			
			REQUIRE-MENTLS(S) OMITTED	REASON	EXPLANA-TION	GRI INDUSTRY STANDARD REF. NO.
GRI 2: General Disclosures 2021	2-15 Conflicts of interest	Page 23				
	2-16 Communi-cation of critical concerns	Page 23				
	2-17 Collective knowledge of the highest gov-ernance body	Page 22				
	2-18 Evaluation of the perfor-mance of the highest govern-ance body	Page 22				
	2-19 Remunera-tion policies	Page 22				
	2-20 Process to determine remuneration	Page 22				
	2-21 Annual total compensation ratio	Page 22				
	2-22 Statement on sustainable development strategy	Page 6-7, 31-33				

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GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			
			REQUIRE-MENTLS(S) OMITTED	REASON	EXPLANA-TION	GRI INDUSTRY STANDARD REF. NO.
GRI 2: General Disclosures 2021	2-23 Policy com-mitments	Page 10, 52, 67, 74, 92				
	2-24 Embed-ding policy commitments	Page 10, 52, 67, 74, 92				
	2-25 Processes to remediate negative im-pacts	Page 23, 33				
	2-26 Tavsiye alma ve kaygı-ları dile getirme mekanizmaları	Page 29				
	2-27 Compliance with laws and regulations	Page 23				
	2-28 Member-ship associa-tions	Page 9				
	2-29 Approach to stakeholder engagement	Page 27-28				
	2-30 Collective bargaining agreements	Page 78				

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GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI INDUSTRY STANDARD REF. NO.
			REQUIREMENTLS(S) OMITTED	REASON	EXPLANATION	
Material Topics						
GRI 3: Material Topics 2021	3-1 Process to determine material topics	Page 30-31	**A gray cell indicates that reasons for omission are not permitted for the disclosure or that a GRI Sector Standard reference number is not available.**			
	3-2 List of material topics	Page 31				
Economic Performance						
GRI 3: Material Topics 2021	3-3 Öncelikli konuların yönetimi	Page 48-49				
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	Page 48-49, 114				
	201-4 Financial assistance received from government	Page 49				

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GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI INDUSTRY STANDARD REF. NO.
			REQUIREMENTLS(S) OMITTED	REASON	EXPLANATION	
Materials						
GRI 3: Material Topics 2021	3-3 Management of material topicsi	Page 52				
GRI 301: Materials 2016	301-2 Recycled input materials used	Page 54, 57				
Energy						
GRI 3: Material Topics 2021	3-3 Management of material topics	Page 92				
GRI 302: Energy 2016	302-1 Energy consumption within the organization	Page 92, 118				
	302-3 Energy intensity	Page 118				
	302-4 Reduction of energy consumption	Page 92				
	302-5 Reductions in energy requirements of products and services	Page 93-99				

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GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI INDUSTRY STANDARD REF. NO.
			REQUIREMENTLS(S) OMITTED	REASON	EXPLANATION	
Water and Effluents						
GRI 3: Material Topics 2021	3-3 Management of material topics	Page 102				
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	Page 102				
	303-2 Management of water discharge-related impacts	Page 102				
	303-3 Water withdrawal	Page 102				
	303-4 Water discharge	Page 102				
Emissions						
GRI 3: Material Topics 2021	3-3 Management of material topics	Page 100				
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	Page 118				
	305-2 Energy indirect (Scope 2) GHG emissions	Page 118				
	305-3 Other indirect (Scope 3) GHG emissions	Page 118				
	305-4 GHG emissions intensity	Page 118				
	305-5 Reduction of GHG emissions	Page 100- 101				

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GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI INDUSTRY STANDARD REF. NO.
			REQUIREMENTLS(S) OMITTED	REASON	EXPLANATION	
Waste						
GRI 3: Material Topics 20211	3-3 Management of material topics	Page 106				
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	Page 106				
	306-2 Management of significant waste-related impacts	Page 106 - 110				
	306-3 Waste generated	Page 119				
	306-5 Waste directed to disposal (incineration, landfilling etc.)	Page 107				

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GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI INDUSTRY STANDARD REF. NO.
			REQUIREMENTLS(S) OMITTED	REASON	EXPLANATION	
Employment						
GRI 3: Material Topics 2021	3-3 Management of material topics	Page 77-79				
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	Page 116				
	401-2 Benefits provided to full-time employees that are not provided to part-time employees	Page 78				
	401-3 Parental leave	Page 78				
Occupational Health and Safety						
GRI 3: Material Topics 2021	3-3 Management of material topics	Page 74-75				
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	Page 9, 74				
	403-2 Hazard identification, risk assessment, and incident investigation	Page 75				
	403-4 Worker participation, consultation, and communication on occupational health and safety	Page 75				

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI INDUSTRY STANDARD REF. NO.
			REQUIREMENTLS(S) OMITTED	REASON	EXPLANATION	
GRI 403: Occupational Health and Safety 2018	403-5 Worker training on occupational health and safety	Page 75				
	403-8 Workers covered by an occupational health and safety management system	Page 74				
	403-9 Work-related injuries	Page 117				
	403-10 Work-related ill health	Page 117				
Training and Education						
GRI 3: Material Topics 2021	3-3 Management of material topics	Page 82-83				
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	Page 82				
	404-2 Programs for upgrading employee skills and transition assistance programs	Page 83-85				
	404-3 Percentage of employees receiving regular performance and career development reviews	Page 78				

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI INDUSTRY STANDARD REF. NO.
			REQUIREMENTLS(S) OMITTED	REASON	EXPLANATION	
Diversity and Equal Opportunity						
GRI 3: Material Topics 2021	3-3 Management of material topics	Page 80				
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	Page 80, 115				
Customer Health and Safety						
GRI 3: Material Topics 2021	3-3 Management of material topics	Page 66 - 67				
GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	Page 67- 71				

Company Name:	Yünsa Yünlü Sanayi ve Ticaret A.Ş.
Trade Registration Office:	122890-0
Mersis Number:	0995-0030-6040-0017
Capital:	TRY 29,160,000
Tax Office and Registration Number:	Büyük Mükellefler 9950030604
Headquarter Address:	Yünsa Yünlü Sanayi ve Ticaret A.Ş. Ayazağa Mah. Azerbaycan Cad. 1B Blok No: 3B İç Kapı No: 52 Sarıyer/ İstanbul
Headquarter Phone:	+ 90 (0212) 365 65 00
Factory Address:	Yünsa Yünlü Sanayi ve Ticaret A.Ş. Çerkezköy Organize Sanayi Bölgesi Gazi Osman Paşa M. 2.Cadde No:9 Çerkezköy 59500 Tekirdağ / Turkey
Factory Phone:	+ 90 (282) 726 80 01
İstanbul Stock Exchange Transaction Code:	YUNSA
Web Site:	https://www.yunsa.com

(GRI 2-1)

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(GRI 2-3)

DISCLAIMER

The information and analyses contained in the YÜNSA sustainability report (hereinafter "report") have been compiled from resources and information deemed as accurate and reliable within the timeframe the report was prepared for informative purposes only, and not to be used as a basis for any investment decision.

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Bureau Veritas

Greenhouse Gases Verification Statement
for

YÜNSA YÜNLÜ SANAYİ VE TİCARET A.Ş.

ORGANISATION BOUNDARIES:

ÇERKEZKÖY ORGANİZE SANAYİ BÖLGESİ GAZİ OSMAN PAŞA M.
2.CADDE NO:9 59500 ÇERKEZKÖY/TEKİRDAĞ
VADİSTANBUL 1B BLOK KAT: 23 34396 AYAZAĞA İSTANBUL

Bureau Veritas Certification Turkey has verified the Greenhouse Gas Assertion of the above organization fort he 1st January 2022 to 31st December 2022 and found to be in accordance with the requirements of the standard detailed below

Standard

ISO 14064-1:2018

(as well as criteria given to provide for consistent operations, monitoring and reporting in) ISO 14064-3: 2019

Total Greenhouse Gas Emissions: **14,811.80 tonnes CO2-equivalent**
Direct Emissions-Category 1: **7,427.72 tonnes CO2-equivalent**
Indirect Emissions-Category 2: **0 tonnes CO2-equivalent**
Indirect Emissions-Category 3: **7,191.58 tonnes CO2-equivalent**
Indirect Emissions-Category 4: **192.54 tonnes CO2-equivalent**
Retirement Of YEK-G certificate for electricity: **27,448 MWh**

Emissions Due to Biomass combustion: **Nill**
Level of Assurance: **Category 1-2: Reasonable, Catogory 3-4: Limited**

Statement No : **TR012453**
Verification Report Reference: **CERTR.4803702.22.C45**
Issue Date: **03.05.2023**

İBRAHİM TAGAY
Certification Manager

BUREAU VERITAS

(GRI 2-5)

YUNSA YÜNLÜ SANAYİ VE TİCARET A.Ş.
Çerkezköy Organize Sanayi Bölgesi Gazi Osmanı Paşa M. 2.Cadde No:9 59500
Çerkezköy/TEKİRDAĞ

To whom it may concern,

This letter is presented to YÜNSA YÜNLÜ SANAYİ VE TİCARET A.Ş. to present opinion of the Bureau Veritas Certification Turkey on the Greenhouse Gases Verification for the period 1 January 2022 to 31 December 2022.

Bureau Veritas Turkey consent to release of this letter by you to the Carbon Disclosure Project in order to satisfy the terms of CDP disclosure requirements. Bureau Veritas Turkey not accepts or assumes any responsibility or liability on our part to CDP or to any other party who may Access to this letter or assurance report.

YÜNSA YÜNLÜ SANAYİ VE TİCARET A.Ş. commissioned Bureau Veritas to perform a verification of its 2022 GHG Inventory. The verification was performed on March 2023.

The GHG assertions verified were the following:

1. That the 2022 GHG Inventory for YÜNSA YÜNLÜ SANAYİ VE TİCARET A.Ş. has been developed in accordance with consistent industry practice, including ISO 14064-1:2018 Standard.
2. That the calculated total GHG emissions for the 2022 are 14.811,80 tons of CO_2e (Direct Emissions: 7,427.72 tCO_2e, Indirect emissions from imported energy: 0 tCO_2e (emission is 13.284.49 tCO_2e but 27448 MWh YEK-G certificate retired), Indirect emissions from transportation: 7,191.58 tCO_2e, Indirect emissions from products used by organization: 192.54 tCO_2e, Emissions Due to Biomass combustion: Nill) (the emission sources included for each source has been given in verification report)

The verification task was to form an opinion at a reasonable level of assurance about the above GHG assertion, regarding:

1. Conformance with the general requirements of ISO 14064-1:2018.
2. Reasonableness of the calculated emissions for the 01.01.2022-31.12.2022.

The verification performed by Bureau Veritas applied ISO 14064-3 International Standard for GHG verifications. The following verification activities were conducted:

1. Review of documentation, controls and methodologies, including other verification reports.
2. Assessment of risks and verification planning.
3. Assessment of documentation, controls and methodologies, including the facility quality management systems.
4. Documentation of verification findings and outstanding issues in verification report.
5. Assessment and documentation of resolutions to outstanding issues in verification report.
6. Issuance of verification statement and completion of verification.

GHG Assertion #1: The GHG inventory conforms to the general requirements of ISO 14064-1 Standard.

GHG Assertion #2: That the calculated total GHG emissions for the 2022 are 14.811,80 tons of CO_2e (Direct Emissions: 7,427.72 tCO_2e, Indirect emissions from imported energy: 0 tCO_2e (emission is 13.284.49 tCO_2e but 27448 MWh YEK-G certificate retired), Indirect emissions from transportation: 7,191.58 tCO_2e, Indirect emissions from products used by organization: 192.54 tCO_2e, Emissions Due to Biomass combustion: Nill) (the emission sources included for each source has been given in verification report)

View Declaration
As a result of the verification audit conducted on the basis of international standards, the 2022 greenhouse gas emission data disclosed in the Corporate Carbon Footprint Report were verified with Category 1 and 2 reasonable assurance, Category 3 and 4 limited assurance.

Verifier Opinion and Qualification:

Based on the process and procedures conducted, the GHG assertion is prepared in accordance with the requirements of ISO 14064-1:2018.

Based on the process and procedures conducted, the GHG assertion is materially correct and is a fair representation of the GHG data and information.

Date: *#6 May 2023*

Egemen Belet
Lead Verifier

İbrahim TAŞAY
Certification Manager

(GRI 2-5)

CREATION OF FABRICS

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