

2021

SUSTAINABILITY REPORT



TEKFEN HOLDING

## Table of Contents

<b>About the Report</b> .....	3
<b>1. “BRIDGING PROSPERITY”</b> .....	5
<b>Why “Bridging Prosperity”?</b> .....	5
<b>Message from the Chairman</b> .....	6
<b>Message from the President</b> .....	8
<b>About Tekfen Holding</b> .....	11
<b>Tekfen Holding's Sustainability Milestones</b> .....	17
<b>Highlights of 2021</b> .....	19
<b>Sustainability Vision</b> .....	20
<b>Megatrends</b> .....	21
<b>Contributing to the Global Agenda</b> .....	21
<b>Investor Perspective</b> .....	21
<b>Material Issues (Materiality Matrix)</b> .....	22
<b>Materiality Analysis</b> .....	22
<b>Tekfen's Priorities</b> .....	23
<b>Stakeholder Priorities</b> .....	23
<b>Material Issues</b> .....	23
<b>Sustainability Management</b> .....	24
<b>2. OPERATIONAL ROOTS</b> .....	27
<b>Economic Performance</b> .....	27
<b>Corporate Governance</b> .....	29
<b>Board Diversity</b> .....	29
<b>Corporate Memberships and Supported Initiatives*</b> .....	31
<b>Risk Management</b> .....	33
<b>Internal Audit</b> .....	36
<b>Business Ethics and Compliance</b> .....	36
<b>Compliance with the Principles</b> .....	36
<b>Training</b> .....	37
<b>Customer Loyalty</b> .....	38
<b>Operational Excellence</b> .....	40
<b>3. STRATEGIC DRIVERS</b> .....	43
<b>Climate Crisis</b> .....	43
<b>Net-Zero Economy</b> .....	43
<b>Management Structure</b> .....	44
<b>Climate Risks and Opportunities</b> .....	44

Climate Targets.....	46
Natural Resources and Waste Management.....	49
Water Management.....	49
Waste Management.....	51
Zero Waste.....	51
Biodiversity.....	52
Innovation.....	53
R&D and Innovation Culture.....	53
R&D Studies.....	56
Digitisation.....	61
Operational Efficiency.....	61
Digital Work Environment.....	62
Network and Internet Access Services.....	62
Cybersecurity.....	62
Employees and Society.....	65
Equal Opportunity and Diversity.....	66
Talent Management.....	66
Performance Management.....	67
Personal and Leadership Inventory Studies.....	67
Organisational Agility and Hybrid Work.....	67
Trainings and Leadership Programs.....	70
Employee Communication.....	72
Occupational Health and Safety (OHS).....	73
OHS Training.....	75
Social Investments.....	78
4.    APPENDIX.....	82
Communication Methods with Stakeholders.....	82
Performance Indicators.....	84
Environmental Performance Indicators.....	84
Social Performance Indicators.....	89
Occupational Health & Safety Indicators.....	91
Economic Indicators.....	92
Awards and Achievements.....	92
5.    GRI CONTENT INDEX.....	94

# About the Report

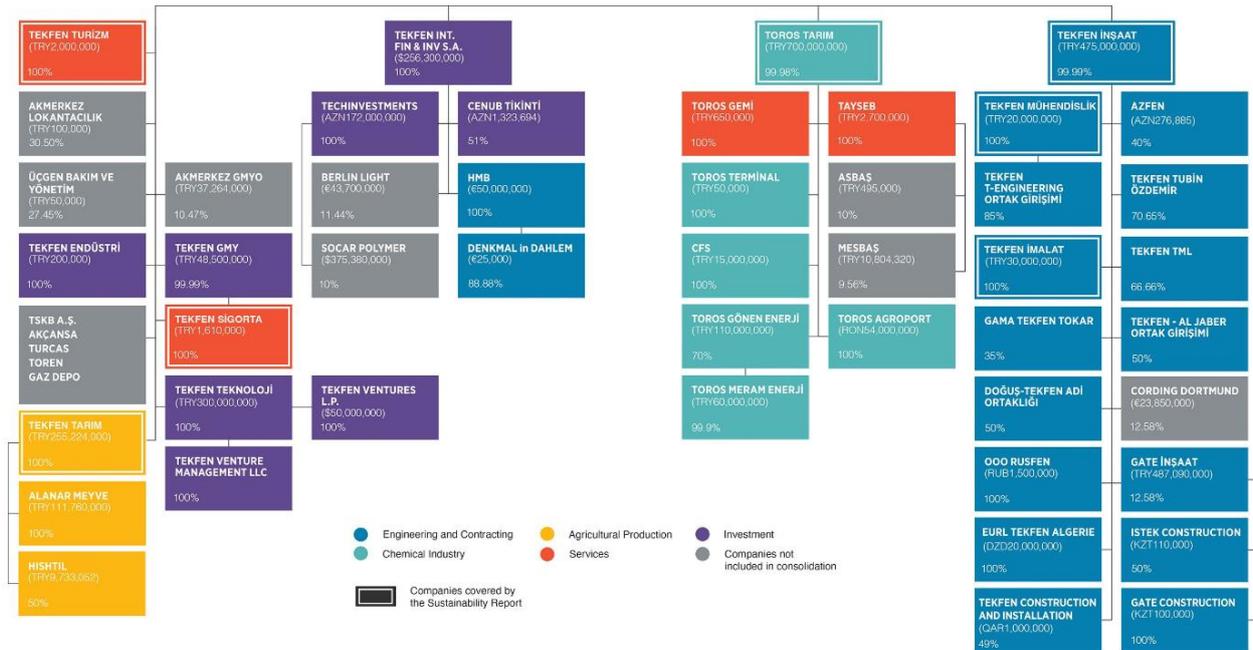
In Tekfen Holding Inc.'s (Tekfen) fourth annual sustainability report, the Company shares with the reader its vision of "Bridging Prosperity", its sustainability priorities, goals, and performance data.

This report has been prepared in accordance with the "Core" option of the GRI Standards. The report also includes information about the progress regarding the United Nations Global Compact.

Tekfen Holding adopts all of the Sustainability Principles published by the Capital Markets Board of Turkey (CMB), and information on the principles that are fully and partially complied with is included in the Company's Annual Report.

Aiming to fully comply with the Sustainability Principles Compliance Framework, Tekfen Holding also reports its detailed approach and performance in line with the Principles by means of this report.

(GRI 102-1, GRI 102-51, GRI 102-52, GRI 102-54)



## Scope

Covering the period between January 1 and December 31, 2021, this report for Tekfen Holding includes data from the Engineering and Contracting Group (Tekfen Construction/Tekfen İnşaat, Tekfen Engineering/Tekfen Mühendislik, Tekfen Manufacturing/Tekfen İmalat), Chemicals Industry Group (Toros Agri/Toros Tarım), Agricultural Production Group (Tekfen Agri/Tekfen Tarım), and Services Group (Tekfen Insurance/Tekfen Sigorta, Tekfen Tourism/Tekfen Turizm).<sup>1</sup> Investment Group (Tekfen Ventures) data are not included in the report, and the Group's good practices are included instead.

The Occupational Health and Safety (OHS) data included in the report covers the relevant workplaces and facilities of companies that are classified as hazardous and very hazardous by Occupational Health Safety principles and NACE codes. Subcontractors are included in all OHS data. The same rules apply and equal OHS opportunities are presented for all employees of Tekfen and its subcontractors, therefore the performance indicators for all employees are reported together. All environmental data include projects, workplaces, and facilities of companies which operationally controlled by Tekfen. For your inquiries, opinions and suggestions regarding the report, please contact us via [surdurulebilirlik@teufen.com.tr](mailto:surdurulebilirlik@teufen.com.tr).

(GRI 102-45, GRI 102-50, GRI 102-53)

---

<sup>1</sup> These companies account for approximately 95% of Tekfen Holding's consolidated turnover.

# 1. **“BRIDGING PROSPERITY”**

## Why “Bridging Prosperity”?

As Tekfen Group, we have been one of the building blocks of the Turkish economy with the values we created and jobs we have secured for 66 years. Since day one, our motto has been “do what you know best in the best way possible”, and this is how we have been in the pursuit of excellence in our fields of operation ever since. Today with the strong belief that “The future belongs to those who build it,” we continue our activities with a focus on a sustainable future and shape our business culture in line with people, social benefit, and the environment.

Both our core business lines of contracting and agriculture are fundamental in “Bridging Prosperity.” At the Engineering and Contracting Group, we contribute to the development of countries with infrastructure projects such as highways and pipelines, industrial facilities such as refineries and terminals, and superstructure projects such as stadiums and high-rise buildings. We build facilities and dwellings projects that meet the vital needs of societies and raise their living standards.

In the field of agriculture, we grow fresh fruits and provide our farmers with high-quality inputs such as our plant nutrients, disease-free seeds, seedlings, and saplings, which are all critical components for their productivity, and therefore the most basic elements of food security.

The buildings we design and build as part of our real estate activities offer safe, comfortable, and environmentally friendly living and working spaces to tens of thousands of people.

With the Tekfen Foundation, we provide scholarships to successful young students for a brighter future and contribute to social life with a focus on arts and culture.

We strive to build a brighter, more prosperous, and more sustainable future with all our activities, practices, priorities, and goals.

We regard human life as our top priority, and we aim to minimise our overall impact on the environment. We strive to constantly improve ourselves and make investments that will enable us to use our resources in the most efficient way possible. We closely follow the megatrends that are rapidly transforming our world, such as the climate crisis, population growth, demographic and social change, urbanisation, and technological developments. Besides integrating digital transformation and innovation into our business, we also allocate resources to initiatives that will enhance our activities with new technologies. We are proud to be setting an example for our industries with our good practices and remarkable performance in occupational health and safety.

As a group that serves the welfare and development of societies with deep historical roots, our primary responsibility is to become a pillar of a sustainable future. What better words than “Bridging Prosperity” to express our quest for sustainability!



## Message from the Chairman

Dear Stakeholders,

2021 has been a year of hope and disquietude around the globe. Fortunately, there were positive developments in 2021, such as the mass availability of vaccination, which helped mitigate the severe impacts of the COVID-19 pandemic, and the ensuing period of normalisation on the horizon. However, the rapid spread of the Omicron variant that occurred by the end of the year eradicated any hopes that the pandemic would soon be over, and once again, dragged the world into a state of uncertainty. The number of registered Coronavirus cases reached 278 million by the end of year and around 5.4 million people lost their lives due to the virus. The inequalities around the world in reaching healthcare services and vaccination, on the other hand, only served to prove how vital the goal to “reduce inequalities” is to achieve a sustainable future. According to the World Health Organization statement in September 2021, Africa had only a 2 percent share of the over 5.7 billion doses of vaccination around the world.

The pandemic also further highlighted the economic inequalities. The UN General Secretary Antonio Guterres once likened the Coronavirus to an x-ray, revealing fractures in the fragile skeleton of the societies we have built. According to the 2022 World Inequality Report, the gap between the lower and upper income levels only widened during the pandemic. The damage inflicted by climate change on livelihood, and the conflicts and forced migrations only worsened the situation.

The inflationary impact of extreme escalation in energy and commodity prices, on the other hand, stressed our economic management. The inflation reaching record-breaking rates by the year end in the US and the Euro region proved that the price rises during the pandemic are here to stay. This led the central banks, who had injected liquidity into the markets to support the economic activity during the pandemic, toward contractionary policies, thus heightening the global recession expectations.

The current situation indicates that the disrupted global balance will not easily settle back in and that the problems will not be overcome unless a stakeholder-based sustainable economic approach is adopted. Adopting an economic approach built on resource efficiency and the circular economy, that implements sustainable business models, supports savings rather than consumption, and generates value not only for a handful of shareholders but for all stakeholders undoubtedly requires an openness to changes and the collective efforts of all economic actors.

We believe that companies that fail to adjust to this transformation or refuse to build their business on sustainability will not survive in the future. At Tekfen, it is our primary goal in all our industries to lead this transformation. In our sustainability approach, we embrace transformative business models and draw on our experience and know-how in our industries to resolve global threats to our future with a particular focus on the climate crisis. Our Group companies progressively focus on sustainability by integrating digitalisation, innovation, environment, efficiency, and inclusiveness into their business processes through an environmental, social and corporate governance (ESG) approach.

The rejuvenation period that occurred with the Holding management takeover early in the first quarter aims to create, without compromising on Tekfen values, a dynamic, durable, competitive and sustainable

structure for Group companies that generates value for all stakeholders and is more confident towards the future.

I consider Turkey's signing of the Paris Agreement in 2021 to adopt the target of zero emission by 2053 a crucial step in taking its place in the new world order. The 217 recommendations concluded at the Climate Council, organized recently for the first time in Turkey, function as guidelines to our "Tekfen Net Zero Roadmap" launched in line with our medium- and long-term emission reduction goals.

We scored "A" at CDP's Climate Change and Water Security Programs for our successful initiatives in 2021 on the climate crisis and water. This success only inspires us to go further. Many global examples now prove that companies who respond rapidly and properly to the fluctuations of our times are more successful in overcoming difficulties and can create new opportunities to operate their business in a more sustainable structure. We believe our capacity to be a part of the change and not fear it will carry Tekfen Group Companies much further.

The Fourth Sustainability Report of Tekfen consists of a summary of our efforts to this end. I would like to take this opportunity to thank our valuable stakeholders and shareholders who always stand by our side in our transformation journey.

Sincerely,

Zekeriya Yıldırım  
Chairman of the Board

(GRI 102-14)

## Message from the President

Dear Stakeholders,

Our world has been undergoing a major transformation. The COVID-19 pandemic highlighted how inevitable and delayed the steps we must take have been if we are to achieve sustainability and a better future for our world. It also reaffirmed the need to speed up our processes. Due to the pandemic, which acted as a catalyst, the climate crisis and various other threats to our future have become more prominent in our agenda. Many of these major events were observed in 2021. We experienced downturns in the economy, social life, and the environment while battling the complications of the global pandemic.

In 2021, the climate crisis continued to manifest in extreme droughts and weather events. Turkey simultaneously experienced floods caused by extreme precipitation and extreme drought. The disastrous wildfires during summer months reduced 133,000 hectares of forest to ashes according to official data. The mucilage that resulted from years of unregulated sea pollution now indicates a serious threat to the marine life. Such events that we witness daily in the world are signs that we will have to pay higher prices every day unless we prioritize achieving harmony with nature.

On the other hand, social and economic sustainability issues remain pressing. As noted in the 2021 and 2022 Sustainable Development Reports, the regression in sustainable development all around the world prompted by the COVID-19 pandemic cannot be compensated for. While challenges in poverty, unemployment, social justice and equality, human rights, and access to services and food regress the living conditions of masses, developing countries with low income levels cannot protect themselves against these crises and their indirect implications as they lack sufficient financial resources. The constantly escalating environmental, social, and economic issues that we must now face are clear indications of the inevitable transformation.

Tekfen boasts an already bright history, and we consider this need for transformation an opportunity to write a new success story, or “the new story of Tekfen.” Sustainability presents a basis to our new story. Because we believe that any company that fails to generate value in the environmental, social, and corporate governance triangle is doomed to fail, let alone lead change.

In 2021, we laid the foundations for such a transformation while moving on with our sustainability journey. Our Group Companies in different industries implemented many innovations and investments throughout the year that will contribute to the green transformation. The LEED Platinum-certified FNN Sustainability Center launched in Adana, Ceyhan by Tekfen Construction is among these efforts. Another facility in the area is the Tekfen Construction’s Ceyhan Fabrication Facility, which, with the rooftop solar panels installed, meets 70 percent of its electricity needs through renewable energy sources.

As the global food crisis gains further importance and prominence, agriculture becomes a priority for sustainability. The war, extreme weather conditions, economic shocks, and the permanent implications of the COVID-19 pandemic also triggered significant issues concerning food access in 2021. The Global Food Crisis Report published over the recent months revealed that the number of people suffering from acute food insecurity broke an all-time record with 193 million people in 2021.

Our two Group companies directly affiliated with agriculture, Toros Agri and Tekfen Agri, both take substantial steps in sustainability and social development through R&D and product development activities. The Agripark R&D Center of Tekfen Agri conducts seed rehabilitation efforts to develop highly productive bread wheat species that are resistant to both drought and the different ecological conditions of our country. Toros Agri R&D Center, on the other hand, focuses on developing new, eco-friendly fertiliser types, promoting energy efficiency and reducing the environmental impact of manufacturing processes. Despite the restrictive measures imposed by the European Green Deal on fertilisers, Toros Agri continues its studies on special fertilisers to manage the risks and opportunities brought by changing market conditions.

Toros Agri has been working to raise awareness among farmers on proper fertilisation for years. As part of these efforts, the Toros Agri Training Bus, which has been on the road since 2008, visited 96 different locations to train farmers. The Agricultural Technical and Digital Marketing team roaming around Anatolia with specially equipped vehicles visited over 13,000 distributors and farmers to offer on-site solutions. As part of the Women Farmers Loan Project, another social investment project addressing farmers, Tekfen Foundation cooperated with Turkey Waste Prevention Foundation and Toros Agri to offer loan and education support to 80 low-income women farmers.

Our main goal in occupational health and safety, a major sustainability priority in our Group, is to ensure “zero accidents” in all our work places. In addition to carrying out field inspections to this end throughout 2021, we conducted educational activities to nurture a behaviour-focused security culture. We also organized nearly 515,000 person/hour training on Health-Safety-Environment and regained a substantial boost in HSE education rate that had dropped due to the pandemic.

Tekfen Construction operates in one of world’s highest risk industries in terms of occupational health and safety. The company sustained its below-industry average in Total Recordable Injury Rate throughout 2021. Achieving significant accident-free rates, Tekfen Construction merited the Health and Safety Award by IPLOCA for its “Operator Training Through Virtual Reality Equipment.” The company also launched the pilot version of its “3H Hazard Hunting Headquarters” project, which was designed as an applied HSE training site. As of 2021 year-end, a total of 479 HSE and 87 healthcare personnel were working in the Tekfen group, including the sub-contractors, indicating the importance attached to OHS across the Group.

Combatting the COVID-19 pandemic has been the key OHS focus across Tekfen Holding and all group companies in 2021. We organized a survey concerning our remote working system, which we were forced to switch to due to the pandemic. Following an 82 percent positive response from participants based on employee opinion and motivation, we opted to permanently incorporate a hybrid remote working system. Within this scope, we published remote working rules and launched the Remote Working Management System.

You can find out all details about the developments I briefly summarized above as well as our other progress in our Sustainability Report. Unlike in previous years, our sole motivation for publishing our report on digital platforms this year was to further reduce our environmental impact.

As we present the Fourth Sustainability Report by Tekfen Holding, I would like to thank all our stakeholders for their contributions and support on our journey.

Sincerely,

Ali Pandır  
President of Group Companies

(GRI 102-14)

## About Tekfen Holding

With foundations laid in 1956 by three civil engineers – Feyyaz Berker, Nihat Gökyiğit, and Necati Akçağlılar, Tekfen Group is one of the important building blocks of the Turkish economy with the value it adds and the jobs it creates. Traded on the BIST 30 Index and the BIST Sustainability Index, Tekfen Holding carries out its activities with 39 companies and 13 subsidiaries that are highly reputable in their respective industries, with operations in five main fields of activity: Engineering and Contracting, Chemicals, Agricultural Production, Services, and Investment. As one of Turkey’s most respected brands thanks to the values it stands for and the high recognition it enjoys, Tekfen Holding builds its culture of doing business on people, social benefit, and the environment, and continues its activities in line with the principle of growth by sustainable profitability.

(GRI 102-2, GRI 102-4, GRI 102-6, GRI 102-7)

### INFOGRAPHIC

5,953 Employees  
7,888 Suppliers  
10,278 Customers  
28 million TRY R&D Budget

### Engineering and Contracting Group

4,695 Employees  
3,350 Suppliers  
88 Customers

Tekfen Engineering and Contracting Group is one of the leading international representatives of the Turkish contracting industry with its 66-year history, nearly 17,000 employees and more than 550 projects to date. Boasting extensive experience in various industries, the Group serves as a sought-after solution partner for employers in the international market with its sustainability-oriented approach, uncompromising commitment to global quality standards, successful completion of projects of all scales, and diverse competencies.

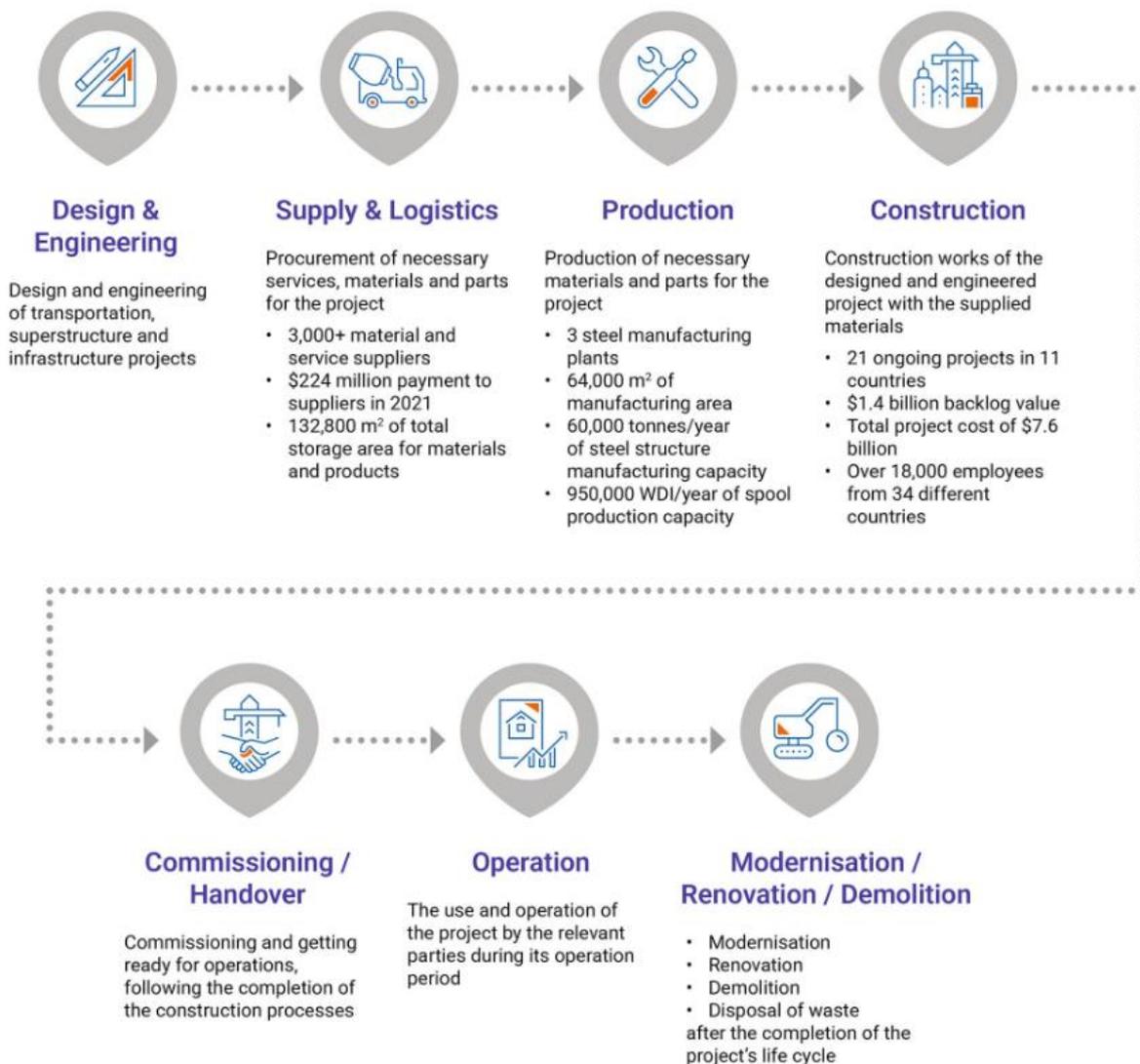
The Group has extensive experience in a wide range of areas and offers turnkey EPC (Engineering, Procurement, Construction) and Design & Build solutions to its customers for many areas, such as pipelines, oil and gas terminals, tank farms, oil refineries, offshore oil rigs, pump and compressor stations, power plants, industrial plants, petrochemical plants, highway and subway projects, sports complexes, and superstructure and infrastructure projects.

## **Tekfen Construction and Installation, Inc.**

As the Group’s flagship company, Tekfen Construction is one of Turkey’s most well-established contracting companies and a sought-after business partner around the world with its extensive experience, values, and competencies.

(GRI 102-2, GRI 102-4, GRI 102-6, GRI 102-7)

## **TEKFEN CONSTRUCTION VALUE CHAIN**



## **Tekfen Engineering, Inc.**

Founded in 1984 to undertake the engineering activities of turnkey projects, Tekfen Engineering is a solution partner capable of providing engineering, consultancy and supervision services for large-scale infrastructure projects that require special expertise with its strong staff of more than 400 employees.

## **Tekfen Manufacturing and Engineering, Inc.**

Tekfen Manufacturing was established in 1970 to provide engineering, manufacturing, and assembly services at international standards for storage and process equipment primarily for the oil & petroleum, petrochemical, and chemical industries, and also for industrial facilities, such as gas plants, iron & steel plants, and power plants. The company goes beyond Tekfen Group and provides services to international contracting companies and domestic and foreign industrial enterprises, with exports all around the world.

## **Chemicals Group**

827 Employees

2,039 Suppliers

4,878 Customers

704 Distributors & 510 Authorized Dealers

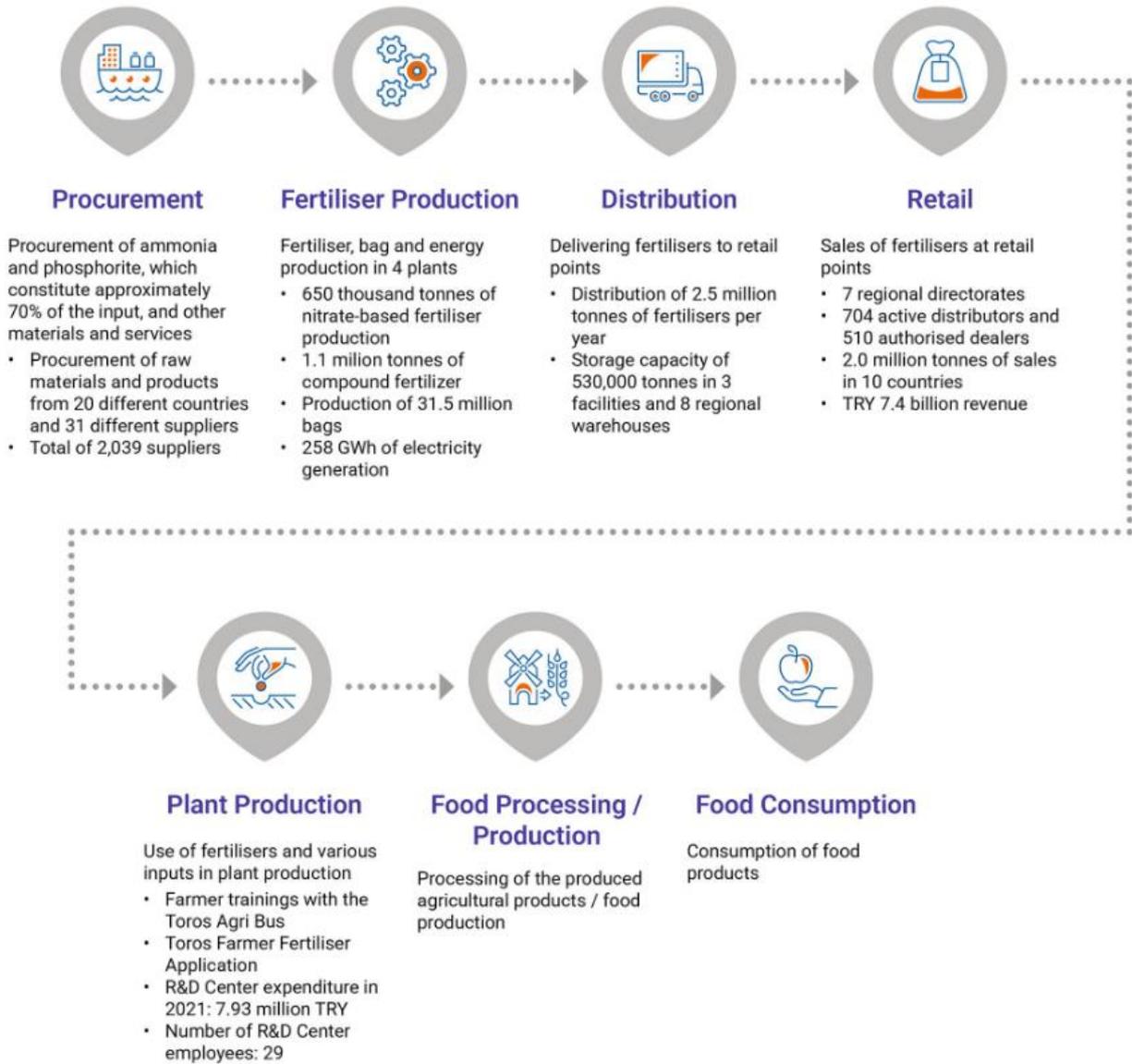
## **Toros Agri Industry and Trade, Inc.**

Focusing mainly on the production of plant nutrients (fertiliser), Toros Agri, the roof company of the Tekfen Chemical Group, continues its activities in the areas of special water-soluble fertilisers and organic/organomineral fertilisers as well as mineral fertilisers, Toros Agri holds 38% of Turkey's total installed capacity for the production of mineral fertilisers, and is ranked 57th in Turkey's Top 500 Industrial Enterprises in 2020 as announced by the Istanbul Chamber of Industry.

As part of its mineral fertiliser production activities, the company produces Ammonium Nitrate (AN), Calcium Ammonium Nitrate (CAN), Diammonium Phosphate (DAP), and compound (NPK) fertilisers at its three different factories located in Ceyhan, Mersin, and Samsun, inhibitor-added and water-soluble fertilisers at its Mersin facility, and the bags used in fertiliser packaging at its Adana bag plant. The company continues to produce organic and organomineral fertilisers at its production facility in Ceyhan, as well as at the Toros Gonen Renewable Energy Production, Inc. facilities acquired in 2019, and the Toros Meram Renewable Energy Production, Inc. facilities established in 2020.

[\(GRI 102-2, GRI 102-4, GRI 102-6, GRI 102-7\)](#)

## TOROS AGRI VALUE CHAIN



## Agricultural Production Group

156 Employees  
 2,002 Suppliers  
 559 Customers

### Tekfen Agricultural Research, Production, and Marketing, Inc.

Tekfen Agricultural Research, Production, and Marketing, Inc. was established in 2017 as the parent company of Tekfen Agricultural Production Group in order to bring a corporate perspective to agricultural production, which is vital for a sustainable future, and to transfer the Group's know-how in

the field of agricultural inputs to the agricultural industry with a scientific approach and financial strength.

Tekfen Agri exports most of its fresh fruit output with its Alanar Fruit brand, and also produces bread and durum wheat seeds, potatoes and potato seeds, and bananas and banana saplings by using its own seeds and saplings. When it comes to production diversity, Tekfen Agri is one of the world's top agricultural production companies.

(GRI 102-2, GRI 102-4, GRI 102-6, GRI 102-7)

## **Services Group**

173 Employees

497 Suppliers

4,751 Customers

Tekfen Services Group consists of companies operating in port management, free zone management, building and facility management, and insurance brokerage services. Group companies are focused on high customer satisfaction in every area and refer to some of the best practices in their respective industries.

(GRI 102-2, GRI 102-4, GRI 102-6, GRI 102-7)

### **Toros Shipping Agency and Trade, Inc.**

The Group's terminal services are carried out at the two terminals located in Toros Agri's production facilities in Ceyhan and Samsun and supported by services such as shipping brokering. As one of Turkey's first-generation private sector ports, Torosport Ceyhan holds an important place in the Gulf of Iskenderun for bulk cargo and general cargo. Similarly, the Torosport Samsun Terminal is suitable for the unloading of both dry and liquid bulk cargo handling.

### **Toros Adana-Yumurtalık Free Zone Founder and Operator, Inc. (TAYSEB)**

TAYSEB, one of the subsidiaries of Toros Agri, is the founder and operator of the Adana-Yumurtalık Free Zone, which is the first free zone to be established in Turkey for industrial enterprises. As of 2020, the operational period of TAYSEB, which is one of the largest free zones in Turkey with an area of 4.63 million square metres, has been extended until 2030.

### **Tekfen Tourism and Services, Inc.**

Tekfen Tourism and Services, Inc. which continuing its activities under "Tekfen Services" brand, is a company that specialised in asset and real estate management and that operates and manages Tekfen's various real estate projects, such as Tekfen Tower, Kağıthane OfisPark, Taksim Residences, Bomonti

Apartments, and Yalıkavak Tekfen Houses. The company also supports these projects with asset management, leasing, contract management, and strategic portfolio and revenue-raising activities.

### **Tekfen Insurance Brokerage Services, Inc.**

Tekfen Insurance, which was established in 1982 under Tekfen Holding, continues to serve as the agency of 18 leading insurance companies in Turkey and all around the world. In addition to Tekfen Group Companies, the company also provides services for all insurance needs of various companies operating in the construction, agriculture, engineering, banking, and manufacturing industries, as well as their individual customers.

## **Investment Group**

### **Tekfen Ventures L.P.**

Tekfen Ventures, the parent company of Tekfen Investment Group, is a corporate venture capital firm established in 2016 to seize the opportunities in the world of global entrepreneurship and to invest in early-stage tech startups. Tekfen closely follows innovative initiatives in industries such as contracting, construction, manufacturing, agriculture, fertiliser, and real estate. As of 2021, Tekfen's portfolio has 13 startups operating in various areas.

[\(GRI 102-2, GRI 102-4, GRI 102-6, GRI 102-7\)](#)

More information about the groups is available in Tekfen Holding's [2021 Annual Report](#).

## Tekfen Holding's Sustainability Milestones

<b>1992</b>	Tekfen Holding co-founds the TEMA Foundation (Turkish Foundation for Combatting Soil Erosion, Reforestation and the Protection of Natural Habitats).
<b>1993</b>	The first consolidated independent audit.
<b>1997</b>	Receipt of the first ISO 9001 Quality Management System Certificate.
<b>1999</b>	Tekfen Foundation for Education, Health, Culture, Arts, and Protection of Natural Resources (Tekfen Foundation) is founded.
<b>2002</b>	Receipt of the First Occupational Health and Safety Management System Certificate (OHSAS 18001).
<b>2003</b>	Tekfen Construction's Baku Sangachal Terminal project receives the BP HELIOS Award. <sup>2</sup>
<b>2004</b>	Tekfen Construction receives the International Pipeline and Offshore Contractors Association (IPLOCA) Environment Award. <sup>3</sup>
<b>2004</b>	Tekfen Construction is the first Group company to receive the ISO 14001 Environmental Management System Certificate.
<b>2007</b>	Tekfen Real Estate Development becomes a founding member of ÇEDBİK, the Association of Environment-Friendly Green Buildings.
<b>2007</b>	Tekfen Holding goes public.
<b>2010</b>	Tekfen Holding begins to monitor, measure and analyse its climate change data.
<b>2011</b>	Receipt of the first Green Building (LEED) Certificate with the Levent Office Project.
<b>2016</b>	First carbon-neutral meeting within the Tekfen Group is held.
<b>2016</b>	Tekfen Ventures is founded.
<b>2016</b>	Tekfen Holding is included in the BIST Sustainability Index.
<b>2017</b>	Sustainability Coordinator's Office & Sustainability Committee are established.
<b>2017</b>	Tekfen Construction receives the IPLOCA Social Responsibility Project Award. <sup>4</sup>
<b>2017</b>	First CDP Climate Change Report published.
<b>2017</b>	Tekfen Holding becomes a member of the Business Council for Sustainable Development Turkey (SKD Turkey).
<b>2018</b>	Signing of the 2018 UN Global Compact.
<b>2018</b>	First CDP Water Security Report is published.
<b>2018</b>	Priority issues with sustainability are identified via a stakeholder analysis.
<b>2018</b>	Toros Agri is the first Turkish company to receive the 'Protect & Sustain' Certificate from the International Fertiliser Association (IFA).
<b>2019</b>	Tekfen Holding publishes its first sustainability report in accordance with the GRI Standards.
<b>2019</b>	Working groups under the Sustainability Committee are established.
<b>2019</b>	Toros Agri is found worthy of the 'Industry Stewardship Champion' award by the IFA for its works in occupational health & safety, environmental management, product safety, and energy efficiency.

<sup>2</sup> Tekfen Construction has been awarded the 'Encouraging Social Development in Education and New Areas of Business' award by BP for its success in the Sangachal Terminal Expansion Programme (STEP) project.

<sup>3</sup> Tekfen Construction has received IPLOCA's 2004 Environmental Award for its Sangachal (Azerbaijan) and BTC (Ceyhan-Turkey) projects.

<sup>4</sup> Tekfen Construction has been awarded the 'Social Responsibility' award by IPLOCA for its efforts to improve the living and hygienic conditions of the seasonal agricultural workers located on the route of the TANAP Lot 3 Pipeline.

<b>2019</b>	Tekfen Holding takes its place among Turkey’s Climate and Water Leaders in the CDP’s Climate Change and Water Security Programmes based on 2019 data.
<b>2020</b>	Tekfen Holding is the only company from Turkey to be included in the Global “A” Lists of CDP’s both the Climate Change and the Water Security Programmes at the same time.
<b>2020</b>	A group strategy is created within the framework of the Creating Shared Value (CSV) Approach for activities focused on social investment.
<b>2020</b>	Tekfen Holding publishes its Policy on Combating Domestic Violence as part of the Business World Against Domestic Violence Project.
<b>2020</b>	Tekfen Agri is awarded in the “Collaboration” category of the 7 <sup>th</sup> Sustainable Business Awards for its ‘Developing National and Domestic Bread Wheat Varieties Using Ancestral Seeds’ project.
<b>2021</b>	The “Women Farmers Loan Project” was implemented through the cooperative efforts of the Tekfen Foundation, Turkey Waste Prevention Foundation (TISVA), and Toros Agri.
<b>2021</b>	Tekfen Construction launched its LEED Platinum-certified FNN Sustainability Center in Adana, Ceyhan.
<b>2021</b>	The remote working system, which was made mandatory during the COVID-19 pandemic, was made permanent in a hybrid system upon 82 percent positive feedback from employees.

## Highlights of 2021

- ✚ Tekfen focused on strategic planning for the climate crisis and established the “Tekfen Net-Zero Roadmap” to shape its plan for the transition to net zero.
- ✚ Tekfen Group Companies completed seven projects that will contribute to the reduction of emissions. Thanks to these projects, the group has saved approximately 10,000 MWh and nearly 2,1 million Turkish lira.
- ✚ Tekfen Holding was one of only three companies in Turkey and one of 118 companies worldwide to receive an A score in the CDP’s Water Security Program, which evaluated 3,368 companies from all over the world in 2021.
- ✚ Participating in the CDP Climate Change Program for the first time in 2017, Tekfen Holding became one of the Climate Leaders of Turkey by achieving an “A-” score in the CDP Climate Change Program in 2021.
- ✚ With the rooftop solar panels installed at Tekfen Construction’s Ceyhan Fabrication Facility, renewable energy sources meet 70% of the facility’s electricity needs.
- ✚ Nearly 28 million Turkish lira was invested in R&D across the Group. Additionally, 1 patent application and 5 utility model applications were made.
- ✚ The FNN Sustainability Center began operations in January at Tekfen Construction’s South Anatolia Main Repair and Maintenance Facility.
- ✚ Tekfen Ventures added two new companies to its investments. Mosaic focuses on technologies that will make the construction process more efficient in the residential construction sector. On the other hand, Avvir uses laser scans and artificial intelligence to detect construction errors.
- ✚ A total of 5,654 Group employees were given 23,062 person-hours of business ethics training.
- ✚ Put on the road as part of the project “Toros Farmer Academy”, the Toros Agri training bus visited 96 locations in 2021 and trained farmers and distributors on the correct use of fertilisers.
- ✚ Tekfen Foundation and Turkey Waste Prevention Foundation (TISVA) cooperated to launch the “Women Farmer Loan Project” to help women entrepreneurs who are willing to work in agriculture but lack the necessary financial resources to set up their own initiatives.

## Sustainability Vision

Tekfen's sustainability vision is embodied in Tekfen's motto "Bridging Prosperity." The primary goal of all its economic activities is to improve social welfare and quality of life for all members of society. Tekfen Holding's activities in engineering and contracting, chemistry, agricultural production, services, and investment industries directly overlap with the fundamental elements of social welfare, such as infrastructure services, access to food, energy, and shelter. Through its activities, Tekfen serves as a bridge that enables individuals to access the essential elements of a better life and better well-being, while laying the foundation for a sustainable future.

<b>STRATEGIC DRIVERS</b>	<b>OPERATIONAL ROOTS</b>	<b>ENABLERS</b>
<p>The climate crisis, employees and society, and innovation have been identified as Tekfen Holding's main strategic drivers for creating value, as they come with significant risks and opportunities in terms of sustainability.</p>	<p>These roots define the business approach and priorities of Tekfen Holding, which has been one of the engines of the Turkish economy for the past 66 years. Economic performance, corporate governance, and customer loyalty will continue to be the building blocks of the company's future.</p>	<p>Operational excellence, digitalisation, talent management, and occupational health and safety (OHS) stand out as the main tools that will facilitate the realisation of the "Bridging Prosperity" vision.</p>



## Megatrends

Megatrends such as rapid population growth, demographic and social change, urbanisation, technological developments, and climate crisis are currently shaping planet Earth, and they are leading to radical transformations in the business world as well. Tekfen’s “Bridging Prosperity” vision expresses the goal of responding to this change sustainably and flexibly, as it redefines the Group’s entire way of doing business.

## Contributing to the Global Agenda

Tekfen’s vision is to develop a sustainable business model that covers the entire value chain and contributes to the UN Sustainable Development Goals (SDGs). Set by the United Nations Development Programme (UNDP) to end poverty, protect our planet, and ensure that all people enjoy peace and prosperity, these 17 goals offer a global agenda to all parties from governments to local administrations and from the public sector to the business world. As one of the signatories of the United Nations Global Compact, Tekfen Holding aims to create shared value by building its sustainability vision on certain SDGs in line with its areas of activity.



## Investor Perspective

As sustainability gains traction around the world, more investors are starting to include the issue on their agenda. The exponential increase in the interest shown in sustainable investments is leading to significant changes in capital flows. Various sources state that investments in sustainable companies doubled year on year and reached \$4 trillion, while sustainable bond issuance surpassed \$1 trillion.<sup>5</sup> As we continue to see more regulations such as reporting of the TCFD (Task Force on Climate-related Financial Disclosures) and the TNFD (Task Force on Nature-related Financial Disclosures), investors expect companies to be more transparent with their environmental, social, and governance (ESG) performance.

To keep up with the global agenda, Tekfen Holding expands and improves the scope of its ESG approach and performance, as demonstrated in its annual sustainability reports. It also responds to the annual evaluations of various sustainability indices such as S&P Global, FTSE4Good, and BIST Sustainability Index. For the last two years, Tekfen has been included in the Global “A” List, which lists the highest scores

---

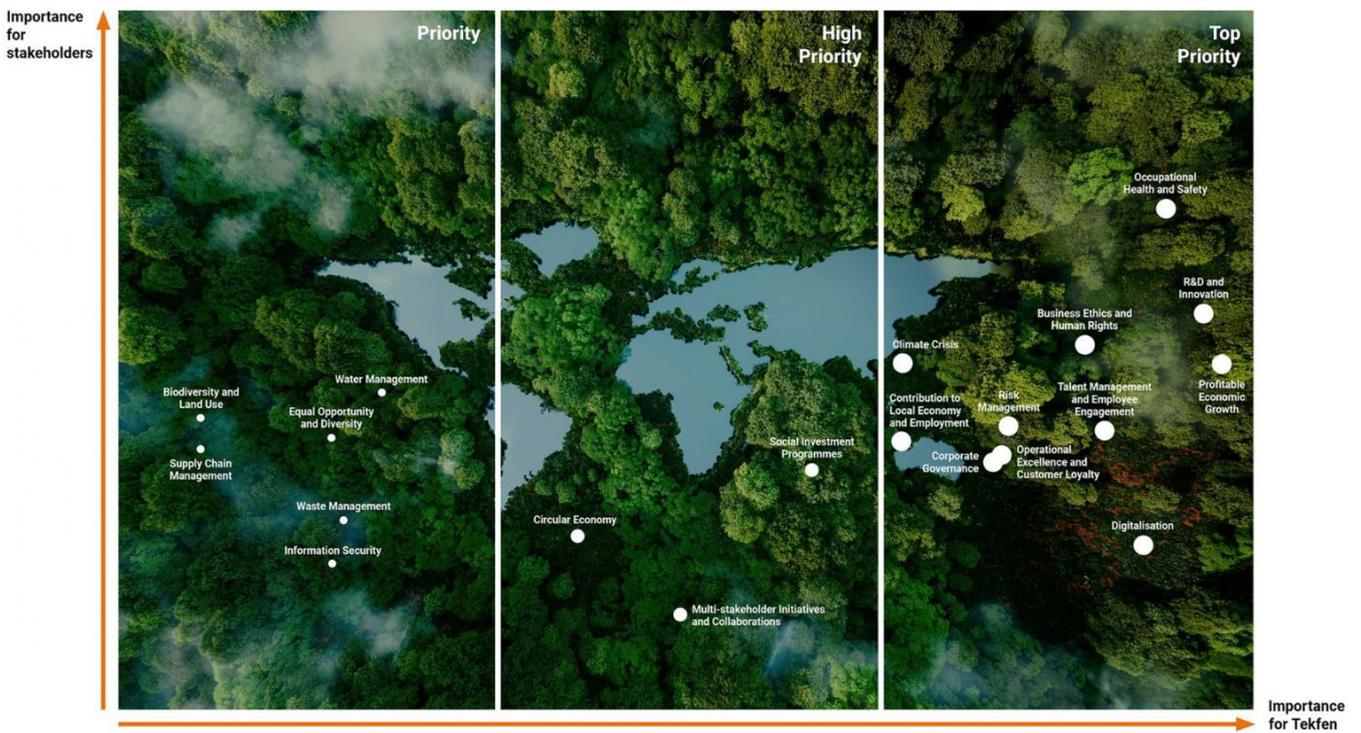
<sup>5</sup> <https://www.morningstar.co.uk/uk/news/216474/sustainable-assets-are-teetering-on-the-%244-trillion-mark.aspx#:~:text=Global%20sustainable%20fund%20assets%20almost,the%20third%20quarter%20of%202021.>  
<https://www.refinitiv.com/perspectives/market-insights/sustainable-finance-continues-surge-in-2021/#:~:text=The%20market%20for%20sustainable%20finance.of%20global%20debt%20capital%20markets>

in CDP's Climate Change and Water Security programs. It also supports global initiatives, such as the United Nations Global Compact and the UN Sustainable Development Goals.

(GRI 102-15, GRI 102-46, GRI 102-47)



### Material Issues (Materiality Matrix)



### Materiality Analysis

Materiality analyses are conducted in order to determine Tekfen Holding's strategic priorities for sustainability and to reveal the focus areas of the Sustainability Report. The intersections of the priorities of the stakeholders and those of Tekfen were determined with the Materiality Analysis covering the External Trend Analysis, the opinions of the Board members, strategic goals, and the Vision Workshop. Material issues are reviewed in light of external trends, risks, and opportunities.

## Tekfen's Priorities

Three different outcomes were included in the analysis in order to identify Tekfen Holding's priorities. These were:

- The outcomes of the Sustainability Vision Workshop held with the managers of the Group Companies,
- Opinions of the Board members,
- The objectives in the company's strategic plan and the outcomes of the Strategy Workshop.

## Stakeholder Priorities

Stakeholder priorities were determined through Stakeholder Analysis and External Trend Analysis.

- As part of the Stakeholder Analysis, Tekfen Holding's employees, customers, suppliers, solution partners, public institutions and regulatory authorities, analysts, investors, nongovernmental and professional organisations, the media, international organisations, and universities were asked about their priorities and their sustainability expectations from Tekfen through surveys. In 2018, about 50 percent of the surveys were answered, adding up to a total of 2,578 people. The Stakeholder Analysis was conducted by an independent consultancy company with reference to the AA1000SE Accountability Stakeholder Engagement Standard.
- With the External Trend Analysis, global and sectoral risks and trends were also included in the analysis, and subjects that are critical for the industries were determined.

## Material Issues

The shared priorities of the stakeholders and Tekfen Holding are mapped in the Materiality Matrix. Subjects defined as top priority indicate the sustainability issues that need to be managed before everything else. These subjects form the basis of the "Bridging Prosperity" vision. The focus areas of the "Bridging Prosperity" vision and the material issues are in alignment.

Tekfen's operational roots already cover some of these material issues, namely "Economic Growth," "Corporate Governance," and "Customer Satisfaction." "Occupational Health and Safety" stands out as the top priority for the relevant industries and is also one of the facilitators.

Looking at the priorities of each company;

- "Occupational Health and Safety" is one of the top priorities for Tekfen Construction.
- "Climate Crisis" is the top priority for Toros Agri and Tekfen Agri.
- "Customer Loyalty" is the top priority for Tekfen Tourism and Tekfen Insurance.

"Digitalisation" and "R&D and Innovation," megatrends with global impact, are also among the top priorities for Tekfen Holding. "Employee Development and Satisfaction" stands out as another major issue that will need attention in the coming period. "Climate Crisis," another major issue in the industries in which Tekfen Holding operates, is one of the top priorities on the materiality matrix map.

The “Climate Crisis”, “Innovation”, “Employees and Society” are Tekfen's strategic areas of value. While the Sustainability Report focuses on top material issues, it also covers highly priority and priority issues.

Material Issues	Report Title	Chapter Title	Section Number
<b>Profitable economic growth, contributions to the local economy and employment</b>	Economic Performance	Operational Roots	01
<b>Corporate governance, business ethics, and human rights</b>	Corporate Governance	Operational Roots	02
<b>OHS, talent management, and employee engagement</b>	Employees and Society	Strategic Drivers	03
<b>Climate crisis</b>	Climate Crisis	Strategic Drivers	01
<b>R&amp;D and innovation, digitalisation</b>	Innovation	Strategic Drivers	02
<b>Operational excellence and customer loyalty</b>	Customer Loyalty	Operational Roots	03

(GRI 102-42, GRI 102-43, GRI 102-44, GRI 102-46, GRI 102-47)

## Sustainability Management

The Sustainability Committee was established and authorized with the approval of the Tekfen Holding Board of Directors in 2017 in order to realise the vision of “Bridging Prosperity” at Tekfen. Operating under the Corporate Governance Committee, the Sustainability Committee consists of senior officers appointed by the CEOs of Tekfen Holding and Tekfen Group Companies (Tekfen Construction, Tekfen Engineering, Tekfen Manufacturing, Toros Agri, Tekfen Agri, Tekfen Tourism, and Tekfen Insurance). The Sustainability Committee is chaired by Tekfen Holding Deputy Chief Financial Officer.

The Sustainability Committee is responsible for creating the strategies, roadmaps, targets, policies, and reports necessary for the realisation of the “Bridging Prosperity” vision, integrating sustainability into business processes in line with the Holding's priorities, and ensuring the active participation of the Group Companies in these processes.

Consisting of 17 members, the Committee convened three times in 2021. At the meetings, information was shared on the good practices of the Group Companies for sustainability, and the roadmap progress made by the working group leaders. Additionally, the consultant was asked about the net-zero growth plans of world economies, global risks, net-zero investors and financing, growth in ESG funds, potential effects of the European Green Deal on the food and construction industries, Carbon Border adjustments, farm-to-table strategy, regenerative agriculture, and the importance and examples of long-term sustainability goals.

Five working groups were formed to support the committee. Members of these working groups were determined by the leaders of the groups in order to obtain the expertise and diversity required for the

implementation of the strategic sustainability roadmap. The groups convened regularly throughout the year and continued their activities in accordance with the relevant strategic sustainability roadmap.

Tekfen Holding Board of Directors is responsible for monitoring sustainability approach, targets, and performance development. The Corporate Governance Committee, which reports to the Board of Directors, is responsible for the execution of sustainability policies, and reports the activities of five working groups to the Board of Directors at least once a year, as well as its own activities. Sustainability issues are regularly discussed by the Corporate Governance Committee and the Board of Directors.

In 2021, we focused on the transition to a flexible working system, net-zero emission roadmap studies, and the development of internal reports. Progress targets related to the actions in the sustainability roadmap and key performance indicators on occupational safety and the environment are included in the company scorecard targets, which affect the annual performance evaluations of senior management (including the CEO) and employees.

### Sustainability Committee and Working Groups



## Work Issues



### HSE

- Setting and tracking targets
- Data verification
- Science Based Target (SBT) membership
- ISO 14064, 50001 certifications
- Internal carbon pricing
- Zero waste projects
- Life Cycle Analysis



### Employees

- Setting and tracking targets
- Leadership, coaching, and mentoring programmes
- Programmes in cooperation with universities to attract young talents
- Employee satisfaction and engagement
- Balance between work and private life



### Corporate Governance

- Ethics and compliance
- Human rights education, assessment and audit
- Supply chain management
- Risk management and sustainability risks



### Stakeholder Relations and Social Responsibility

- Membership in international initiatives
- GRI extension and verification
- Transition to integrated reporting
- Social projects that create common value
- Change theory and social impact analysis for projects



### Digitalisation and Innovation

- Open innovation platform
- Organising competitions
- Software development for performance and goal tracking

(GRI 102-19, GRI 102-20, GRI 102-18)

## **2. OPERATIONAL ROOTS**

Tekfen, which started its journey in 1956 as a small engineering and consultancy company, continues its operations as one of Turkey's top reputable holding companies and as part of the BIST 30 Index. The Group expands its high experience and knowledge in engineering, contracting, chemical, agriculture, investment, and services industries with values of reliability, honesty, and quality, and offers them to the economy, its stakeholders, and society. As reputable brands in their respective areas, the Group Companies lead their industries not only with their economic performance but also with their corporate structures and service standards. Economic performance, corporate governance, and customer loyalty, which form Tekfen's operational roots, are among the top sustainability priorities of the Group and are indispensable building blocks of its vision for the future.

### **Economic Performance**

In 2021, a year marked by reduced investments, Tekfen Holding aimed to respond to the rapidly changing global and local environment by focusing on its current field of activity.

For the international contracting industry, 2021 was mostly under the influence of the COVID-19 pandemic, just like 2020 was. Even though countries and the industry achieved partial economic recovery thanks to the widespread vaccination roll-outs, the disruptions caused by the pandemic, especially in the production and supply chains, continued to drag down the economy. Just like the entire industry, Tekfen Construction, which was adversely affected by the fall in oil prices towards the end of 2019 and the restrictive effects of the pandemic in 2020, focused primarily on completing the ongoing projects in the best way possible and expanding its portfolio with new projects in 2021.

The Chemical Industry Group, which specializes in the production of an essential input in agriculture, namely fertilisers, and the Agricultural Production Group, which operates directly in agricultural production, were both exposed to the negative effects of the pandemic. But they also benefited from a positive outcome associated with COVID—the increased significance of global agricultural activities. Fertiliser prices started to increase rapidly in 2021, especially in the second half. This weakened the farmers' purchasing power for fertilisers and caused the market to shrink.

The factors that affected the 2021 performance of the Group Companies can be summarized as follows:

- The uncertainty surrounding the macroeconomic indicators caused a slowdown in the supply of large-scale projects.
- Orders in the contracting industry started to weaken, which reduced revenue predictability.
- The pandemic continued to be a systematic risk factor in global and local economies.
- The rise in raw material prices stood out as a risk factor that may put pressure on profitability margins.

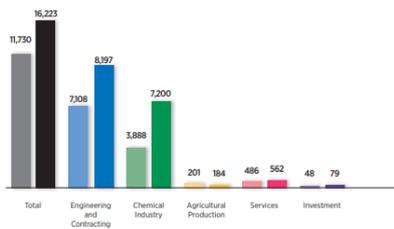
Factors that placed Tekfen Holding in a stronger position and reduced its financial risks:

- High credit quality supported cash-generating abilities.
- The balance sheet was strong thanks to satisfactory capital and cash levels, despite the deterioration in 2020.
- Foreign currency cash flows supported finances.
- Portfolio distribution was diversified enough to compensate for potential fluctuations in economic conditions.
- Strong position in the relevant sub-industries.
- High level of compliance with corporate governance principles.

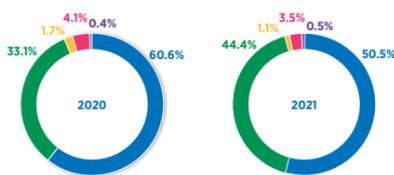
Tekfen supports the employment and development of the countries in which it operates with its economic contributions, boasting a local employment rate of 76%. Additionally, the Group Companies have a total of 7,888 suppliers, and 52% of all supplier payments are made to local suppliers.

(GRI 102-9, GRI 103-1, GRI 103-2, GRI 103-3)

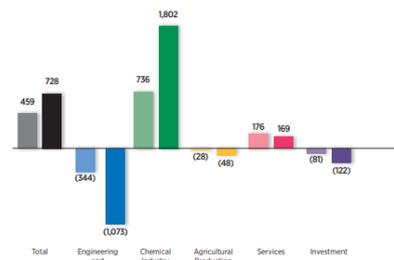
**Revenues** (Consolidated million TRY)



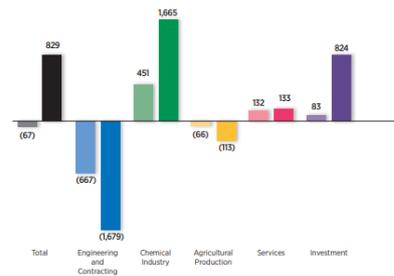
**Breakdown of Revenues (%)**



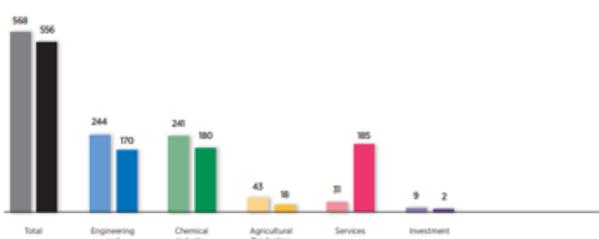
**EBITDA** (Consolidated million TRY)



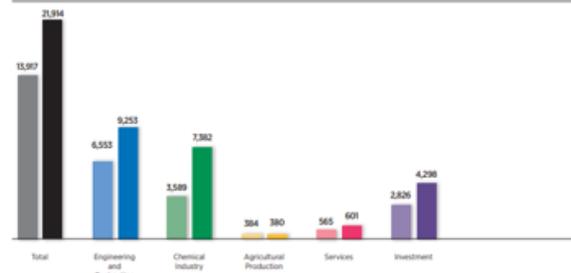
**Net Profit / Loss for the Year** (Consolidated million TRY)



**Investment** (Consolidated million TRY)



**Total Assets** (Consolidated million TRY)



(GRI 102-7, GRI 201-1)

## Corporate Governance

Tekfen Group has built its relations with management, partners, employees, and third parties on the principles of equality, transparency, accountability, and responsibility since the very first day. The Group regards its deep-rooted values, strong corporate tradition, and adherence to basic governance principles as indispensable elements of its existence. The Group strictly adheres to its corporate governance approach in order to protect the rights of shareholders and stakeholders at every step along the way.

With the change in Holding management in the first quarter of the year, the Group initiated a renewal process to review its structure in today's ever-changing environment and transform it into a more agile, durable, and sustainable organisation. To that end, the ongoing efforts to establish a lean and agile organisation have been accelerated, as the Group has embarked on an intensive planning process to establish the right business model that will give it the leading edge by utilizing its strengths.

Tekfen Holding's Board of Directors consists of 11 members, 4 of whom are independent. The Board of Directors has 4 female members, 2 of whom are independent. There are committees operating under the Board of Directors on issues such as establishing strategies and policies, monitoring compliance with action plans, and evaluating performance in order to ensure that the Board of Directors fulfills its duties and responsibilities duly. The Sustainability Committee, Audit Committee, Corporate Governance Committee, Early Detection of Risk Committee, and Remuneration Committee are responsible for meeting periodically and presenting their evaluations and reports to the Board of Directors. The duties of the Chairman of the Board of Directors and CEO are carried out by different individuals in line with the Corporate Governance Principles.

### Board Diversity

According to the "Women on Board Turkey 2021 Report"<sup>6</sup> prepared by the Sabancı University Corporate Governance Forum, the representation of female board members in the BIST 100, which lists Turkey's largest companies, decreased year on year and dropped to 15.3%. The representation rate stood at 17% for all BIST companies. The board members of 26 companies in the BIST 100 Index are all men. The ratio of female executives in Sustainability Index companies, which includes Tekfen Holding, stood at 16.9%. This rate was lower than expected, as it also fell below all BIST companies. Tekfen Holding, on the other hand, ranked high in the index with a female board representation rate of 36% in 2021, whereas the minimum target in the index was 25%.

More information about Corporate Governance is available on pages 181 to 202 in Tekfen Holding's [2021 Annual Report](#).

(GRI 102-18)

---

<sup>6</sup> [https://9thiwdconferenceinturkey.files.wordpress.com/2022/02/report\\_2021.pdf](https://9thiwdconferenceinturkey.files.wordpress.com/2022/02/report_2021.pdf)



**The average rate of women on the boards of BIST companies is 17%, compared to 36% at Tekfen Holding.**

## Corporate Memberships and Supported Initiatives\*

### Founding Memberships

			 TÜRKİYE EĞİTİM GÖNÜLLÜLERİ VAKFI
 Türkiye Üçüncü Sektör Vakfı Third Sector Foundation of Turkey	 Türkiye Aile Sağlığı ve Planlaması Vakfı	 KURUMSAL İLETİŞİMLER DERNEĞİ	

### Memberships

 Türkiye Kurumsal Yönetim Derneği Corporate Governance Association of Turkey	 TEİD Etik ve İtibar Derneği Ethics & Reputation Society	 United Nations Global Compact	 skdTürkiye
 TÜRKİYE MARİNE ENVİRONMEN DENİZTEMİZ TURMEPA PROTECTION ASSOCIATION	 TÜRKİYE TİCARET DENETİM ENSTİTÜSÜ 1995	 DEİK DIŞ EKONOMİK İLİŞKİLER KURULU FOREIGN ECONOMIC RELATIONS BOARD	 İSTANBUL KÜLTÜR SANAT VAKFI İKSİV
 SEARCH & RESCUE ASSOCIATION AKUT ARAMA KURTARMA DERNEĞİ	 EĞEP EĞİTİM VE GELİŞİM PLATFORMU DERNEĞİ		

## Affiliate Memberships

 <p><b>IPLOCA</b> INTERNATIONAL PIPE LINE &amp; OFFSHORE CONTRACTORS ASSOCIATION</p>	 <p><b>TÜRKİYE MÜTEAHHİTLER BİRLİĞİ</b></p>	 <p><b>İNTEŞ</b> 1964 İHHK İNSAT SAYIŞLIK KONTR SÖZLEŞME</p>	 <p><b>İFA</b> ULUSLARARASI HAKERESLİK ÖZETİMİ INTERNATIONAL TRADE ASSOCIATION</p>
 <p><b>Cedbik</b></p>	 <p><b>TÜRKLİM</b></p>	 <p><b>TRFMA</b> TİSİS YÖNETİM DERNEĞİ TÜRKİYE</p>	 <p><b>PETFORM</b></p>
 <p><b>TÜREB</b> TWEA TÜRKİYE RÜZGAR ENERJİSİ BİRLİĞİ TURKISH WIND ENERGY ASSOCIATION</p>	 <p><b>TSÜAB</b> TARIM SANAYİCİLERİ VE ÜRETİCİLERİ AİT BİRLİK</p>	 <p><b>füab</b> Fidan Üreticileri AİT Birliği</p>	 <p><b>bisab</b></p>
 <p><b>UIB</b> ULUDAĞ İHRACATÇI BİRLİKLERİ</p>	 <p><b>TOBB</b> TÜRKİYE İŞADAMLARI VE BORSACILARI BİRLİĞİ</p>	 <p><b>GYDER</b></p>	 <p><b>BIM4TURKEY</b></p>
 <p><b>OSSA</b> ÖSTİM SAĞLIKLA VE HAVACILIK KÜLTÜRÜNÜN</p>			

\* In 2021, dues of 1.75 million Turkish lira were paid to the trade associations and tax exempt groups of which Tekfen Holding and Group Companies are members.

(GRI 102-12, GRI 102,13)

## Risk Management

In addition to various uncertainties and transformations, the COVID-19 pandemic has also created unpredictable challenges for society, employees, company operations, and stakeholders, elevating the significance of risk and crisis management all over the world. Being able to run risk management processes correctly and effectively is the key to success in this environment of instability.

According to the [Global Risks Report 2022](#) published by the World Economic Forum, 42% of respondents to the global risk perception survey predict that uncertainty will remain over the next three years. Climate action failure, biodiversity loss, social cohesion erosion and infectious diseases are among the top 10 risks.

Due to the global nature of its core business areas, Tekfen Holding closely monitors cyclical developments in the world and implements effective risk management with a prudent management approach in order to identify risks accurately and in advance, measure their potential effects, and take the necessary measures. Group Companies act in coordination with Tekfen Holding and implement a uniform reporting method in order to manage potential risks in their own fields.

Risks are managed with a common risk management structure within the Group in accordance with the Committee of Sponsoring Organisations of the Treadway Commission (COSO) framework. Accordingly, the risks are identified, assessed (measured), answered (acted on), reported, and monitored in line with the department risk inventories of all Group Companies and as part of a bottom-up approach. Additionally, all risk inventories are thoroughly reviewed once a year through the activities carried out with the departments in order to ensure a comprehensive assessment of external risk factors. This maintains the dynamism of the risk management process and the principle of continuous improvement.

Tekfen Holding and Group Companies have written procedures on how to manage their own risks, and organisational structures have been established to carry out risk management and reporting activities. The risk reports created for each Group Company are submitted to the Holding after the approval of the relevant Board of Directors and to the Early Detection of Risk Committee, which convenes every two months, after being analyzed by the Risk Management Directorate.

The Early Detection of Risk Committee, which is chaired by an independent member of the Board of Directors, is responsible for bringing significant risks to the agenda of the Tekfen Holding Board of Directors, along with its own views and assessments concluded after examining the risk documents. Risks are evaluated at the highest level, and the appropriate measures are determined accordingly. Risk reports are also shared with the Independent Auditor.

Tekfen Holding addresses its risks under five main headings: financial, operational, strategic, reputational, and compliance. In addition to these headings, subjects such as climate change, water crisis, occupational health and safety, human rights, business ethics, compliance, business continuity, cybersecurity, the law on the protection of personal data (LPPD), and executive succession management are also monitored as part of risk management activities. You can learn more about climate and water risks in the “Climate Crisis” section.

(GRI 102-11)

Risk Type	Definition	Management Method
<b>Financial Risks</b>	<i>Collection risk (credit risk):</i> These are the risks for the full and timely collection of receivables.	Sales of goods and services against cash payment where possible, obtaining collateral from customers and asking for bank guarantee/surety, grading customers according to their risk.
	<i>Liquidity risk:</i> It is the risks of not having enough liquid assets to meet the liabilities that are due.	Working with a strong cash availability on a consolidated basis regular follow up of critical indicators for the maturity-matching of assets and liabilities in balance sheet management, paying due attention to balancing trade receivables and trade payables and stock management policies, keeping the financing need at a low level by working with a strong equity structure.
	<i>Market risks:</i> Financial losses that may be incurred as a result of the fluctuations in market parameters.	Using derivatives for hedging against currency risk, making efforts to pre-fix the purchase prices for raw materials and materials that will be needed for the production of goods and services.
<b>Operational risks</b>	Cover the risks that may arise during the operational processes of all functions of each Tekfen company in the all sectors. Risks related to issues such as business continuity, information security, disasters, environment and occupational safety, human resources, supply chain and production, and project management are managed within this context.	In principle, the measures to be taken regarding the management of these risks are considered to be an integral part of the work of the departments that carry out the activity at the first stage. "Unified Regulations" (UFRs), published by Tekfen Holding, regulates the basic rules that companies must follow while conducting their business. In addition, , operations are constantly audited by the internal audit departments within the Holding and Group Companies, both according to the companies' own regulations and UFRs, and operational risks are reviewed to check whether they are properly managed or not.

<b>Strategic risks</b>	Risks that will affect the realisation of the company's long-term goals and services are managed within this context. These are the issues arising from macroeconomic, political, demographic, social, environmental, and similar factors in Tekfen's operating regions, sustainability risks such as the climate crisis and the water crisis, and risk related to industry and competitive trends, internal resource allocation, entry into new fields of business, mergers and acquisitions, product development processes, and business opportunities.	These issues are evaluated and followed by the Board of Directors, senior management, and the expertise committees and created under them, and necessary actions are taken. If deemed necessary, services are obtained from consultancy firms with proven international competence and expertise.
<b>Reputational risks</b>	Issues that may harm the company's reputation are managed within this context. These are risks that may have an adverse effect on the company and potentially have a negative impact on employees, customers or other stakeholders due to errors or malicious acts that may arise from both internal and external factors.	Reputation is regarded as an important intangible asset for Tekfen Group Companies, and the focus of reputation risk management is on stakeholder relations and communication, as well as on corporate image management. In this context, reputational risks are managed vis-à-vis shareholders, customers, suppliers, employees, and society through corporate communication and corporate governance activities.
<b>Compliance risks</b>	Risks arising from intentional or unintentional non-compliance with the legislation, contracts, or the company's internal guidelines are managed within this context	In order to manage the risks that may arise from behaviours that do not comply with national and international legislation, internal procedures, and ethical rules, the Legal and Compliance units in the Holding and Group Companies continue to work in coordination with the relevant operational units for each subject. In addition, an important step was taken regarding the management of compliance risks with the "Ethics Hotline", which became operational in 2018.

## Internal Audit

Internal Audit activities for Tekfen Contracting and Agri-Industry Groups are carried out by the Group's relevant Internal Audit teams. Tekfen Holding Group Internal Audit Directorate audits all companies within the Group and all units of these companies. Tekfen Holding Group Internal Audit Directorate is also responsible for the execution of all Internal Audit activities required in accordance with international standards and uniform intra-Group practices. Internal Audit departments report to the Company's Board of Directors through the Audit Committee in order to ensure that Internal Audit activities are carried out independently and impartially. Efforts to improve internal control systems are carried out under the coordination of the Holding Group Internal Audit Directorate. Evaluation of the effectiveness and efficiency of the internal control system is carried out by the relevant Internal Audit teams.

Tekfen Group Internal Audit departments are responsible for examining the functioning of internal control, risk management and corporate governance processes as a whole and for sharing the results of their activities with the relevant Audit Committee Members. Internal Audit activities are carried out in accordance with International Internal Audit Standards, relevant laws, and regulations.

## Business Ethics and Compliance

The business ethics lies at the foundation for Tekfen's way of doing business. The Group ensures a responsible approach towards customers, employees, shareholders, suppliers, business partners, competitors, the environment, and society in accordance with the business ethics adopted by all employees, based on integrity, the confidentiality of private information, conflict of interest, and compliance with laws and regulations. Accordingly, the company's standards have been put into writing through policies and shared with all stakeholders. In 2020, seven new company policies were established under the leadership of the working groups, and all policies were shared with all stakeholders on the Tekfen Holding website under the "[Policies](#)" section.

Tekfen Holding does not favor any political opinions or institutions. As detailed in [Tekfen Construction's Business Ethics and Anti-Bribery and Anti-Corruption Policy](#), supporting politicians or political parties and making payments to political parties, organisations, and their representatives are strictly prohibited.

## Compliance with the Principles

All notifications regarding ethical violations can be made anonymously in Turkish or English via the "Ethics Hotline" commissioned group wide in 2018, by calling +90-212 257 0 110, sending an email to [etikhat@tekfен.com.tr](mailto:etikhat@tekfен.com.tr) , and visiting a [web site](#). All channels are available 24/7 and notifications are collected by an independent company. Tekfen Holding has an Ethics Committee, which is chaired by a Member of the Board of Directors and includes the Internal Audit Director. Notifications for Tekfen Construction also can be made by sending an email to [ethics@tekfен.com.tr](mailto:ethics@tekfен.com.tr) or by using the [form](#) on.

All Group Companies have a Compliance Officer and a Compliance Committee appointed by the company's Board of Directors. These individuals and committees work in cooperation with the Ethics Committee and report to both the Company's Board of Directors and the Tekfen Holding Ethics

Committee every month. All notifications made to the Ethics Hotline are evaluated by the Ethics Committee according to ethical and disciplinary rules. In 2021, a total of 98 notifications were received through all ethical reporting channels, and 69 of them were resolved within the year. There were no notifications or penalties related to corruption or bribery during the reporting year.

**Tekfen Construction was deemed worthy of the Ethics and Compliance Award by BP for its adherence to ethical principles and the support of its senior management.**

## **Training**

Business ethics training is important for ensuring compliance with the principles and establishing an in-house ethical culture. A total of 5,654 Group employees were given 23,062 person-hours of business ethics training in 2021. The training includes discussions of anti-corruption and anti-bribery. In order to raise the business ethics awareness, Tekfen Construction informs its employees every month on various issues, such as behaviour in the workplace, equality of opportunity, conflicts of interest, and competition laws.

Engineering and Contracting Group employees receive training on the Code of Business Conduct and Anti-Bribery and Anti-Corruption Principles upon being hired and sign a letter of commitment stating that they have read and understood these principles. Additionally, refresher training on ethical values is conducted every year at the center and on a project basis under the supervision of the Compliance Officer or the Project Compliance Representative.

Tekfen requires its subcontractors and suppliers to adopt its values and way of doing business and conducts merit assessments in order to encourage its subcontractors and suppliers to train their employees on these subjects.

[\(GRI 102-16, GRI 102-17, GRI 103-1, GRI 103-2, GRI 103-3, GRI 205-2, GRI 205-3\)](#)

## Customer Loyalty

Tekfen Holding continues to provide the highest level of service to maintain the strong bond it has established with its customers and clients. Tekfen Group Companies conduct annual customer satisfaction surveys to ensure close and regular monitoring of customer satisfaction.



A total of 141 customer complaints were received in 2021 with all answered and 135 resolved. There have been no breaches in customer data confidentiality.

### Tekfen Construction

Tekfen Construction cares about what its clients think, taking the necessary steps to ensure sustainable customer satisfaction. Tekfen Construction receives customer feedback through non-compliance reports obtained from employer representatives in the field and regular customer satisfaction surveys.

Relevant project departments perform a root cause analysis on the non-compliance reports, and action plans are determined to correct the non-compliance. These action plans include both the resolution of the relevant non-compliance and the measures to prevent it from reoccurring. The number of non-compliance reports and the timely conclusion of said reports are among the quality performance indicators of the projects. To that end, monthly reports are made to the headquarters, and activities are carried out to ensure that all complaints are resolved before the end of the relevant project. Additionally, collected feedback is evaluated annually with the participation of the senior management, and suggestions are made for improvement. Tekfen Construction received 208 non-compliance reports in 2021 with all resolved.

The Tekfen Construction General Directorate Quality Department conducts client satisfaction surveys twice a year for employers to evaluate the project management system of existing projects, and all feedback is evaluated annually with the participation of senior management. In 2021, two customer satisfaction surveys were conducted in the first half (January-June 2021) and the second half (July-December 2021) of the year. Responses were received from 21 customers in 7 ongoing projects and Ceyhan Fabrication Facility in the first half and from 23 customers in 6 ongoing projects and Ceyhan Fabrication Facility in the second half. Completed projects were not included in the survey. The customer satisfaction rate in 2021 exceeded the 85% target, averaging 88.23% for the year (88.10% in the first half and 88.36% in the second half).

## **Toros Agri**

Toros Agri aims to expand its current portfolio, closely follow innovations, and assist the end user in obtaining higher quality products and efficiency, as well as maintain and improve its well-established and effective communication with all customers and farmers. Distributors and authorized dealers also play a key role in determining their needs and ensuring customer satisfaction. Accordingly, the company maintains close contact with its distributors through regular visits and meetings.

Toros Agri analyzes product samples taken every two hours at its production facilities in its laboratories and constantly monitors the compliance of its fertilisers with quality standards. Notifications received from distributors and farmers regarding product quality are examined on-site when necessary. If the complaint regarding quality is justified, the product is returned, and the necessary steps are taken to resolve the quality issue quickly by investigating its cause.

### **In 2021:**

- The Toros Agri training bus visited 96 locations and trained farmers and distributors on the correct use of fertilisers.
- Across the country, 5,398 distributor visits, 7,975 farmer discussions, 184 agricultural institution visits, 1 drone activity, and 20 farmer meetings were conducted.
- As part of the social investment project carried out in cooperation with the Tekfen Foundation and the Turkey Waste Prevention Foundation (TİSVA), 2,500 farmers were reached.
- During the production season, 15 demonstration trials were performed in 7 regions.
- Using the Toros Farmer Application, 13,674 fields of 11,209 farmers were registered.

You can learn more about the related projects and practices in the “Social Investments” section.

## **Tekfen Engineering**

Tekfen Engineering improves its Quality Management System effectiveness with the participation of all employees and ensures effective customer management in its projects. Customer management is monitored from top to bottom through weekly and monthly project management meetings. In these meetings, senior management and project managers come together and decide on strategies for customer management.

In order to ensure and measure customer satisfaction, a client satisfaction survey form is shared with customers, and the results are evaluated accordingly. Customer meeting records, feedback on the quality of the delivered product and service, requests and complaints, and satisfaction/dissatisfaction are recorded, monitored, and evaluated at management review meetings, along with all communications regarding product changes.

Tekfen Engineering records its findings in the “Tekflow” findings system in case of non-compliance, including complaints from stakeholders and in-group audits, and shares them with the customer when necessary. Root causes of non-compliance are identified, actions to eliminate root causes and prevent recurrence of non-compliance are determined, corrective actions are taken, and the effectiveness of the corrective actions implemented are reviewed. Instances of non-compliance, corrective actions determined according to the relevant causes, and the results of these corrective actions are documented and preserved.

**In 2021, 44 employees were given customer relationship management training.**

## **Operational Excellence**

Tekfen's operational excellence approach consists of four elements:

- Systematising and perfecting all processes in line with international standards and industry good practices.
- Making operational excellence a part of Tekfen's culture with the goal of lean production, management of quality processes, effective and efficient use of resources, and continuous improvement.
- Continuously improving the quality of services offered to customers with the goal of long-term sustainable growth.
- Improving efficiency while reducing costs, increasing employee and customer loyalty, and reducing the environmental impact of operations.

Tekfen Holding and its group companies conduct all their operations following international standards, and all group companies implement quality, occupational health and safety, environment, energy, and information security management systems. The effectiveness and adequacy of the practices are regularly monitored and evaluated through internal and third-party audits. According to the evaluation results obtained, areas for improvement are determined and corrective measures are taken.

The management certificates of Tekfen Holding and Group Companies are listed in the table below:

Management Certificates	Tekfen Construction	Tekfen Manufacturing	Tekfen Engineering	Toros Agri	Tekfen Agri	Tekfen Holding	Sales Revenue Share
ISO 9001 Quality Management Systems	X	X	X	X	X		93%
ISO 14001 Environmental Management Systems	X	X	X	X			92%
ISO 45001 Occupational Health and Safety Management System	X	X	X	X			92%
ISO 27001 Information Security Management System	X	X		X		X	91%
ISO 50001 Energy Management System				X			42%

## Toros Agri

As Turkey's largest fertiliser producer, Toros Agri focuses its operational excellence goal on subjects such as lean production, productivity and quality increase, savings, and Occupational Health and Safety.

### ***6- Sigma Green Belt Projects***

6-Sigma is a methodology for achieving process excellence. Toros Agri completed its first 6- Sigma Green Belt process in 2020 and its second, in 2021.

In 2021:

- 16 candidates were involved in the second process.
- Fourteen 6-Sigma Green Belt projects were initiated, and a potential income of 2.64 million TRY was achieved.
- During the training process consisting of four modules, 216 hours of coaching support was provided to the Green Belt candidates for 2,016 person-hours of training and projects. Those who completed their projects and presentations received their Green Belt certificates.

### ***Lean Manufacturing Activities and Practices***

In 2021, Toros Agri focused on energy savings for its projects conducted as part of the philosophy of lean manufacturing and continuous improvement (Kaizen) and carried out numerous studies on energy savings for all units.

86 Kaizen projects were started in 2021 for continuous improvement. Toros Agri achieved a potential revenue of 3.5 million TRY in 2021 with its 6-Sigma Green Belt and lean production projects.

### ***“Protect & Sustain” Excellence Certification***

As the first and only company in Turkey to receive the Protect & Sustain certificate by the International Fertilizer Association (IFA) in 2018 for its OHS, environment, product safety, and security practices, Toros Agri maintained its “excellence” status in 2021.

### **Tekfen Construction**

At the beginning of each year, Tekfen Construction determines quality performance criteria such as error rates, repetitive work volumes, field test results, non-compliance, and material loss on a project/workplace basis by considering the scope of activities of projects and workplaces and customer expectations. The criteria are monitored monthly, and cumulative values are calculated at the end of the year.

Activities for quality purposes are carried out based on continuous improvement. Tekfen Construction's quality performance was 91.6% in 2019, 89.7% in 2020, and 97.3% in 2021.

One of Tekfen Construction's key efficiency advantages is the digitisation of project processes. In 2021, approval processes in steel works and quality control processes were carried out via mobile devices, which improved efficiency and reduced costs. The entire physical archive was transferred to digital media in 2021, which marked a major step towards accessing the required documentation faster and at a lower cost.

### **3. STRATEGIC DRIVERS**

Tekfen Group's main drivers of focus for ensuring its existence well into the future are defined as "Strategic Drivers" in its Sustainability Strategy. The three main headings determined in this context, "Climate Crisis," "Innovation," and "Employees and Society," are also the main subjects of the global sustainability agenda.

#### **Climate Crisis**

The environmental, social, and economic impacts of the climate crisis are worsening with each passing day globally. Climate action failure ranks first among long-term threats in the Global Risk Report 2022 published by the World Economic Forum. This risk is also seen as the one with potentially the most devastating effects for the next 10 years.<sup>7</sup>

According to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), if there is no measurable reduction in greenhouse gas emissions in the next 30 months, the effects of climate change will increase further, and the surface temperature will rise by 1.5°C or even 2°C during the 21st century. The same report points out that, should the current policies continue, global warming will increase by 2.2°C to 3.5°C in 80 years.<sup>8</sup>

Combating the climate crisis requires scientific planning and roadmaps. Extreme weather events, which were prominent in our country in 2021, are causing drought and deterioration of biodiversity. Climate change, which also negatively impacts access to basic needs such as food, energy, and water, threatens all living things on the planet.

(GRI 103-1, GRI 103-2, GRI 103-3)

#### **Net-Zero Economy**

Net-zero emissions is a global target aimed at tackling climate change by 2050. According to a KPMG report on this, reaching the net-zero target will only be possible if the public, private, and financial sectors work together, and consumers become more aware of the issue.<sup>9</sup>

As of 2022, the global emissions of 132 countries that have set net-zero targets amount to 88% of total global emissions. Turkey aims to achieve net-zero emissions by 2053.

The most ambitious global initiative in setting net-zero targets is the European Green Deal, which offers comprehensive legislation on the subject. Presenting a new economic growth strategy in the face of the climate crisis, the Green Deal is a plan that aims to make the European Union climate neutral by 2050 and

---

<sup>7</sup> WEF, 2022, The Global Risks Report 2022: <https://www.weforum.org/reports/global-risks-report-2022/>

<sup>8</sup> Climate Change 2021: The Physical Science Basis <https://www.ipcc.ch/report/ar6/wg1/>

<sup>9</sup> KPMG; Net Zero Readiness Index 2021 <https://home.kpmg/xx/en/home/insights/2021/09/net-zero-readiness-index.html>

offers a significant opportunity for the transition to a net-zero economy. The Carbon Border Adjustment Mechanism, established as part of this plan and planned for implementation in 2023, foresees taxation per metric ton of greenhouse gases emitted during the manufacturing of products exported to the EU. The scope of the border tax system, which will apply to industries such as iron, steel, cement, fertiliser, aluminum, and electricity, will be gradually expanded. Companies with EU commercial relations are expected to be significantly impacted by the Carbon Border Tax. Minimizing these risks and turning them into opportunities will only be possible if the private sector creates plans and strategies suitable for new conditions by making the necessary investments and performing appropriate research.

With the ratification of the Paris Agreement by the Grand National Assembly of Turkey, the climate change agenda in our country is now being handled more comprehensively by all stakeholders. The Climate Council held in February 2022 helped with this by reconsidering Turkey's climate change vision with the understanding of “green transformation” in line with developing and changing conditions.

In line with developments in the world and our country, Tekfen Holding has accelerated its efforts to achieve net-zero emissions by 2050.

[\(GRI 103-1, GRI 103-2, GRI 103-3\)](#)

## **Management Structure**

The ultimate responsibility in combatting climate change rests with Tekfen Holding's Board of Directors, which approves all decisions taken regarding the climate crisis. Setting targets, determining the budget for reducing greenhouse gas emissions, managing risks and opportunities related to climate change, and internal carbon pricing are some issues and decisions discussed by the Board of Directors.

The Environment Working Group monitors climate-related targets and actions and reports to the Sustainability Committee. Reporting to the Corporate Governance Committee, the Sustainability Committee is responsible for creating the strategies, roadmaps, targets, policies, and reports necessary for the climate crisis, one of the main aspects of the “Bridging Prosperity” vision, integrating sustainability into business processes in line with the Holding's priorities, and ensuring the active participation of the group companies in these processes.

[\(GRI 103-1, GRI 103-2, GRI 103-3\)](#)

## **Climate Risks and Opportunities**

The primary focus of Tekfen Holding's climate crisis management is its activities with chemicals, which also cover the fertiliser industry with the highest Scope 1 and 2 emissions, and its contracting activities, which also cover the oil and natural gas industries. The Engineering and Contracting Group and the Chemistry Group, which have the largest shares in Tekfen Holding's turnover, operate in industries vulnerable to the effects of climate change, which poses significant risks for both fields of activity.

Tekfen Holding identifies climate and water risks and opportunities and integrates them into its business strategies. The main climate risks identified by Tekfen are:

#### **Policy risk**

- Due to the Carbon Border Adjustment Mechanism (CBAM), the carbon tax payable at the border for the products we export to the EU may lead to a decrease in profitability.
- With the Green Deal, the consumption of chemical fertilisers is expected to decrease by 20% in EU member states, which may lead to a decrease in our chemical fertiliser exports.
- With the Emissions Trading System, which is expected to be implemented in Turkey soon, we will see an increase in operational costs.

#### **Market risk**

With the decreasing share of fossil fuels in energy, new investments in fossil fuels are expected to decrease in the coming period. This situation poses a significant risk for our Engineering and Contracting Group companies, which carry out most of their projects in the oil and gas industries.

#### **Technology risk**

Low-carbon technologies in production are influential for Toros Agri, which operates in an emissions-intensive industry.

#### **Reputational risk**

International initiatives to combat climate change and the increasing demands of local communities and NGOs may lead to increased stakeholder pressure on Tekfen's contracting activities in the oil and natural gas industries and fertiliser production activities that cause high N<sub>2</sub>O (nitrous oxide) emissions.

#### **Physical risk**

The agriculture industry is one of the industries at greatest risk from the climate crisis. Extreme weather events such as storms, floods, hail, and heat waves lead to shrinkage of agricultural lands and deterioration of soil quality, which decreases the use of fertilisers and farmers' access to fertilisers due to reduced purchasing power. Reduced fertiliser use negatively affects agricultural production efficiency and the farmer's economic conditions while posing a significant threat to food security. While the decrease in fertiliser consumption poses a risk for Toros Agri, the change in precipitation and the frequency increase of extreme weather events will likely adversely affect Tekfen Agri's agricultural production activities.

Tekfen Group Companies take different steps to manage climate risks and seize opportunities. To that end, a working group has been established within Tekfen Engineering to develop the company's competencies in designing environmental technologies. This group has researched traditional and next-generation environmental technologies and identified the target markets for the Engineering and Contracting Group. The content of the activities carried out is covered under the following subjects and supported by the relevant projects and communication channels:

**Traditional Environmental Technologies:** Water treatment, industrial and domestic wastewater treatment, air pollution and control, sulfur recovery and flue gas remediation, and solid waste management.

**Clean Energy and Production Technologies:** Waste-to-energy (traditional biogas), waste-to-biofuel/biochemicals (gasification process), plastics recycling (chemical recycling), solar power, wind power, hydrogen and fuel cells, biofuel/biochemical production from 2G biomass, carbon capture, storage and reuse.

**Environmental Infrastructure:** Water supply and distribution, wastewater removal, and sustainable transportation.

Following the Gönen Renewable Energy investment, an example of circular economy solutions, Toros Agri commissioned the Meram Renewable Energy facility in 2020. The company is expanding its share in the organic fertiliser market with both investments. With the filter investment made in the nitric acid unit at the Mersin Plant, the company aims to reduce its N<sub>2</sub>O emissions by 80 to 85 percent.

The target of reducing chemical fertiliser use as part of the EU Biodiversity Strategy for 2030 and the shrinkage it will cause in the market are among the main risks that Toros Agri must manage. Toros Agri continues its studies on special fertilisers to manage the risks and opportunities brought by changing market conditions. By expanding its product portfolio, the company plans to generate some of its sales volume from organomineral, microbial, inhibitor, and biostimulant fertilisers. The EU certification process of organic fertiliser contents has been completed. Additionally, the project for the development of microbial fertilisers continues as part of the collaboration between Tekfen Holding and TÜBİTAK Marmara Research Center (MAM). Meanwhile, Tekfen Agri carries out seed breeding projects for seeds resistant to new climatic conditions and drought.

The group companies conduct energy studies at all fixed facilities, and energy efficiency projects are determined and implemented accordingly. Tekfen Group also contributes to the “Bridging Prosperity” vision with energy-efficient and sustainable buildings and infrastructure services in its real estate development and facility management activities.

The [Carbon Disclosure Project \(CDP\)](#) details information on climate risks and management.

(GRI 103-1, GRI 103-2, GRI 103-3)

## Climate Targets

In 2021, Tekfen focused on strategic planning for the climate crisis and established the “Tekfen Net-Zero Roadmap” to shape its plan for the transition to net-zero.

As part of the Climate Ambition Accelerator program, spearheaded by the UN Global Compact and launched simultaneously in 25 countries, Tekfen set science-based emission goals to become climate neutral in line with the 1.5°C target.

Tekfen completed its energy audit reporting studies of energy-intensive fixed facilities within the group and determined projects related to energy efficiency in 2021. As part of these efforts, site visits and initial determinations were made, and the first phase of valuation, feasibility, and mapping of priority projects for emission reduction was completed and presented to senior management.

Tekfen continues to work towards total compliance with the medium- and long-term emission reduction targets set in 2020. The current medium- and long-term targets of the group are:

- Target 1: By the end of 2025, total Scope 1+2 emissions will be reduced by 15% compared to 2019.
- Target 2: By the end of 2037, total Scope 1+2 emissions will be reduced by 40.2% compared to 2019.

Tekfen Group Companies completed seven new projects in 2021 that contributed to emission reduction while minimizing operational emissions. Thanks to these projects, the group has achieved approximately 10,000 MWh in energy savings and nearly 2.1 million Turkish liras in financial savings.

**Participating in the CDP Climate Change Program for the first time in 2017, Tekfen Holding became one of the Climate Leaders of Turkey by getting an “A (-)” score in the CDP Climate Change Program in 2021.**



## **Tekfen Construction**

In line with net-zero targets, two of Tekfen Construction's fixed facilities, namely the Ceyhan Fabrication Facility and the South Anatolia Main Repair and Maintenance Facility, switched to using 100% renewable energy as of 2021. In addition to the start of renewable energy production with solar panels, the International Renewable Energy Certificate (I-REC) was obtained for the main electricity, thereby eliminating Scope 2 emissions from these facilities.

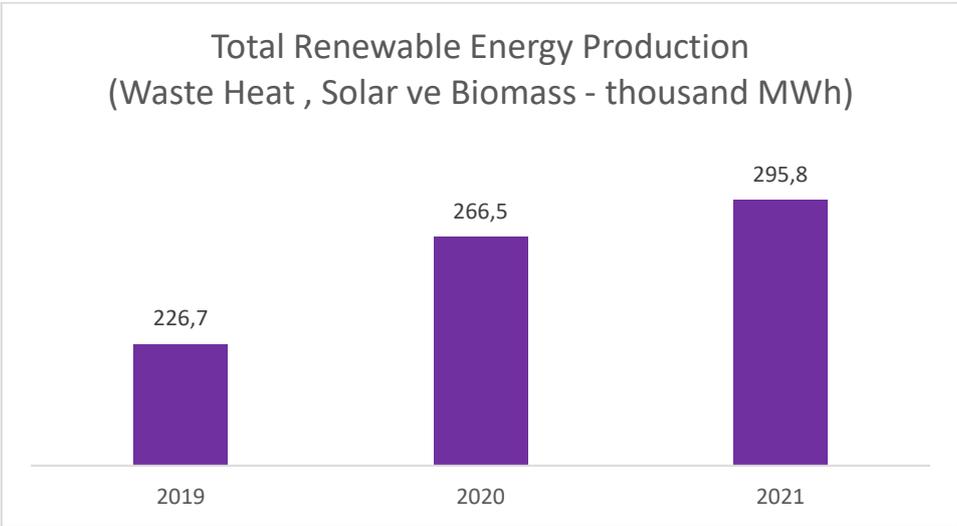
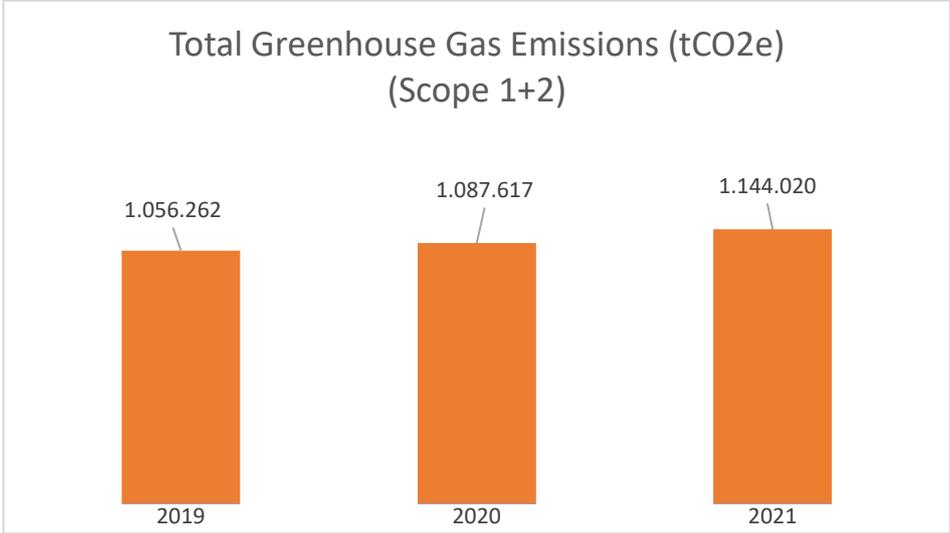
**With the rooftop solar panels installed at Tekfen Construction's Ceyhan Fabrication Facility, renewable energy sources meet 70% of the facility's electricity needs.**

## **Toros Agri**

The installation of the new N<sub>2</sub>O filtering system continues in the nitric acid unit of the Mersin Plant, which is the largest emission source of Toros Agri. The goal of the filter investment is to achieve a reduction of 80 to 85 percent in N<sub>2</sub>O emissions, which play a major role in climate change. The project is planned to

be completed in 2023 and aims to reduce the group's total scope 1 emissions by 600,000 to 650,000 metric tons of CO<sub>2</sub>.

Using the steam energy generated as waste heat in the production processes of the company's Samsun and Mersin Plants resulted in an energy generation of 220,000 MWh, preventing 94,886 metric tons of greenhouse gas emissions.



### Tekfen Agri

The European Union and TÜBİTAK projects performed at the Agripark R&D Center continued in 2021. The goal is to improve agricultural productivity and farmer welfare through collaboration with international organisations and universities while reducing the environmental impact caused by operational activities with innovative products resistant to drought and efficiency studies in production processes. The "Innovation" section of the report provides detailed information about these projects.

## Tekfen Tourism

Improvement works have been carried out since 2014 to reduce the environmental impact of the Tekfen Tower. As of 2021, the entire building uses LED lighting. The engines of the cooling towers connected to the air conditioning system, one of the biggest energy consumers in the building, were renewed with high-efficiency engines and integrated into the automation system, enabling them to operate at the required speed. Additionally, the automation system of the radiator assemblies in the building was made controllable with a web-based interface, resulting in more efficient and effective air conditioning.

(GRI 302-4, GRI 305-5)

## Natural Resources and Waste Management

With its resource efficiency investments, Tekfen aims to use natural resources such as raw materials, energy, and water more effectively. Tekfen also aims to create more value with less input while contributing to reducing the environmental impact of its stakeholders with products and services such as correct fertilisation guidelines and practices that support reducing water consumption in addition to green buildings. The group also carries out projects to prevent waste generation at the source, reuse the waste, and thus preserve the value of the resources following principles of a circular economy.

### Water Management

The depletion of clean water resources has negative social, economic, and environmental effects. The increasing demand for water and food resources due to the growing population affects many industries, including agriculture. Research shows that the demand for critical raw materials such as water, food, animal feed, and biofuel will be 50% higher in 2050 than in 2012.<sup>10</sup>

In Turkey, the increasing population and poor agricultural practices make the correct use of water resources an even greater necessity. Inefficient use of water resources and excessive water withdrawal cause freshwater ecosystems to deteriorate. Tekfen Group Companies work to identify risks and opportunities related to water, manage water correctly, and reduce their water footprint.

The main water risks identified by Tekfen are:

- The reduced productivity in agriculture caused by the water crisis is expected to have serious economic consequences for small farmers, which may lead to a decrease in fertiliser sales as well as in the purchasing power and the overall number of farmers, who are some of Toros Agri's most important customers. Tekfen Agri also faces the risk of decreased productivity in agricultural production due to increasing water stress.
- Both water supply and quality are expected to deteriorate. Water quality deterioration will likely lead to increased legal pressure on nitrate pollution caused by agricultural production, which may increase compliance costs for Toros Agri's fertiliser activities.

---

<sup>10</sup> UN World Water Development Report 2022  
<https://www.unwater.org/publications/un-world-water-development-report-2022/>

Detailed information on water risks and management can be found in the [Carbon Disclosure Project \(CDP\) Report](#).

**Tekfen Holding was one of only 3 companies in Turkey and one of 118 companies worldwide to receive an “A” score in the CDP’s Water Security Program, which evaluated 3,368 companies from all over the world in 2021.**

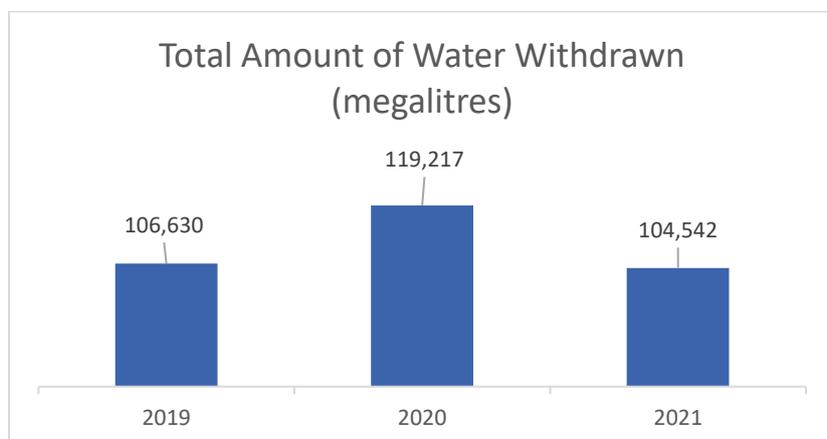
Tekfen Group Companies take different steps to manage water risks and seize opportunities. To use water effectively and efficiently, Tekfen Agri invests in technologies that monitor plants' water needs and uses smart irrigation systems. Sensors measuring soil moisture and weather stations equip Alanar Orchards to ensure efficient water use. Only drip irrigation and mini sprinkler systems are used in these orchards.

Studies are carried out at Tekfen Agri and Toros Agri R&D Centers to develop products and seeds compatible with changing climatic conditions. Toros Agri increases its production and sales of special water-soluble fertilisers through its R&D studies. Special fertilisers are preferred for drip and sprinkler irrigation systems as they require less water. Toros Agri also works to prevent nitrate pollution by supporting farmers in using the right fertiliser at the right time and in the correct place and amount. To do so, Toros Agri uses tools such as training videos, the Toros Farmer Application, and face-to-face farmer training.

The Water and Wastewater Treatment and Recycling Project is still underway at Toros Agri's Mersin Plant. After completion, the project will enable the treatment of wastewater, the recovery of ammonia and nitrate in wastewater, and the rehabilitation of the existing demineralisation system at the facility.

As part of the commissioning of Tekfen Construction’s ongoing Satellite Haradh Gas Compression Plants Pipeline Package project in Saudi Arabia, a total of 36,000 cubic metres of water was used for the hydrostatic testing of the pipelines with a volume of 79,000 cubic metres and 43,000 cubic metres of water saved through reuse.

[\(GRI 103-1, GRI 103-2, GRI 103-3, GRI 303-1, GRI 303-2\)](#)



## Waste Management

Reducing waste at the source, correct disposal, and adopting circular economy principles are critical for sustainability. The adoption of circular economy principles and the renewal of systems in line with these principles lead to positive environmental, social, and economic results. Innovative business models suitable for the circular economy create new employment areas on top of reducing carbon emissions while enabling the creation of new financial resources for the private sector. <sup>11</sup>

Tekfen Group Companies carry out projects to prevent waste at the source and to minimise waste/reduce waste to zero:

The Engineering and Contracting Group recycles or reuses waste generated during construction activities and minimises dust formation by using reclaimed asphalt at temporary construction sites.

There is no process-based product waste arising from Toros Agri's fertiliser production facilities. Wastes that occur during production are used in reproduction following the quality criteria.

Toros Gönen Renewable Energy and Toros Meram Renewable Energy, subsidiaries of Toros Agri, produce biogas and generate electricity from the organic wastes they obtain from their regions while also producing organic and organomineral fertilisers from gasified waste. Successfully demonstrating the principles of the circular economy, these businesses not only ensure the disposal of organic wastes in the region but also generate energy and introduce new products to the economy.

Tekfen Tourism (Tekfen Services) sorts organic wastes, oil wastes, electronic wastes, and other recyclable wastes coming from the cafeterias at the source and sends them to licensed companies for proper disposal.

## Zero Waste

Tekfen Group Companies adopt a waste management philosophy that covers the prevention of waste, more efficient use of resources, prevention or minimisation of waste by reviewing the causes of waste generation, and the collection and recycling of any waste separately at the source. Producing compost and energy from organic wastes, recycling waste and bringing it into the economy, reusing construction waste in other operations, and reducing food losses in agriculture with climate-resilient agriculture models are some of the group's best practices.

Having fulfilled the requirements of the Zero Waste Regulation that came into effect in 2019, 10 facilities of the group companies were entitled to receive the Basic Level Zero Waste Certificate in 2020 and 2021. At Tekfen Tower, the requirements for the transition to the Zero Waste Management System were fulfilled in 2021, and the application was made for Basic Level Zero Waste Certification.

Following the environmental sustainability strategies that focus on ensuring waste management through recycling and creating circular economy opportunities, a PG (phosphogypsum) Working Group was

---

<sup>11</sup> <https://www.europarl.europa.eu/news/en/headlines/economy/20151201STO05603/circular-economy-definition-importance-and-benefits>

established within the R&D Center in 2021 to find alternative industrial areas for the use of the phosphogypsum (PG) reserve resulted as fertiliser production activities at Toros Agri's Mersin and Samsun Plants. The working group focuses on establishing academic and corporate cooperation on the use of PG in numerous fields. Once chemically and physically purified, PG can be utilized in the manufacturing of high added-value products, used as a raw material or as a soil regulator to boost soil and plant productivity in agriculture. It can also be employed as an additive in the plaster and cement industry and as filler in road construction. In 2021, pilot projects on using PG in agriculture were launched, and a calcium sulphate fertiliser was registered.

Tekfen Agri started to measure the environmental footprint of its products by carrying out the Life Cycle Assessment (LCA) and completed the "Cradle-to-Gate" LCA for sesame seeds in 2020. Tekfen Agri, which received the Environmental Product Declaration (EPD) certificate as a result of its projects, was not only the first company in Turkey's agriculture and food industries to receive this certificate but also the first company in the world to receive an EPD certificate for sesame seeds.

As part of the Zero Waste Project carried out at the Agripark R&D Center, vegetable wastes are sent to the biogas facility for energy and organic fertiliser production. With the Agripark Compost Project, the company has invested in a composting machine to compost the organic wastes.

The company's Nevşehir Potato Seed Warehouse has a total potato seed storage capacity of 7,000 metric tons. Thanks to its high-tech ventilation and cooling systems, the potato seed warehouse has the lowest wastage rate among its counterparts in Turkey.

[\(GRI 103-1, GRI 103-2, GRI 103-3\)](#)

## **Biodiversity**

Biodiversity is an essential component for the continuity of life on earth. Genes, species, and ecosystem services are critical inputs to many production processes, and businesses need healthy ecosystems to treat and distribute their waste and maintain soil and water quality.

Operating in industries that impact biodiversity, such as construction and agriculture, Tekfen Group is committed to taking the necessary measures to protect the ecosystem and species during its operations in line with its [Biodiversity Policy](#).

Management of the biodiversity risk is based on the Biodiversity Action Plan, the Ecology Management Plan, and the Environmental Impact Assessment Reports. To that end, the group carries out activities such as wildlife observation and protection practices, relocation of species found in project areas to similar habitats, and rehabilitation.

## Innovation

The pandemic and the changes it has brought are causing rapid advances in new technologies, forcing businesses to adapt to these technologies if they wish to maintain their assets. Current conditions have also significantly accelerated the adoption of new technologies, many of which are now permanent.<sup>12</sup> On the other hand, uncertainties increase as disruptive technologies replace existing products and services and reveal new opportunities. While investing in innovations, it is necessary to develop robust and agile strategies that include selecting the right technologies at the right time, preparing for different risks that may arise, and accepting changes in talent brought by innovation and digitization.<sup>13</sup>

Industries such as agriculture and construction, which constitute Tekfen's main business areas, respond to the vital needs of societies and play a key role in their development. Developments such as the climate crisis and the pandemic have revealed that existing business models and technological infrastructures of many industries are not sustainable. Innovation is also critical to tackle post-pandemic challenges faced by global economies and issues such as the climate crisis and equity.

Tekfen Holding companies operate in industries open to innovation and technological development. New engineering practices, digitisation, and automation shorten the business processes in contracting projects, minimise error rates, and contribute to safer working environments by reducing occupational health and safety-related risks. In the agriculture industry, the main subjects of the innovation approach include the development of seeds resistant to changing climatic conditions and drought, responsible use of natural resources, innovative production methods that will increase agricultural productivity, advanced agriculture technologies, and low-carbon fertilisers and harvesting methods. Tekfen Agri and Toros Agri carry out these activities under their R&D Centers' leadership.

## R&D and Innovation Culture

One of Tekfen's sustainability focuses is the promotion of the R&D and innovation culture within the Group, which is vital for the development of innovative solutions that will enhance the company's business processes and services, enable the development of new products and services, and improve the company's environmental, social, and governance performance. To this end, Tekfen encourages the participation of both company employees and external stakeholders so that innovative ideas can sprout in all business processes. Innovative approaches in the fields where the company has requirements are supported by competition and reward systems.

### Tekfen Construction

To increase employee awareness of innovation and maximize the departments' contributions to digitisation projects, department managers will select eligible individuals from their respective teams to become business analysts and receive 8 to 10 weeks of main and digital process training. This training

---

<sup>12</sup> Forsyth, J. (2022), 8 technology trends for innovative leaders in a post-pandemic world, *WEF*, <https://www.weforum.org/agenda/2022/03/8-technology-trends-innovative-leaders-post-pandemic/>

<sup>13</sup> Dijitalleşme yolunda Türkiye 2021, *KPMG*, <https://assets.kpmg/content/dam/kpmg/tr/pdf/2021/04/dijitallesme-yolunda-turkiye-raporu-2021.pdf>

will equip them with the necessary knowledge so that the departments' personnel can identify and define the departments' needs and test the information technology infrastructure after it is established.

### **FNN Sustainability Center**

The FNN Sustainability Center began operations in January 2021 at Tekfen Construction's South Anatolia Main Repair and Maintenance Facility in Ceyhan, Adana. The project goal was to build a facility that minimises its environmental impact by integrating various environmentally friendly and human-friendly features into the design and construction processes.

The FNN Sustainability Center generates 77,606 kWh/year of energy through solar panels on 450 square metres, meeting 45% of its electricity needs. Wastewater recycling, landscape uses, endemic plants, façade daylight factors, lighting design, and the energy conservation and sustainability values of the building with special solutions have been documented with LEED Platinum Certification. Following the EPA standard, an efficiency rate of 50% was achieved in water usage with rain and condensate water systems. 20% of the building's structure uses recycled material, and a green terrace area was designed for recreational purposes in the center.

### **Tekfen Engineering**

Tekfen Engineering held an internal innovation competition in 2021 and rewarded 4 projects at the end. The rewarded projects were:

- Hydrogen Production from Biogas with the DMR Method
- Smart City Solutions for a Better Future
- Taxi Stands and Digital Transportation
- 3D-Printed Structures

### **Toros Agri**

- In 2019, Toros Agri joined the InoSuit – Innovation Focused Mentorship Program established with university-industry collaboration to increase innovation management competence, strengthen innovation management infrastructure, and design corporate innovation systems. Carried out in partnership with the Turkish Exporters' Assembly (TİM), Toros Agri, and Mersin Technoscope, the project is coordinated by the Toros Agri R&D Center.
- In line with the InoSuit Project, the INNOVATIVE – Toros Innovation Bulletin was first published in 2019 to support the innovation culture at Toros Agri. The bulletin includes innovations in the agricultural industry, technological developments in agriculture, sustainable agricultural practices, and interviews. In 2021, 12 Toros Innovation Bulletins and 3 R&D Bulletins were published. Additionally, training events were held, and informative posters were prepared for innovative purposes. The INNOVATIVE - Toros Innovation Bulletins are available on the [Toros Agri R&D Center website](#).

## Tekfen Agri

- Tekfen Agri began strategic cooperation with the Sabancı University Nanotechnology Research and Application Center (SUNUM), one of Turkey's leading research centers, in 2019. To that end, workshops with broad participation are held every year to create synergy between the institution and the employees, and ideas and projects are developed with cultural and technical diversity for open innovation.
- With its trademark motto, "Make your dream come true with innovation!" Tekfen Agri carries out various efforts to spread an innovation culture among its employees. The company has an innovation appreciation and reward system, and an employee innovation survey was conducted in 2021 to evaluate the Innovation Club's activities and learn about the club members' expectations and suggestions. Additionally, the corporate innovation system survey was conducted to evaluate the company's innovation management and performance and identify areas for improvement.
- The Innovation Club continued its activities in 2021 with the "Innovation Room," which was established to encourage in-house innovation and creativity. Innovation Club activities, ideas, situations, and cooperation projects are followed up by the annual internal bulletin.

### Idea Management System

As part of the Innovation Club activities to spread an innovation culture, 40 volunteers from Tekfen Agri, Alanar, and HTF with different disciplines and experiences came together at 29 events to brainstorm new ideas. In the Idea Management System, where innovative ideas from different platforms are evaluated and selected ideas are put into practice, there are 14 total projects, and 4 of these projects have been implemented. Applications were made to various funding support programs, 1 national and 3 international, and 2 projects received funding support.



## R&D Studies

R&D and innovation, which help companies offer products and services with high added value and protect themselves from adverse market conditions and destructive competition, also play a major role in improving environmental performance, which is a key element for sustainable development.

Tekfen continues its R&D studies within a corporate framework, creating shared value in the field of sustainability, improving business processes, and developing innovative products and services. The Group carries out its internal and external R&D, innovation, and entrepreneurship activities through its R&D Centers, Tekfen Ventures, and Boğaziçi University FNN Tekfen Incubation Center.

- In 2021, nearly 28 million Turkish lira was invested in R&D across the Group. Additionally, one patent application and five utility model applications were made.
- Toros Agri R&D Center and Tekfen Agri Agripark R&D Center employ 54 full-time equivalent employees, 16 of whom are full-time R&D personnel. Tekfen Manufacturing Design Center carries out its activities with 23 employees.

### Toros Agri

Established in 2017 as a first in the field of plant nutrition in Turkey, the Toros Agri R&D Center develops new environmentally friendly fertiliser varieties that will contribute to agricultural productivity. They also engage in efforts to improve existing products, produce products not previously manufactured in our country, develop and optimise production processes, save energy in production, and reduce environmental impacts.

In addition to the self-sourced studies carried out at the R&D Center, 3 TÜBİTAK 2244 projects, 1 TÜBİTAK 1501 project, and 1 TAGEM project are currently underway. These projects are performed in collaboration with Ankara University, Mersin University, Çukurova University, and Konya Bahri Dağdaş Research Institute.

- **SAM Consortium**

The SAM Consortium project, applied for in 2020 upon the call of the international sustainability initiative Belmont Forum and under the coordination of the University of Maryland Center for Environmental Science, was entitled to international funding. 11 institutions and organisations from 6 countries, including the United States, Austria, Brazil, Morocco, South Africa, and Turkey, are currently involved in this project. The Toros Agri R&D Center carries out the project in cooperation with the Toros Agri Corporate Sustainability Governance Directorate and Technical Marketing Departments. In line with sustainable development goals, the aim is to support interdisciplinary joint projects with the Sustainable Agriculture Matrix (SAM), which measures sustainable agriculture from social aspects such as economy, technology, environment, climate, and human development. Efforts for the project continued in 2021.

- **Anti-Caking Agents Project**

The caking problem, which causes physical deterioration in fertilisers due to environmental factors such as handling and various climatic conditions, increases costs by creating inefficiencies in agricultural practices. As part of the project, product-based studies are carried out to prevent

the caking problem in different fertiliser varieties, and the goal is to determine the most suitable anti-caking agents in terms of costs and chemical content.

With a new R&D project initiated with the support of TÜBİTAK, the anti-caking product currently used in production was replaced with one that provides higher performance. 2 articles have been published as part of the project.

## **Tekfen Agri**

Tekfen Agri prioritizes innovation and digital agriculture activities to create added value by developing innovative solutions for the problems and opportunities in the agriculture industry. Tekfen Agri Agripark R&D Center, where agricultural biotechnology activities are carried out, is one of Turkey's first and few technological agriculture centers and was registered as an R&D Center in 2018.

Utilizing Anatolia's rich biodiversity as a resource, Agripark carries out important activities for the future of Turkish agriculture and provides farmers with disease-free and high-quality seeds and saplings. The R&D Center is currently working on 17 projects. 11 are self-sourced, 4 receive national support, and 2 receive international support.

### **Tekfen Agri ranked 149th in Turkishtime magazine's annual R&D 250 list in 2020.**

Agripark uses the tissue culture method to produce 6 types of disease-free and productive potato seeds, which is one of its main fields of activity. Development for 4 more is still underway. Additionally, various R&D projects are carried out at the center for developing potato varieties resistant to disease agents.

As in potato seeds, banana saplings produced in a sterile environment with the tissue culture method provide higher yield and quality for the producers. Agripark emphasizes the development of endemic products and searches for ways to reproduce and develop Turkish delicacies such as Anamur bananas under healthy conditions.

Agripark conducts pioneering projects for wheat, one of the Turkish peoples' staple foods, and develops efficient and high-quality bread wheat, durum wheat, triticale, and barley varieties by utilizing the rich genetic resources of Anatolia, the historical homeland of wheat. In 2021, 2 durum wheat varieties, 8 bread wheat varieties, and 1 barley variety were produced, which are all different varieties and compatible with different ecologies of grain farming in Anatolia.

In 2021, two bread wheat varieties were registered by the Variety Registration and Seed Certification Center of the Republic of Turkey Ministry of Agriculture and Forestry. 3 bread wheat varieties and one barley variety were registered, and the required production permits were obtained.

While climate change negatively impacts efforts to eradicate poverty, it also threatens our ability to achieve sustainable development and global food security.<sup>14</sup> The number of food-insecure people has doubled in two years, reaching 276 million compared to 135 million before the pandemic. In addition to climate change, COVID-19, increasing inequality, and wars threaten food security.<sup>15</sup> Uncertainty and vulnerabilities in the food supply could turn into a global risk.<sup>16</sup> That is why adequate agricultural production resistant to climate change is just as critical as ensuring supply security.

Tekfen Agri prioritizes developing varieties resistant to abiotic and biotic stress factors and providing sustainable food safety. With bread wheat breeding activities, which include biotechnological and conventional breeding techniques, the goal is to produce high-yielding, disease- and pest-resistant bread wheat varieties that are suitable for the different environmental conditions of our country and the least affected by global climate change. Tekfen Agri utilizes the experience and knowledge it has gained in wheat breeding for barley, potatoes, sesame, oats, etc.



- The “Ensuring Traceability of Fruits from Tree to Table with Blockchain Technology” project was entitled to receive support as part of the TÜBİTAK 1707 Order-Based R&D Program. The project aims to enable end consumers to easily see a product’s entire journey from the tree to the market shelves.
- Cooperation with the Sabancı University Nanotechnology Research and Application Center (SUNUM), Akdeniz University Technology Transfer Office, Çukurova University, TÜBİTAK, and the General Directorate of Agricultural Research and Policies (TAGEM) continued in 2021.
- Agripark's close cooperation for banana saplings with Tropic Biosciences, which is in Tekfen Ventures' investment portfolio, also continued in 2021. Tropic Biosciences, which carries out breeding studies to increase the nutritional value and productivity of widely consumed bananas and make them free of viruses and fungal diseases, procures male banana flowers from Tekfen Agri for the start of the process. In 2021, 300 tissue cultures were sent to Tropic Biosciences in root form in special climate-controlled containers.

<sup>14</sup> FAO's work on Climate Change, *The Food and Agriculture Organization of the United Nations*, <https://www.fao.org/climate-change/en/>

<sup>15</sup> Nations must ‘act together, urgently and with solidarity’ to end the food insecurity crisis – UN, WEF, <https://www.weforum.org/agenda/2022/05/nations-act-together-urgently-solidarity-end-food-insecurity-crisis/>

<sup>16</sup> New Scenarios on Global Food Security based on Russia-Ukraine Conflict 2022, FAO

## Tekfen Engineering

- **HiFlex Concentrated Solar Power Plant**

Tekfen Engineering handles all engineering efforts for solar power, which is one of the main pillars of the EU-supported HiFlex Project initiated by the Italian pasta brand Barilla (one of the world's largest pasta producers) to reduce the carbon footprint in production in collaboration with 11 companies from 7 countries. As part of the project, Tekfen Engineering tried out various prototypes in 2021, developed control software for the solar tracking system, and started testing control cards. The demo facility, which consists of 5 heliostats (solar tracking mirrors), is planned to be commissioned in 2022 in Technopark Istanbul, which is also home to Tekfen Engineering's R&D office.

- **P&ID Digitisation Project**

The first phase of symbol processing in the P&ID (Piping and Instrumentation Diagrams) Digitisation Project, which aims to process engineering documents with image processing and artificial intelligence technologies, was completed in 2021. User interface design, which is the second phase of the project carried out in collaboration with SiMit Lab, the artificial intelligence laboratory of Istanbul Technical University Faculty of Computer and Informatics, continues with the contributions of the Tekfen Engineering software team.

## Tekfen Manufacturing

Tekfen Manufacturing, which was awarded the Design Center Certificate by the Republic of Turkey Ministry of Industry and Technology, also develops R&D projects in cooperation with TÜBİTAK.

- **TİMAŞ Nickel 9 Project**

Storage tanks with 9% nickel alloy material are currently not produced in our country, which is why a TEYDEB project was conducted with TÜBİTAK to improve the design and production processes for these types of tanks. Since cryogenic substances (e.g., LNG) stored in the liquid phase at extremely low temperatures (down to -196°C) make steel brittle, special alloys must be used to store these materials. The 9% nickel alloy material maintains its ductility at these low temperatures and can also respond to large storage capacities thanks to its resistance to high pressure. 1 prototype storage tank was manufactured as part of the project.

## Tekfen Ventures

The pandemic continued to accelerate digitisation and innovation in 2021. As business models and needs have changed significantly, a substantial increase has been observed in the investments made in the entrepreneurship ecosystem. According to MarketWatch's January 2022 data, global venture capital investments are estimated to double in 2021 and exceed \$621 billion.

Established in 2016, Tekfen Ventures is a corporate venture capital firm that invests in early-stage tech startups in the entrepreneurial ecosystem. The company, which closely monitors innovative initiatives

in the agricultural, construction, real estate, manufacturing, and urban technology industries in which Tekfen operates, comprehensively examines the market positions, business models, and future plans of these initiatives and invests in companies at the right stage both on corporate and financial levels. Companies in the Tekfen Ventures portfolio have the potential to drastically change traditional business models and make a difference by contributing to the solution of environmental and social problems with their innovative solutions and technologies.

Tekfen Ventures sold Prospera Technologies in 2021 and added two new companies to its investment portfolio. One of these startups, Mosaic, is a tech company operating in the \$120 billion residential construction industry of the United States. Mosaic focuses on technologies that will make the construction process more efficient rather than focusing on products and materials to stop the weakening trend of the industry and increase its profitability. Avvir, another construction technology company, uses laser scans and artificial intelligence to detect construction errors.

Tekfen Ventures, which has 13 startups operating in various areas in its portfolio as of 2021, continues its mission of supporting innovative initiatives that redesign the global agricultural, construction, and manufacturing industries in the new operating period.

<b>Avvir</b>	Avvir is a construction technology company that uses laser scans and artificial intelligence to detect construction errors.
<b>Claroty</b>	Claroty protects and optimises industrial environments, including operational technology, the Internet of Things (IoT), and the Industrial Internet of Things (IIoT) with its comprehensive cybersecurity platform.
<b>Latch</b>	Providing the ability to manage building entrances, exits, and every access point inside the building from a single platform, Latch supports more than 2 million unlocking operations per month.
<b>Mosaic</b>	Mosaic aims to standardize the construction process itself rather than products and materials.
<b>Petra</b>	Petra moves electricity, gas, water, and similar infrastructure installations underground, making them safer and more economical. They develop non-contact tunneling technologies that can drill efficiently and inexpensively in all geological structures, including rock types that do not allow for tunneling, such as granite and basalt.
<b>Phospholutions</b>	With its patented RhizoSorb technology, Phospholutions increases the efficiency of phosphorus fertilisers and reduces their environmental impact.
<b>Pivot Bio</b>	Using microbes in the production and uptake of nitrogen, which has a key role in the growth of plants, Pivot Bio products help combat problems such as global warming and surface water loss while contributing to the productivity of farmers.
<b>Quanergy</b>	Quanergy manufactures LiDAR (Light Detection and Ranging) sensors that can map the field of view in real time by measuring the distance between objects.

<b>Sight Machine</b>	Offering a software platform that provides rapid increases in manufacturing productivity, Sight Machine produces data analysis solutions for the manufacturing industry and can provide real-time reporting by collecting all production information in an industrial facility with its technologies.
<b>Soft Robotics</b>	Soft Robotics develops automation solutions for machine manufacturers to meet the urgent needs of industries subject to labour shortages, worker health issues, and government-mandated food safety regulations.
<b>StrongArm Tech</b>	StrongArm Tech develops solutions to improve occupational health and safety at workplaces and reduce the risk of accidents while recording, analyzing, and presenting actionable insights to its customers.
<b>Tropic Biosciences</b>	Tropic Biosciences is an agricultural biotechnology company that uses advanced plant breeding and genome editing technologies to develop high-yield crops.

You can learn more about these initiatives on Pages 122 to 135 of the [Tekfen Holding Annual Report](#).

## Digitisation

Digital transformation is now among the top priorities of almost every business. More digitally mature companies can act more flexibly and quickly, adapt to change easily, and achieve much better financial results.<sup>17</sup>

Since 2017, Tekfen Holding Information Technology Group Companies Directorate has carried out the projects and works on the Tekfen roadmap created with a focus on digital transformation. Efforts for the infrastructure, business solutions, information security, and compliance required by the Group Companies continued in 2021, and solutions were produced for demands of remote working, communication and collaboration tools, digitisation of business processes, and cybersecurity. This has enabled cost advantages, hardware and license optimisation, synergy and sharing between companies, operational efficiency, quality service, and better compliance with laws and regulations.

## Operational Efficiency

Increasing operational efficiency with the common platforms and applications serving the Group Companies is one of the key digital transformation projects. “Tekflow”, Tekfen’s digital process automation platform, has enabled the digitisation of many business processes for better operational efficiency, traceability, and measurability. Common systems commissioned in 2021 included legal contract management, proxy management, the Board of Directors decision process, the internal audit findings tracking system, and the HSE document approval system. Additional projects were completed in the areas of ERP, process optimisation, process automation, and document management for the Group Companies.

<sup>17</sup> Gurumurthy, R., Nanda, R. & Schatsky, D. (2022), Putting digital at the heart of strategy, *Deloitte*, <https://www2.deloitte.com/us/en/insights/topics/digital-transformation/digital-acceleration-in-a-changing-world.html>

The Workplace Health Information System was commissioned to support the health units in the workplaces with an Occupational Health and Safety information infrastructure. The Financial Dashboard project, which monitors key financial data from the Group Companies, was expanded and integrated with Forex.

## **Digital Work Environment**

One of the main goals of the digital transformation roadmap is to provide a digital work environment where Tekfen employees can work regardless of space and time. The achievements so far in infrastructure, communication and collaboration platforms, digital tools, and digitisation of business processes have contributed significantly to adapting to the pandemic. Tekfen Holding implements a hybrid work model, which incorporates a mixture of in-office and remote work.

In Tekfen's Oracle HR system, used in all the Group Companies, a process was established for remote work requests, and the HR teams' change requests were fulfilled. Once again, communication platforms, video conferencing, and webinar services were used efficiently and widely in 2021. The self-service IT platform established for Tekfen employees is also used effectively.

Digital work environment projects continued in 2021. The Tekİmza platform was commissioned and has enabled the use of e-signatures in the business processes of Tekfen Holding and Group Companies. The Tekİmza platform was integrated with the "Tekflow" platform for automation of workflows and with the "Bilge" platform for document management needs.

## **Network and Internet Access Services**

Thanks to the Tekfen Corporate Network and Security structure, TekNET, commissioned in 2019, more than 50 workplaces of 10 Group Companies in Turkey can securely access common applications and corporate internet services over a closed-circuit, wide-area network. Location availability rates were increased to 99.5% and higher with redundant circuits, and cost advantage of over 30% was achieved. With 24/7 monitoring of all locations, circuits, and devices by the Network Operations Center, activities are carried out safely and uninterrupted. In 2021, improvements were made in line with the needs of all Group Companies, new locations were opened, new network services were commissioned, and capacity increases were made in parallel with remote working.

## **Cybersecurity**

Remote working systems, which became widespread after the pandemic, have caused an increase in security vulnerabilities, and led to a large increase in cyberattacks globally. Tekfen Holding has taken the following steps to ensure the highest level of cybersecurity:

- Tekfen Holding implements the ISO 27001 Information Security Management System standards to preserve corporate data accurately and keep it confidential and secure. To that end, activities are carried out to identify potential risks to the accessibility, integrity, and confidentiality of corporate

information and to monitor identified risks with various controls and technologies according to their scores.

- As part of the business continuity and disaster recovery process, corporate data management is carried out uninterrupted, effectively, and securely. ISO27001 internal and external audit processes and tests are performed for critical systems. Annual tests are reviewed, and process updates and improvements are carried out and reported.
- Tekfen's TekNET corporate network infrastructure has led to significant investments in cybersecurity, creating a secure infrastructure in the process. Developments in cybersecurity continued in 2021, and an end-user security system based on behavior analysis was commissioned against next-generation security threats. The activities performed to this end have increased the safety score from 84% to 94%. Additionally, the Cybersecurity Intelligence Service has enabled monitoring of current security events and Tekfen-related developments on the internet and social media.
- The Information Technologies Disaster Recovery Center, which is essential for ensuring business continuity and compliance with the Communiqué on the Management of Information Systems issued by the Capital Markets Board of Turkey, was commissioned at the FNN Sustainability Center built in Ceyhan, Adana. Operated under the Tekfen Holding Information Technologies Group Companies Directorate, the center is available to all Group Companies. Shared services and all critical applications of Tekfen Holding were designed to operate through this center in the event of a disaster. Business continuity tests are conducted annually for critical systems.
- ISO 27001 Information Security Management System standards are implemented across all Tekfen Group Companies, and their effectiveness is constantly improved. Tekfen Holding's ISO27001 certificate was renewed after the audit in 2021.
- Studies on compliance with the CMB Communiqué on Management of Information Systems are conducted regularly. With the digital tracking system established to serve this end, the monthly monitoring of the relevant actions and studies continued in 2021. Penetration tests, which are required to be carried out every year by the Communiqué, were performed across all Group Companies, and the findings were followed up in coordination with the companies.
- As part of information security awareness activities, the phishing activities, e-trainings, and announcements involving all Tekfen employees continued intensively in 2021.

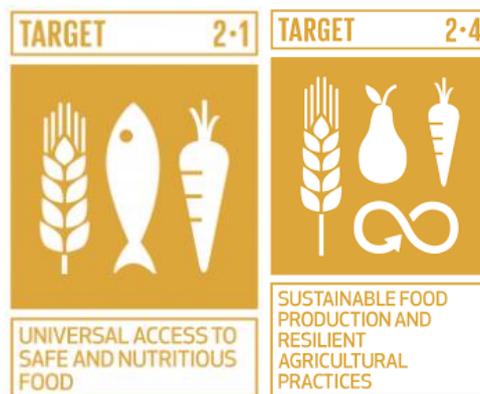
## **Toros Agri**

### **“Toros Farmer” Application**

One of the most important areas of influence in Toros Agri's value chain is the use of fertilisers. Raising awareness among farmers on the use of fertilisers is essential for reducing any negative effects and managing them correctly. Digital farming applications form the basis of a data-driven agricultural ecosystem. Digital technologies, which support farmers in making decisions and using their resources effectively, have a direct impact on the productivity and quality of the product as they enable farmers to

determine needs such as fertilisation and irrigation in agricultural areas, using the fertiliser at the right time and in the right way, and monitoring product development.

The “[Toros Farmer](#)” Application, commissioned by Toros Agri in 2016 to help farmers benefit from technological developments, is a free farmer-friendly decision-support app that can be downloaded on computers, smartphones, or tablets. Offering weather forecasts and soil and plant data, the app gives farmers suggestions while helping with timely and accurate production and operation decisions by following weather conditions on each field. As of the end of 2021, the number of Toros Farmer Application users increased by 15% year-on-year to 19,417 people. Additionally, the drone imaging and analysis technology used by the mobile technical teams of Toros Agri provide farmers with the most accurate information about the health and nutritional status of their fields and the most appropriate fertilisation recommendations.



## Tekfen Agri

- **Alanar Alansis Traceability Platform:**

The Alanar Alansis Traceability Platform is a digital transformation project that starts with the registration of fruit varieties collected from the garden with a QR code at the harvest delivery point and continues until the end of all production and shipping processes.

- **Fruit Purchase Digitalisation (MAD) Platform:**

The Fruit Purchase Digitalisation (MAD) Platform is a field control and financial traceability platform that works, integrated with the Alansis Platform at fruit purchase points, as part of the digital transformation project.

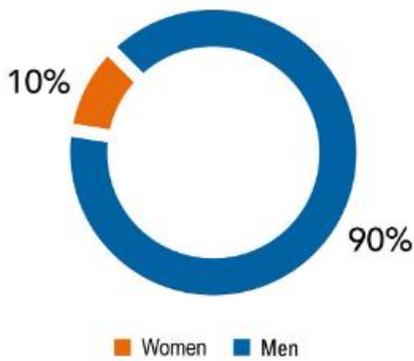
## Employees and Society

Tekfen Holding regards human capital as the most important resource for increasing productivity, adopting and developing a corporate culture that nurtures innovation and flexibility, staying ahead in global competition, and supporting sustainable growth and considers having qualified and satisfied employees among the key elements of its success. The company believes that being a global player requires a corporate culture that values diversity and internalizes equality of opportunity.

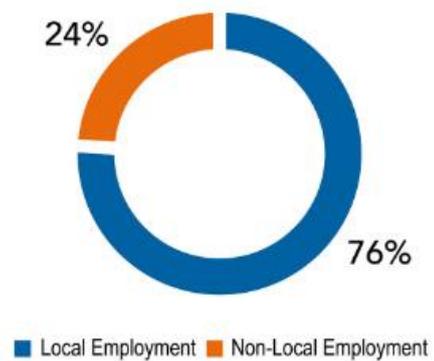
Tekfen follows an inclusive, pluralist, and diverse human resources strategy and offers equal opportunities to its employees, regardless of their religion, language, or culture. As a family of 16,000 people with nearly 6,000 company employees and subcontractors, Tekfen prioritizes providing its employees with a fair, safe, healthy, and productive work environment that encourages development.

(GRI 103-1, GRI 103-2, GRI 103-3)

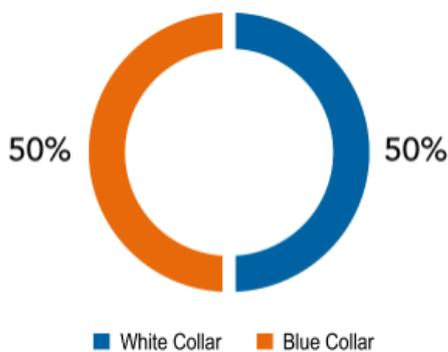
**Employees by Gender**



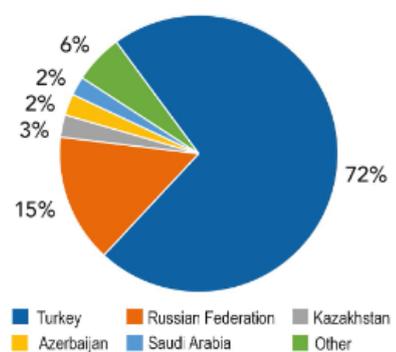
**Local Employment Rate**



**Employees by Collar Colour**



**Employees by Nationality**



## Equal Opportunity and Diversity

Building diverse and inclusive teams is essential for employees' well-being, productivity, and efficiency. Employees, particularly the younger generations who represent the future of work and the workplace, expect to work in organisations that value differences, diversity, open-mindedness, and progressive perspective. <sup>18</sup>

Tekfen Holding respects fundamental human rights in all business processes and does not use child or forced labour. Considering a diverse workforce a strength, the group offers equal opportunities to all employees and rejects discrimination based on religion, language, age, skin colour, ethnicity, sexual orientation, disability, marital status, and more. Tekfen has a female employment rate of 10% and a female executive rate of 15%. 22 employees are currently benefiting from the nursery service.

(GRI 103-1, GRI 103-2, GRI 103-3)

## Talent Management

The change in employee expectations brought along by the pandemic has led to greater labour mobility, and more and more employees are leaving their jobs for better working conditions. Kaspersky's "Securing the Future of Work" report has revealed that 23% of employees in Turkey are considering moving to a new job within the next 12 months. <sup>19</sup>

All companies currently share the risk of a lack of skilled workforce. Demand for digital skills has increased in line with the rapid advancement of automation and technology, creating a talent gap in addition to the current workforce shortage. This demand clearly demonstrates the importance of having a talent management and workforce planning process. <sup>20</sup>

Tekfen Holding emphasizes talent management for better risk management and offers its employees opportunities for:

- Setting individual goals with the performance management system and evaluating the competencies needed to reach these goals.
- Making remote work regular by establishing a hybrid working model focused on organisational agility.
- Creating training programs to support the personal development of employees.
- Implementing inventory applications that measure the competencies of the managers according to their roles to establish the organisation's future manager profile.

(GRI 103-1, GRI 103-2, GRI 103-3)

---

<sup>18</sup> <https://www.randstad.com/workforce-insights/talent-management/workplace-diversity-inclusion-why-it-matters-how-you-can/>

<sup>19</sup> [https://www.kaspersky.com.tr/about/press-releases/2021\\_turkiyedeki-calisanlarin-yaklasik-dortte-biri-salgin-doneminde-is-degistirmeyi-dusunuyor](https://www.kaspersky.com.tr/about/press-releases/2021_turkiyedeki-calisanlarin-yaklasik-dortte-biri-salgin-doneminde-is-degistirmeyi-dusunuyor)

<sup>20</sup> <https://www.randstad.com/workforce-insights/workforce-management/what-workforce-planning-why-it-important/>

## Performance Management

Performance management is crucial in aligning employee performance with the organisation's strategic targets.<sup>21</sup> Implemented across Tekfen, the Performance Management System aims to set common targets in all group companies and reward high performance fairly. The Performance Management System consists of the following practices:

- Target cards are prepared for each company based on Holding and Group strategies, and company targets are assigned to individuals. At the end of the year, individual achievements are measured through target-based evaluations, and the performance management process is completed by mutual agreement. In 2021, a total of 1,164 performance target cards were logged for indirect employees at the premises of Tekfen Holding and Group Companies, and 7,989 individual performance targets were defined.
- Company-based target cards prepared in line with Tekfen Holding's strategy are aligned to the level of individual employees. At the end of the year, individual achievements are measured through target-based evaluations, and the performance management process is completed by mutual agreement. In 2021, 30% of the employees were provided with performance evaluation.
- The Performance Management System also evaluates the required competencies. The evaluation outputs made with the 360-degree method are considered in the design of training-development programs and monitored to support employee career planning.

## Personal and Leadership Inventory Studies

Personal and leadership inventory studies are performed at various intervals to determine the future management profile and establish the "Promising Manager" pool following the organisation's strategy and objectives. In 2021, the managerial competencies of 865 lower-, middle-, and top-level managers from all group companies were measured using different inventory applications according to their roles.

(GRI 103-1, GRI 103-2, GRI 103-3, GRI 404-3)

## Organisational Agility and Hybrid Work

The pandemic has led to significant changes in employee expectations. In addition to a healthy work environment, employees expect a good work/life balance, a strong culture that focuses on employees, and leadership support.<sup>22</sup> The work-from-home model, which has become widespread with the pandemic, has changed how employees experience the hybrid work environment and their general perspectives on office and work. Hybrid work practices are becoming increasingly common globally, with more than half of employees supporting the transition to hybrid work.<sup>23</sup> According to PwC's Global Workforce Hopes and Fears Survey, 87% of respondents want a hybrid work model.<sup>24</sup>

<sup>21</sup> <https://www.forbes.com/sites/forbeshumanresourcescouncil/2022/05/25/the-evolution-of-the-performance-management-process/?sh=106b449a42d1>

<sup>22</sup> <https://www.recruiter.com/recruiting/how-covid-changed-employee-expectations/>

<sup>23</sup> <https://www.microsoft.com/en-us/worklab/work-trend-index/great-expectations-making-hybrid-work-work>

<sup>24</sup> <https://www.pwc.com.tr/gelecegin-calisma-hayatina-dair-umutlar-endiseler-arastirmasi>

To respond to the changing trends of business life and the expectations of its employees, the Directorate of Human Resources of Tekfen Holding Group Companies added **organisational agility** in 2021 to the digitisation, internal communication, and sustainability focus areas established in 2020. The group companies conducted a survey regarding the remote working model implemented due to the COVID-19 pandemic. The remote work model was made permanent given that 82% of the respondents stated their support. Accordingly, the remote work model rules were established, and the **Remote Work Management System** was commissioned to monitor remote work requests and manage the approval mechanism.

## **STAKEHOLDER TESTIMONIALS**

**Sıla Çatalsakal**

**Human Resources Coordinator, Tekfen Holding**

### **Could you briefly explain Tekfen Holding's flexible working system?**

At Tekfen Group, we have established a system focused on employee satisfaction and efficiency with an inclusive approach that covers the employer, the employee, and the needs of the business alike to adapt our company to the remote work system brought along by the pandemic. We manage the remote work process with the Oracle Human Work Management System, our own ERP module. This system monitors the process and increases efficiency following our internal legislation, the "Uniform Remote Work Method" which defines the rules and methods for remote work.

We believe that remote work can be very effective in terms of quality of life and work efficiency when managed with the right strategy between the employer and the employee. To that end, the work monitored by the manager based on goals and activities must be measurable in terms of performance and efficiency. We emphasize the planning and evaluation of our department managers with their teams in monitoring and coordinating work, especially in the remote work model.

With the remote work model offering flexible working hours, employees can work remotely for up to 10 working days a month in their working environment back at home per the Occupational Health and Safety principles. To keep our offices viable, we allow only up to half of the employees in each department to work remotely at once.

### **Why and how did you start this process? How did you run the project? Which stages ran smoothly?**

Like most companies, we at Tekfen Group switched to a remote work system with quick and organized planning to protect our employees and their families against the severe consequences of the COVID-19 pandemic.

We first asked the employees for their opinions by conducting a large-scale survey and then created our new system by balancing employee motivation with the company's expectations. For the management evaluation of the remote work concept in all aspects, we asked 180 respondents for their opinions, including managers and senior executives, consultants, and board members. More than 80% of the company management stated that their work can be done remotely and claimed that the remote work model could be easily adapted across the company. Meanwhile, more than 70% of the employees specified they wanted to work under a remote work model.

So, we first established the system's rule set and application standards by developing the "Uniform Remote Work Method." We established the Remote Work ERP system in cooperation with our Information Technologies department and supplied the equipment necessary, such as keyboard-mouse sets, headsets, printers, office chairs, and stationery supplies. We also offered meal and internet allowances to all employees during remote work periods.

### **What effects has the flexible work model had on the employees and the company?**

The number of employees prioritising balance between work and private life was increasing, and we were aware that switching to a remote work system would be inevitable. This intersection has led to the "New Normal Business Life," a reinforced version of the "New Normal" concept that came into our lives with COVID-19. Trying to adapt to business life in one of the century's most challenging periods, the new generation is finding its place in business as flexible work systems replace traditional practices. This more creative and effective technology generation also wants to benefit from the conveniences of the digital world in balancing work and private life.

Many small- and large-scale companies did not initially know how to handle the increasing prominence of remote work systems across the country and globally, as they contrasted with traditional work methods. While the conventional system was preferred due to its low risk and becoming second nature, the "Remote Work System," which emerged out of necessity with the COVID-19 pandemic, has broadened the horizons of companies and showed a new and useful working method is possible. As a result, the flexible work model was made permanent after the pandemic.

We observed that our employees are much more satisfied and motivated with the remote work model, as they can save the time spent in traffic and on the road, work at home or other places, and manage work and working hours more effectively with a task-based approach, organise working hours in line with their schedule, spend more time with their families, and make more time for themselves. The fact that this is a voluntary system has also been a source of motivation for our employees.

### **What do you think the future looks like for the flexible work model?**

The flexible work model has led to the redefinition of the working ecosystem with the office-home hybrid work mix and continues to shape business life with next-generation office solutions and culture. The office concept is no longer defined as the "place where the team comes together to work." This independence has turned into a motivation tool that improves employee productivity. This personalized, flexible work experience has allowed for fewer office distractions, more employee productivity, and much larger workspaces.

With the widespread use of the hybrid system, there will no longer be any routines, and employees will be able to move away from classical and traditional methods and develop their own unique way of working. They will create their own office rules, determine their schedules with flexible working hours, motivate themselves better, and establish their freedom. As the HR managers of the companies, we will continue to observe the needs of employees and business processes and our efforts to implement practices to boost employee motivation and process efficiency.

## Trainings and Leadership Programs

Companies can make the work environment more dynamic by providing their employees with new skills and improving the existing ones with training, coaching, and development programs. Providing employees with learning, development, and growth opportunities increases their motivation and commitment to work. It is also recommended that companies invest in new technologies to tap into the existing potential. 37% of professionals claim that the best way to compensate for workforce and talent shortages is to develop existing employees and provide them with new skills.<sup>25</sup>

Tekfen Holding provides its employees with the expertise required by their positions, strengthens their adaptability to changing conditions, and trains internal leaders via various training and leadership programs. Tekfen Holding and its group companies provided an average of 14 hours of training per person in 2021. Employee training spending totaled 2.85 million Turkish lira. As part of these activities;

- The **Leadership Program**, established in 2018 in collaboration with Koç University, continued in the digital environment. In 2021, 60 managers and coordinators received 3,637 hours of training. This program aims to contribute to individual development, bring them together with experts from different fields, and offer different perspectives on issues such as strategic thinking, innovation, economy, and global trends. It was completed with a participation rate of 82%.
- The **Executive Development Program**, organized in collaboration with Koç University, was carried out from September to December. Consisting of individual awareness, strategic thinking, and team management modules, the program was designed to ensure that lower-level managers first effectively manage themselves and then, their tasks and teams. As part of the program, 3,904 hours of training were provided to 115 chiefs, assistant managers, and group leaders across Tekfen.
- The **Managing the VUCA (Volatility, Uncertainty, Complexity and Ambiguity) Age with Coaching Skills Program**, organized in collaboration with Sabancı University to improve the coaching skills of middle-level managers, was designed to teach how leadership and coaching concepts overlap and how to use coaching skills in both private and corporate life. The training was designed in line with the Leadership Potential Inventory results to cover the areas of tolerance to uncertainty, change, and mental agility, which stand out as areas for improvement across the group. Across the group companies, 83 middle- and top-level managers who completed the Leadership Program the previous year received 1,973 hours of training. The goal is to suggest movies and series compatible with the program to the managers who complete the training and ensure that the teachings are sustainable and permanent.
- Launched in 2021, the **Internal Trainer Training Program** passes the knowledge, skills, and experience of the Tekfen Group on to future generations and contributes to the development processes of the employees. 32 internal trainers were deemed suitable and included in the program's various modules. Volunteering internal trainer candidates across the company were selected based on factors such as one-to-one interviews, opinions of HR teams and managers, and technical equipment. To support internal trainers in preparing efficient training content and becoming successful trainers, e-learning content covering effective rhetoric, storytelling

---

<sup>25</sup> <https://www.kornferry.com/insights/featured-topics/future-of-work/2022-future-of-work-trends>

techniques, effective presentation, and public speaking was included in the program in addition to the Train the Trainer, Participant Management, and Digital Platform training modules. Internal trainers also receive One-on-One Design Coaching training, and the goal is to expand this pool with each passing year. The Internal Trainer Training Program implementation in 2022 is expected to boost employee loyalty and enable savings worth 80,000 Turkish lira in the total cost of the planned training.

(GRI 103-1, GRI 103-2, GRI 103-3, GRI 404-1, GRI 404-2)

## Tekfen Atelier

Tekfen Atelier, a training platform established in 2018 to meet the development needs of all company employees under Tekfen Holding, aims to contribute to employee development and increase their knowledge level in various areas with classroom and virtual classroom training, e-learning content, seminars, and webinars. Currently ongoing in the digital environment, the Tekfen Atelier provided 14,147 hours of training in 99 virtual classrooms throughout the year in technical, competence, development, and HSE-quality categories with a participation rate of 88%.

Continuing to support employees through the Learning Management System (LMS) consisting of video e-learning content, Tekfen Atelier expanded its training scope to cover areas such as project management, finance, risk management, occupational health and safety, information security, business ethics, quality management, team management, stress management, and effective communication with areas of the Law on the Protection of Personal Data (LPPD), HSE (Health, Safety, and Environment), and sustainability in 2021. Sustainability training was given to 2,894 employees via the LMS platform.

## Tekfen Atelier Mobile App

A total of 1,157 people made 4,396 applications to the 2022 training catalog via the **Tekfen Atelier Mobile App**. The app was developed to enable quick and easy training requests by all group company employees, including those in all projects, premises, and the head office in Turkey and abroad. In addition to the competency, development, technical, and HSE-quality categories, training offered by internal trainers for the first time is included in the catalog. Thanks to the Tekfen Atelier Mobile App, which will be further improved in 2022 with new features, employees' development processes will be tracked more easily and quickly.



## Employee Communication

The work-from-home model brought along by the pandemic has made employee communication even more critical. Companies need to learn about the expectations of their employees to meet their changing needs. Companies must work with their employees to create personalised, authentic, and motivating experiences that strengthen individual, team, and company performance and focus on value creation and employee experience to retain their best employees.<sup>26</sup>

Tekfen Holding and Group Companies adopt open communication to increase employee job satisfaction and offer channels such as the **Tekfen Human Resources (TİK) Mobile App** and the **Ethics Hotline** to establish continuous communication and understand their expectations. Various practices maintain employee communication.

- **Internal Customer Satisfaction Survey:**

The Internal Customer Satisfaction Survey aims to understand the dynamics between group companies and internal units and determine the effects of employees on business processes; provides information on evaluations of various service aspects such as communication, quality, and agility; and raises awareness on areas for improvement. In this study, which has been carried out every year across group companies since 2018, areas for improvement are identified to improve the quality of communication and service, and improvement-oriented processes are designed in these areas. In the survey, which was completed in 2021 with a 92% participation rate from all group companies, the average satisfaction rate across the Tekfen Group stood at 72% following the consideration of various aspects, such as communication, efficiency, agility, and authorisation. The growth targets for the average of all aspects or a certain aspect over the years are included in the employees' scorecards, which are monitored following the performance evaluation criterion.

- **Employee Effectiveness and Leadership Climate Survey:**

Tekfen believes that productivity stems primarily from employees' satisfaction with their workplace and conducts surveys to measure employee commitment to the organisation and their potential to work effectively. Survey results are reviewed every year, action plans are drawn up, and changes in the relevant areas are monitored over the years. The survey covers the entire group and reflects employees' commitment to the organisation, their thoughts about the opportunities provided by the organisation, and their opinions on the company's strategy and leaders. The survey measures employee satisfaction in aspects such as business processes, trust in leaders (leadership climate), remuneration and fringe benefits, resources, respect and appreciation, performance, and training and included questions about the management of the COVID-19 process and the remote work model for the first time in 2021. According to the results of the survey, which was conducted with a participation rate of 96% by white-collar and blue-collar employees, the employee effectiveness rate across Tekfen Group was 64%. The standard for effective work is 52% in Turkey and 47% worldwide.

---

<sup>26</sup> <https://www.mckinsey.com/business-functions/people-and-organizational-performance/our-insights/this-time-its-personal-shaping-the-new-possible-through-employee-experience>

The results of the Employee Effectiveness Survey, which measures employee loyalty and the opportunities offered to the employees, are monitored in company-based scorecards. The Trust in Leaders aspect, which shows the views on the ethical stance and management of the company, is included in the scorecards of senior managers.

## Occupational Health and Safety (OHS)

The COVID-19 pandemic has reminded companies of how important it is to emphasise the health and well-being of their human resources to improve employee engagement and performance. To that end, companies should go beyond compliance with Occupational Health and Safety regulations. They must include Occupational Health and Safety among their main goals and improve themselves in that area.<sup>27</sup>

Occupational Health and Safety is one of the top priorities for Tekfen Holding, which operates companies in high-risk industries such as construction and chemicals. The group aims for zero accidents across all industries and strives to transform the OHS concept into a living culture. In 2021, the group continued to work intensively to ensure compliance with the OHS Management Systems and spread the OHS culture. Accordingly, on-the-job training continued for job-specific risk identification and relevant measures implementation to develop a behaviour-oriented safety culture with daily site controls and regular site, internal, and second-party audits. Tekfen Construction, Tekfen Engineering, Toros Agri, and Tekfen Manufacturing companies revised their OHSAS 18001 certificate for the Occupational Health and Safety Management System to ISO 45001 to approach zero accidents. This certification covers 5,343 employees<sup>28</sup> across 8 facilities of the Tekfen group.

Tekfen Holding appoints employee representatives in communication with employer representatives for national and international projects and ensures that employees' views on OHS are included in the decision-making processes through regular meetings.

OHS risk assessments of potential projects are made before the start of the projects, and these risk assessments are regularly reviewed for existing projects and facilities. In cases where process safety requires, HAZOP (Hazard and Operability) studies are carried out to identify hazards.

As of 2020, combatting COVID-19 has been the key OHS focus across Tekfen Holding and all group companies in 2021. Crisis committees were established to ensure effective and rapid decision-making throughout the process, and action plans were made and put into practice. Throughout the year, combatting the pandemic was carried out following these plans and under the control of crisis committees. From the pandemic's first days, all employees were given training on COVID-19 and methods of protection from the pandemic and were kept aware through regular information and publications.

In 2021, a year still under the influence of the COVID-19 pandemic, the **Health Services Department** was established under the Tekfen Holding Human Resources Directorate, serving the entire Tekfen Group. More than 4,000 PCR tests were performed on volunteer and random bases for Tekfen employees at different locations such as workplaces, homes, hospitals, and airports throughout the year, which was

---

<sup>27</sup> [https://www.kornferry.com/content/dam/kornferry-v2/featured-topics/pdf/FOW\\_TrendsReport\\_2022.pdf](https://www.kornferry.com/content/dam/kornferry-v2/featured-topics/pdf/FOW_TrendsReport_2022.pdf)

<sup>28</sup> Number of employees excluding subcontractors

marked by various health measures and close monitoring of employees. Cases and close contacts were actively monitored in coordination with the Human Resources, Administrative Affairs, Workplace Physician, and HSE Departments across the group companies, and hygiene kits and masks were distributed regularly throughout the year.

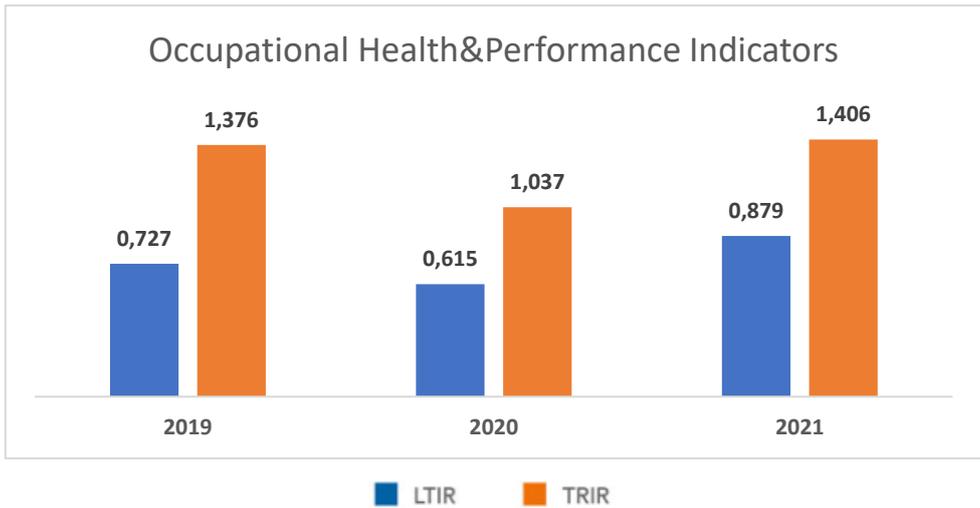
HSE teams manage OHS and Environmental Management Systems across the group companies. The HSE & Quality departments under Tekfen Holding constantly monitor the OHS performances of the group companies. As of the end of 2021, 287 HSE and 87 healthcare professionals work under Tekfen.<sup>29</sup>

Daily site controls and weekly site, internal, and third-party audits are carried out to ensure compliance with the management systems, regulations, and procedures. Tekfen Holding, along with the Uniform Method of HSE internal directive, determines the HSE strategy and minimum requirements for the group companies.

Tekfen had one fatal occupational accident in 2021. An employee of one of Tekfen Construction's subcontractors in the Qatar Al-Khor Expressway Link Roads Project died from an occupational accident.

(GRI 103-1, GRI 103-2, GRI 103-3, GRI 403-1, GRI 403-8)

Performance Indicators (Rates)	2019	2020	2021
<b>LTIR<sup>30</sup> (LTIR= Number of Injuries Resulting in Lost Workdays x 1,000,000 / Total Worked Person-Hours)</b>	0.727	0.615	0.879
<b>TRIR<sup>31</sup> (TRIR = Total Number of Recordable Injuries x 1,000,000 / Total Worked Person-Hours)</b>	1.376	1.037	1.406

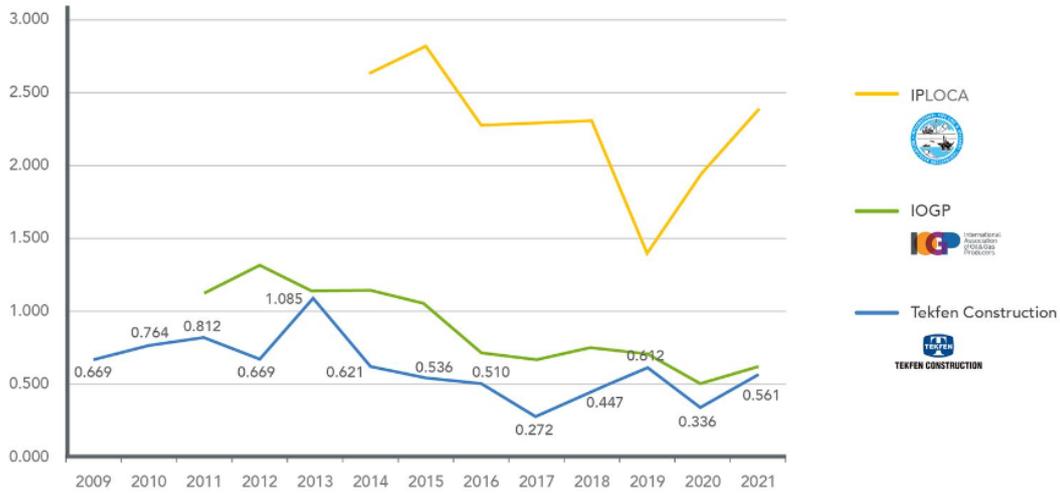


<sup>29</sup> This number increases to 479 when including the HSE employees of subcontractors.

<sup>30</sup> LTIR (Lost Time Incident Rate): The rate of accidents with injuries in 1 million work hours, resulting in lost workdays.

<sup>31</sup> TRIR (Total Recordable Incident Rate): The rate of accidents with injuries in 1 million work hours, requiring medical treatment beyond first aid.

**Tekfen Construction vs. IOGP and IPLOCA**  
**According to the Total Recordable Injury Rate (TRIR)**  
**(1,000,000 people)**



(GRI 103-2, GRI 103-3, GRI 403-1, GRI 403-2, GRI 403-3, GRI 403-4, GRI 403-7)

## OHS Training

OHS training is prioritized across all group companies to increase the employees' knowledge of OHS, make OHS a part of the work culture, and reach zero accidents. In this regard, all employees working under Tekfen Holding are provided with equal opportunities. The same rules apply and the same OHS opportunities are presented for all Tekfen employees and subcontractors; the performance indicators for all employees are monitored together.

Health, Safety, and Environment (HSE) Training	2019	2020	2021
<b>HSE Training (person*hour)</b>	688,602	301,056	514,930
<b>HSE Training Rate (HSE Training/ Total Worked Hours) x 100</b>	0.89%	0.53%	1.01%

## Tekfen Construction

Project-specific HSE plans, HSE procedures, and risk assessment reports are prepared before starting any activity in any project or workplace. These documents are based on Tekfen Construction's Corporate HSE Plan and Procedures and ISO 45001:2018 Occupational Health and Safety Management System standards, the requirements specified in the legal regulations of the relevant country, and the customer's HSE requirements. At this stage, all potential risks related to the activities are determined, and measures are planned to reduce their impact.

The **HSE Risk Management Procedure** has been established in line with the Tekfen Construction Corporate HSE Plan. This procedure defines hazard identification and risk assessment methods.

**HSE Observation Cards** are monitored across all projects and workplaces, which enables all employees to share any cases of HSE non-compliance or good practices. The HSE team regularly evaluates the feedback, records it in the HSE Observations List, and monitors any required actions.

The **HSE Personnel Development Program** was established in 2021 to contribute to the professional development of HSE employees working in Tekfen Construction's projects and workplaces, bring HSE professionals together on the same platform, and have them inform each other of the good practices they manage. As part of the program, online training was organized under 9 headings with 67 HSE personnel from all levels participating.

Tekfen Construction updated and re-published the [Off-the-Job Safety Handbook](#), which was prepared as part of the Off-the-Job Safety program started in 2018 to raise employee awareness of HSE issues, both in and out of the workplace. The updated book, dedicated to frontline healthcare professionals who have worked hard in combatting COVID-19, was also published on the official website of the International Pipe Line & Offshore Contractors Association (IPLOCA), one of the key organisations in the global oil and gas industry.

Tekfen Construction was awarded the IPLOCA Health and Safety Award in 2021 for its “Operator Training with Virtual Reality Equipment” project. The award-winning project allows the operators of elevated work platforms to evaluate their competencies before they are recruited and gain experience through periodic training without facing the risks arising from the real equipment.

#### **Tekfen Construction's occupational safety achievements in 2021:**

- Al-Thumama Stadium Project (Qatar): 25 million work hours without lost time
- Haradh Satellite Compressor Stations Pipelines Project (Saudi Arabia): 20 million work hours without lost time
- Area 51 Multi Well Pad Pressure Management Project (Kazakhstan): 15 million work hours without lost time
- Kharampur Gas Pipeline Project (Russia): 3 million work hours without lost time
- Tüpraş İzmit Refinery, FCC Revamp Installation Works Project (Turkey): 1 million work hours without lost time
- Tax Ministry Administration Building (Azerbaijan): 2 million work hours without lost time
- Tüpraş İzmit Refinery, Maintenance, and Repair Services Project (Turkey): 1 million work hours without lost time

## Hazard Hunting Headquarters (3H)

The Hazard Hunting Headquarters (3H), developed by Tekfen Construction as a hands-on HSE training area project involving employees, was implemented as a pilot project in 2021. The personnel who received theoretical HSE training during the recruitment phase visit the 3H area after the training and see the work areas, work equipment, hand tools, and good and bad examples of specific activities. The project aims to improve risk perception and get the employees to adopt the habit of identifying hazards, making work areas safer in the process.

The 3H Practical Training Area was established on an area of approximately 1,000 square metres. In the pilot project, 5 million work hours were completed without lost time. While the average LTIR was 0.401 in similar projects, this rate was 0.238 in the pilot 3H project.



## Tekfen Engineering

Tekfen Engineering started the Incident/Observation Notification Campaign project to identify workplace hazards, improve working conditions, make the work environment safer, and take precautions before accidents occur. As part of the project, which aims to identify workplace hazards by improving incident and observation reporting performance, it was decided that 4 of the incident/observation/near-miss notifications made by the employees would be rewarded. 38 notifications were received for the duration of the project. The project resulted in a significant increase in the otherwise low number of near-miss notifications, and measures were taken regarding situations that could potentially cause occupational accidents.

## Tekfen Manufacturing

Implementing an HSE Management System following the ISO 45001 and ISO 14001 standards, Tekfen Manufacturing has been working without any lost time since 2018, adding up to 1,197 days.

## Toros Agri

In 2018, Toros Agri became Turkey's first and only company awarded the "Protect & Sustain" certificate by the International Fertilizer Industry Association (IFA). Observing compliance with human safety, product safety, quality, and environmental standards over the value chain extending from fertiliser

production to consumption, the certification process evaluates the effectiveness of monitoring, measuring, and continuous improvement studies of the effects on the entire value chain to ensure responsible production, distribution, and consumption. Processes of the facilities, regional warehouses, and main activities are evaluated as part of the annual audits of the IFA Protect & Sustain program. As a result of the audits, Toros Agri retained its “Protect & Sustain” certificate at the Excellence level in 2021.

In 2021, process safety audits were performed across all high-risk facilities of Toros Agri in compliance with the Process Safety Regulation, which was prepared based on the Tekfen Process Safety Model. The relevant notifications and updates were made, and periodic maintenance and audits of critical equipment were carried out. Actions for improvement were determined and systematically monitored, personnel performing maintenance and audits of critical equipment were certified and change maps of important personnel working in hazardous chemical and hazardous processes were updated.

(GRI 403-5, GRI 403-6)

## Social Investments

Social, cultural, and environmental activities have formed an integral part of the corporate culture that Tekfen has implemented from day one. Using some of its added value in social projects, Tekfen realises various corporate responsibility projects in education, culture and arts, and development. Tekfen Holding shapes its social investment programs in line with its “Bridging Prosperity” vision, which forms the framework of its sustainability understanding. Social projects that will contribute to the resolution of social and environmental problems are designed in a way that will benefit both Tekfen and society in line with the understanding of creating common values.

Alongside the Tekfen Foundation, Tekfen Group Companies also allocate resources to various social responsibility projects congruent with their own goals and strategies. In 2021, Tekfen Group Companies donated 16.38 million Turkish liras in aid and donations.

### Tekfen Foundation

Tekfen established the Tekfen Foundation for Education, Health, Culture, Art, and Protection of Natural Resources in 1999 to contribute to social and cultural activities under a corporate framework and help build a livable future in harmony with nature. Drawing inspiration from its founding partners, Tekfen Foundation allocates significant resources to education, the country's biggest requirement for a better present and a sustainable future, and culture and arts, some of the primary indicators of a society's development. Tekfen Foundation, having realised countless projects to date, has been operating as a public interest group since 2004.

#### *Education*

The Tekfen Foundation provides scholarships to high school and university (undergraduate) students to support the education of successful students in Turkey who need financial support and the children of Tekfen employees. Having contributed to the graduation of nearly 3,000 students to date, the Tekfen Foundation provided scholarships to 553 students in the 2020–2021 academic year. The Foundation,

which also provides its scholars with intern opportunities at Tekfen Group Companies and mentoring support, had to suspend the internship program in 2021 due to the pandemic but continued the mentoring program that was started the year before.

### *Culture and Arts*

Tekfen Philharmonic, which has a special place in the country's culture and arts, is the art institution of the Tekfen Foundation. Founded in 1992 as a chamber orchestra with the participation of artists from 11 countries in the Black Sea region and going on to bring together musicians from 23 countries with the inclusion of countries from the Caspian Sea and Eastern Mediterranean, Tekfen Philharmonic is a cultural ambassador that serves as a bridge of friendship between the three seas.

### *Social Development*

#### **“Women Farmers Loan” Project**

Considering the active participation of women in the workforce to be one of the most fundamental prerequisites for a sustainable society, sustainable local development, and a sustainable family economy, Tekfen Foundation Turkey Waste Prevention Foundation (TISVA) started the Women Farmers Loan project in 2021 to support women entrepreneurs who want to work in agriculture but do not have the financial means to start their own business. As part of the scope of the pilot project started on May 14, World Farmers' Day, 80 low-income female farmers in the Aegean Region were granted loans of 5,000 to 15,000 Turkish lira depending on their agricultural activities. Women farmers entitled to receive loans are also provided with training and consultancy support by Toros Agri's expert agricultural engineers to enable them to manage their business in the best way possible. Following women farmers from the Aegean, 23 more female farmers from the Western Mediterranean were provided with loans as part of the program.



### **Tekfen Holding**

Tekfen Holding continues its tradition of supporting the play of a local group at the Istanbul Theater Festival every year. Tekfen's support as the primary sponsor of the Darüşşafaka Basketball Team ended in 2021.

### ***Employee Volunteering Projects***

***Save at Home to Secure Your Future:*** Approaching the environment with respect and conducting its activities with the lowest impact on nature, Tekfen Holding started the Save at Home to Secure Your

Future project to encourage its employees to show the same effort at home. The project supports reducing the household consumption of resources such as electricity, natural gas, and water, and aims to save money by helping the home economy and the environment. In the “Recycling” competition, held in glass and battery categories, the participants get the chance to win various prizes for the glass and battery waste they bring to their workplaces. As part of the Save at Home to Secure Your Future program, which covers about 500 Tekfen members and their families, participants are provided with weekly content, including environmentally friendly practices and tips for more savings. In doing so, it contributes to increasing employees' environmental awareness.

***Tekfen Backyard:*** An idle piece of land at the Tekfen Holding Ulus Campus was turned into a small orchard named the “Backyard.” Jams were made from strawberries grown in the hobby garden, organized with the voluntary support of experts from the Nezahat Gökyiğit Botanical Garden (NGBG) and group companies employees, and sold at an auction held by Tekfen.

## **Tekfen Construction**

### *Education*

Tekfen's support for the Tekfen Foundation Special Education Application Center in Ceyhan, Adana continued in 2021. The school, opened by the Tekfen Foundation under Tohum Autism Foundation's consultancy in 2014 and built with the complete renovation and furnishing of an idle building, plays a considerable role in meeting the educational needs of children with autism. In line with the school's needs, Tekfen Construction overhauled and renewed the two existing containers in the garden in 2021 and gifted a new container. Intelligence games, visual arts, music, and sensory development workshops are held in these containers.

### *Sponsorship*

Tekfen Construction, which has realized numerous highway projects in Turkey and different parts of the world, is among the sponsors of the book “Karayollarının Asırlık Yol Çizgileri” (Century Old Road Lines of General Directorate of Highways) published in 2021 by the Turkish Employers' Association of Construction Industries (İNTES). The book, which serves as a major publication for the history of Turkey's highways, tells the story of the highways from the Ottoman Empire to modern Turkey with comments from many people.

## **Toros Agri**

### *Education*

In 2021, the company continued to meet the maintenance, repair, and general needs of Toros Agri Anatolian High School and Toros Agri Primary School, which were opened in the region of Toros Agri's Ceyhan Production Facility.

### *Local Development*

Increasing productivity with its agricultural inputs since day one, Toros Agri stands by Turkish farmers and aims to raise their living standards with its support for farmer training and awareness-raising efforts on the use of correct fertilisers. One of the pioneering efforts of Toros Agri in helping farmers benefit

from technological developments is the “**Toros Farmer**” Application app developed in 2016. You can learn more about the Toros Farmer Application in the Innovation section.

### ***Toros Farmer Academy***

The fertiliser industry is critical to ensuring sustainable food safety, an issue that has become even more prominent with the pandemic. Toros Agri considers increasing the population of educated and conscious farmers necessary for ensuring efficiency in fertiliser use and effective agriculture. Aiming to develop Turkish agriculture, raise awareness of farmers on good agricultural practices, and increase their productivity and welfare by supporting farmers with issues such as correct and balanced fertiliser applications and soil, leaf, and water analyses since day one, Toros Agri started the Toros Farmer Academy (Training Bus) and Agricultural Technique and Digital Marketing projects in 2018.

Put on the road as part of the project, the **Toros Agri Training Bus** visited 96 locations in 2021 and trained farmers and distributors on the correct use of fertilisers. Supporting farmers by visiting every region of Anatolia with specially equipped vehicles, the Agricultural Technique and Digital Marketing team conducted 5,398 distributor visits, 7,975 farmer discussions, 184 agricultural institution visits, one drone activity, and 20 farmer meetings across the country in 2021. During the production season, 15 demonstration trials were performed in seven regions. The trials with the combined use of Toros's organic solid fertiliser and organomineral fertilisers produced better results than the others. These results were also shared in the publications and promotional activities performed during the year.



More information about social investments is available in the [2021 Annual Report](#).

## 4. APPENDIX

### Communication Methods with Stakeholders

<b>Stakeholder Group</b>	<b>Communication Method</b>	<b>Communication Frequency</b>
<b>Employees</b>	Company intranet portal	Perpetually
	Corporate websites	Perpetually
	OHS Board meetings	At least once a month
	Internal customer surveys	Annually
	Sustainability reports	Annually
	Annual reports	Quarterly
	T-Bulletin	Quarterly
	Stakeholder analysis	At most every four years
<b>Public Institutions</b>	Meetings and conferences	As needed
	Corporate websites	Perpetually
	Annual reports	Quarterly
	Sustainability reports	Annually
	T-Bulletin	Quarterly
	Stakeholder analysis	At most every four years
<b>Business and Solution Partners</b>	One-on-one interviews	Perpetually
	Corporate websites	Perpetually
	Annual reports	Quarterly
	Sustainability reports	Annually
	T-Bulletin	Quarterly
	Stakeholder analysis	At most every four years
<b>Suppliers</b>	One-on-one interviews	Perpetually
	Corporate websites	Perpetually
	Audits and trainings	Daily
	Annual reports	Quarterly
	Sustainability reports	Annually
	T-Bulletin	Quarterly
	Stakeholder analysis	At most every four years
<b>Associations, Universities, Media, and NGOs</b>	Collaborations	Perpetually
	Corporate websites	Perpetually
	Participation in meetings and working groups	At least once in a month
	Seminars and conferences	At least once a month
	Annual reports	Quarterly
	Sustainability reports	Annually

	T-Bulletin	Quarterly
	Stakeholder analysis	At most every four years
<b>Shareholders, Investors, and Analysts</b>	General Assembly meetings	Annually
	Special case announcements	As needed
	One-on-one meetings and correspondences	Perpetually
	Teleconferences	Quarterly
	Quarterly investor presentation	Quarterly
	Conferences and roadshows	At least 10 times a year
	Annual reports	Quarterly
	Sustainability reports	Annually
	T-Bulletin	Quarterly
	Stakeholder analysis	At most every four years
<b>Customers</b>	One-on-one interviews	Perpetually
	Corporate websites	Perpetually
	Annual reports	Quarterly
	Sustainability reports	Annually
	T-Bulletin	Quarterly
	Stakeholder analysis	At most every four years

(GRI 102-40)

## Performance Indicators

### Environmental Performance Indicators<sup>32</sup>

Greenhouse gas emissions (tons of CO <sub>2</sub> e)	2019	2020	2021
<b>Scope 1</b>	1,015,149	1,054,641	1,112,048
<b>Scope 2 (Location-Based)</b>	41,114	32,976	33,133
<b>Scope 2 (Market-Based)</b>	41,114	32,976	31,973 <sup>33</sup>
<b>Scope 3</b>	3,847,234	5,179,127 <sup>34</sup>	4,656,128
<b>Scope 1+ Scope 2</b>	1,056,262	1,087,617	1,144,020

Emission Intensity (tons of CO <sub>2</sub> e)	2019	2020	2021
<b>Emission Intensity (tCO<sub>2</sub>e/million USD turnover)</b>	429.66	680.63	625.12
<b>Emission Intensity (tCO<sub>2</sub>e/number of employees)</b>	61.79	58.97	69.22 <sup>35</sup>

Energy Production (Mwh)	2019	2020	2021
<b>Heat Generation</b>	646,730	678,390	554,013
<b>Renewable Energy Production (Waste Heat)</b>	226,652	250,106	257,814
<b>Renewable Energy Production (Solar Energy)</b>	50	69	167
<b>Renewable Energy Production (Biomass)</b>		16,348	37,814
<b>Diesel-Generated Electricity</b>	115,168	212,021	209,536
<b>Total Amount of Electricity Produced</b>	341,870	478,544 <sup>36</sup>	505,331
<b>Electricity Sold</b>	91,744	99,756	113,019

Energy Consumption (Mwh)	2019	2020	2021
<b>Natural Gas</b>	69,558	41,478	51,042
<b>Coal</b>	16,987	18,767	16,398
<b>Fuel Oil</b>	272	279	317

<sup>32</sup> The scope of the 2021 emission and energy data was extended by including data from Toros Meram Yenilenebilir Enerji Üretim A.Ş.

<sup>33</sup> In 2021, the I-REC certificate was obtained and reported separately.

<sup>34</sup> In 2021, the Scope 3 data was further expanded by including imported fertilizers. The 2020 data was also revised to that end.

<sup>35</sup> The number of employees include contractors. The number of employees declined in 2021.

<sup>36</sup> The 2020 data was revised to include biomass energy data.

<b>LPG</b>	1,110	939	902
<b>Diesel (Fixed Plants)</b>	115,168	212,021	209,536
<b>Diesel (Vehicle/Equipment)</b>	508,125	529,871	409,746
<b>Gasoline (Vehicle)</b>	14,930	54,090	44,836
<b>LNG</b>	34,006	31,659	30,771
<b>CNG</b>	1,742	1,305	-
<b>Total Fuel Consumption</b>	761,898	890,410	763,549
<b>Total Amount of Electricity Purchased</b>	88,520	70,403	77,129
<b>Renewable Energy Consumption (Waste Heat &amp; Solar Energy)</b>	134,958	166,767	182,776
<b>Total Energy Consumption</b>	985,376	1,127,580 <sup>37</sup>	1,023,454

<b>Amount of waste (tonnes)</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
<b>Total amount of hazardous waste</b>	1,529	510	1,422
<b>Total amount of non-hazardous waste</b>	101,397	41,470	32,096

<b>Waste Breakdown According to Disposal Method (tonnes)</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
<b>Sent to recycling/recovery</b>	17,799	3,856	8,267
<b>Sent to incineration</b>	1,709	510	149
<b>Sent to landfill</b>	83,418	37,613	20,488
<b>Other</b>	-	-	4,213

<b>Water data (megalitre)</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
<b>Total amount of water withdrawn</b>	106,630	119,217	104,542
<b>Total amount of water used</b>	10,064	12,213	9,438
<b>Total amount of water discharged</b>	96,566	107,004	95,104
<b>Amount of water reused</b>	3,012	3,762	1,874

<b>Amount of water withdrawn according to source (megalitre)</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
<b>Surface waters<sup>38</sup>(fresh water)</b>	1,974	5,681 <sup>39</sup>	5,814
<b>Surface waters (saline water)</b>	80,317	102,476	87,273

<sup>37</sup> The total energy consumption data changed as biomass energy was included in the 2020 data.

<sup>38</sup> Surface waters include rain waters.

<sup>39</sup> A switch occurred from third-party sourced water to surface water, and the 2020 data was revised accordingly.

Groundwater	18,520	9,946	10,105
Produced water	86	68	0
Third-party water	5,732	1,046 <sup>40</sup>	1,350
<b>Total</b>	<b>106,630</b>	<b>119,217</b>	<b>104,542</b>

Total amount of water withdrawn by water quality (megalitre)	2019	2020	2021
Fresh water <sup>41</sup>	26,312	16,741	17,269
Other water <sup>42</sup>	80,317	102,476	87,273
<b>Total</b>	<b>106,630</b>	<b>119,217</b>	<b>104,542</b>

Wastewater by discharge points (megalitre)	2019	2020	2021
Surface waters (fresh water)	705	90	87
Surface waters (saline water)	94,639	104,887	91,253
Groundwater	773	1,615	1,945
Third-party water	449	412	1,818
<b>Total</b>	<b>96,566</b>	<b>107,004</b>	<b>95,104</b>

Total amount of water discharged according to the water quality of the receiving environment (megalitre)	2019	2020	2021
Fresh water	1,927	2,117	3,850
Other water	94,639	104,887	91,253
<b>Total</b>	<b>96,566</b>	<b>107,004</b>	<b>95,104</b>

Water data of high/very high water-stressed areas (megalitre)	2019	2020	2021
Total amount of water withdrawn	21,657	12,222 <sup>43</sup>	13,108
Total amount of water used	7,780	8,154	7,754
Total amount of water discharged	13,877	4,068	5,353
Amount of water reused	1,021	649	753

<sup>40</sup> A switch occurred from third-party sourced water to surface water, and the 2020 data was revised accordingly.

<sup>41</sup> Fresh water: ( $\leq 1.000$  mg/L Total Dissolved Solids)

<sup>42</sup> Other water: ( $> 1.000$  mg/L Total Dissolved Solids)

<sup>43</sup> According to the WRI Aqueduct Water Risk Atlas, Samsun was a very highly water-stressed region in 2018, while it was classified as a region with low water stress in 2019. Therefore, there is a decrease.

Distribution of total amount of water withdrawal in regions with high/very high water stress (megalitre)	2019	2020	2021
Fresh water	21,657	12,222	13,108
Other water	0	0	0

(GRI 302-1, GRI 303-3, GRI 303-4, GRI 303-5, GRI 305-1, GRI 305-2, GRI 305-3, GRI 305-4, GRI 306-3, GRI 306-5)

## Greenhouse Gas Calculation Methodology

"Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard" is used as the greenhouse gas calculation methodology.

Within the scope of 2018 Scope 3 emissions, emissions from business travel, employee transportation to work, waste, leased assets and fuel sold are reported. In 2019 and 2020, in addition to these emissions, the production of construction materials purchased in the Contracting Group, the transportation of Toros Agri and Tekfen Agri's products, the transportation of raw materials to Toros Agri, the production of ammonia used in the fertiliser production process, the electricity consumption of Toros Agri dealers, Emissions due to the production of used fuels, the use of fertiliser sold by Toros Agri and losses in purchased electricity are also reported. In 2021, emissions from the production of imported fertilizers and raw materials such as urea and ammonium sulphate are also included in the reports

## Emission Factors

The emission factors used are shared in the table above. The Global Warming Potential (GWP) coefficients are taken from the 4th Assessment Report of the Intergovernmental Panel on Climate Change (IPCC). For emission factors, IPCC, DEFRA Greenhouse Gas Reporting: Conversion Factors 2020 Report and International Energy Agency (IEA) emission factors were used.

## Scope 1

Fuel / Emission Source	Unit	CO2				CH4				N2O				Total EF	Total EF
		TJ	CO2 EF	EF Unit	tCO2/Unit	CH4 EF	EF Unit	tCH4/Unit	tCO2eq/Unit	N2O EF	EF Unit	tN2O/Unit	tCO2eq/Unit	(kg CO2e/TJ)	tCO2e/Unit
Natural gas	m3	0,0000345329	56.000,00	kgCO2/TJ	0,00193383960	1,00	kgCH4/TJ	0,00000003453	0,000000086332	0,10	kgN2O/TJ	0,0000000035	0,0000010291	56054,80	0,00193573
Coal-Lignite	tonnes	0,0125574000	101.000,00	kgCO2/TJ	1,26829740000	1,00	kgCH4/TJ	0,00001255740	0,00031393500	1,50	kgN2O/TJ	0,0000188361	0,0056131578	101472,00	1,27422449
Diesel (Fixed Combustion)	lt	0,0000354370	74.100,00	kgCO2/TJ	0,00262588043	3,00	kgCH4/TJ	0,00000010631	0,00000265777	0,60	kgN2O/TJ	0,0000000213	0,0000063361	74353,80	0,00263487
LPG (Fixed Combustion)	kg	0,0000456252	63.100,00	kgCO2/TJ	0,0028789514	1,00	kgCH4/TJ	0,00000004563	0,00000114063	0,10	kgN2O/TJ	0,0000000046	0,0000013596	63154,80	0,00288145
Diesel (Mobile Combustion)	lt	0,0000354370	74.100,00	kgCO2/TJ	0,00262588043	3,90	kgCH4/TJ	0,00000013820	0,00000345511	3,90	kgN2O/TJ	0,0000001382	0,0000411849	75359,70	0,00267052
Gasoline (Mobile Combustion)	lt	0,0000319963	69.300,00	kgCO2/TJ	0,0022173405	3,80	kgCH4/TJ	0,00000012159	0,00000303964	5,70	kgN2O/TJ	0,0000001824	0,0000543488	71093,60	0,00227473
Diesel (Off-Road, Mobile)	lt	0,0000354370	74.100,00	kgCO2/TJ	0,0026258804	4,15	kgCH4/TJ	0,00000014706	0,00000367659	28,60	kgN2O/TJ	0,0000010135	0,0003020223	82726,55	0,00293158
LPG (Mobile)	lt				0,0015549100				0,00000121000				0,0000009700		0,00155709
Fuel Oil	lt				0,0031626200				0,00000473000				0,0000078800		0,00317522
LNG	tonnes				2,5504900000				0,00344000000				0,0013400000		2,5552800000
CNG	tonnes				2,5336900000				0,00344000000				0,0013400000		2,5384800000

**Scope 2** emission factors are taken from the International Energy Agency's IEA Emission Factors 2021 database. Emission factors are not published in this report as this database is not publicly available.

### Scope 3

	<b>Unit</b>	<b>EF</b>
<b>Household waste</b>	tCO2e/tonnes	0,446242
<b>Hazardous waste</b>	tCO2e/tonnes	0,021294
<b>Recyclable waste</b>	tCO2e/tonnes	0,021294
<b>Staff service</b>	tCO2e/km	0,00024116
<b>Management vehicles</b>	tCO2e/km	0,00016843
<b>Airplane-short distance</b>	tCO2e/km	0,00024587
<b>Airplane -middle distance</b>	tCO2e/km	0,00015353
<b>Airplane -long distance</b>	tCO2e/km	0,00018362

(GRI 305-1, GRI 305-2, GRI 305-3, GRI 305-4)

## Social Performance Indicators

Number of Employees by Gender and Labour Category	2019		2020		2021	
	Female	Male	Female	Male	Female	Male
Number of White-Collar Employees	572	2,956	550	2,597	552	2,437
Number of Blue-Collar Employees	22	3,063	20	3,081	18	2,946
<b>Total Number of Employees</b>	<b>594</b>	<b>6,019</b>	<b>570</b>	<b>5,678</b>	<b>570</b>	<b>5,383</b>
	<b>6,613</b>		<b>6,248</b>		<b>5,953</b>	
Number of Employees Covered by Collective Labour Agreement	887		797		682	

Number of Employees by Gender and Age	2019		2020		2021	
	Female	Male	Female	Male	Female	Male
Under 30	152	1,169	100	934	94	713
Ages 30-50	378	3,946	404	3,840	408	3,689
Over 50	64	904	66	904	68	981

Number of Employees by the time Worked	2019		2020		2021	
	Female	Male	Female	Male	Female	Male
Worked for 0-5 Years	415	4,420	351	3,261	292	2,751
Worked for 5-10 Years	86	615	92	991	141	1,197
Worked for 10 Years and More	93	984	127	1,426	137	1,435

Number of Employees with a Senior Management Title by Gender and Age	2019		2020		2021	
	Female	Male	Female	Male	Female	Male
Over 50	17	145	15	116	19	116
Ages 30-50	43	264	47	236	49	269
Under 30	7	7	1	3	1	1

Number of Employees by Gender Who Took and Returned from Parental Leave	2019		2020		2021	
	Female	Male	Female	Male	Female	Male
Number of Employees Who Took Parental Leave	10	28	15	52	2	50
Number of Employees Who Returned from Parental Leave	7	28	8	52	2	50

Number of Disabled Employees by Gender	2019		2020		2021	
	Female	Male	Female	Male	Female	Male
Number of Disabled Employees	13	79	9	65	6	61

Number of New Employees by Gender and Age	2019		2020		2021	
	Female	Male	Female	Male	Female	Male
Number of Employees Hired During the Year	129	3,172	104	2,020	43	176
Total Number of Employees Hired During the Year	3,301		2,124		219	

Number of Employees by Gender Who Quit Job	2019		2020		2021	
	Female	Male	Female	Male	Female	Male
Number of Employees Who Quit During the Year	152	3,357	106	2,106	171	3,324
Total Number of Employees Who Quit During the Year	3,509		2,212		3,495	
Employee Turnover Rate	53%		35%		59%	
Volunteer Turnover Rate	-		-		30%	
Number of Employees Subject to Performance Evaluation	1,386		1,207		1,742	

Other Indicators	2021	
	Female	Male
First and Medium Level Manager	272	371
Top-level Manager	16	45
C Level Manager	1	19
Non-managerial Employees	451	4,843
Income-Generating Employees	6	62
Employees in STEM Positions	123	1,063
Internal Hire Rate	22%	

Employees by nationality	Percentage of total employees	Percentage of managerial position
Turkiye	71,61%	93,9%
Russian Federation	15,03%	0,9%
Kazakhstan	2,55%	2,7%
Azerbaijan	2,44%	0,1%
Saudi Arabia	2,15%	0,1%
Other	6,22%	2,3%

(GRI 102-8, GRI 102-41, GRI 401-1, GRI 401-2, GRI 401-3, GRI 404-3, GRI 405-1)

#### Occupational Health & Safety Indicators<sup>44</sup>

	2019	2020	2021
<b>Total Worked Hours (Person-Hour)</b>	77,054,705	56,893,148	51,222,004
<b>Fatal Accidents (F)</b>	5	1	1
<b>Lost Workday Case (LWDC)</b>	51	34	45
<b>Restricted Work Case (RWC)</b>	11	8	6
<b>Medical Treatment Case (MTC)</b>	39	16	22
<b>Occupational Illness (OCC)</b>	12	0	0
<b>Lost-Time Injuries (LTI = F+LWDC)</b>	56	35	46
<b>Total Recordable Injuries (TRI = F+LWDC+RWC+MTC)</b>	106	59	74
<b>LTI Rate (LTIR= Lost Time Injury Rate x 1,000,000/Total Person-Hour)</b>	0.727	0.615	0.879
<b>TRI Rate (TRIR = Total Recordable Injuries x 1,000,000/Total Person-Hour)</b>	1.376	1.037	1.406
<b>HSE Training Rate (HSE Training /Total Worked Hour) x 100</b>	0.89%	0.53%	1.01%
<b>HSE Training (Person-Hour)</b>	688,602	301,056	514,930

(GRI 403-9, GRI 403-10, GRI 404-3)

<sup>44</sup> Covers domestic and international projects and businesses for activities considered high-risk in terms of job security, as well as data on subcontractors. All training seminars are given to employees and subcontractors under one of three heading: Health, Safety and Environment (HSE).

## Economic Indicators <sup>45</sup>

Economic Data (thousand TRY)	2019	2020	2021
<b>Total Revenue <sup>46</sup></b>	14,791,025	11,827,382	16,569,232
<b>Operating Expenses <sup>47</sup></b>	13,503,410	11,991,735	16,747,638
<b>Community Investments <sup>48</sup></b>	15,463	28,308	16,386
<b>Economic Value Retained <sup>49</sup></b>	1,272,152	-192,661	-194,792
<b>Investment Expenditures <sup>50</sup></b>	291,784	567,726	556,115

(GRI 201-1)

## Awards and Achievements

- Tekfen Holding received an A score in the CDP's Water Security Program, which evaluated 3,368 companies from all over the world in 2021.
- Tekfen Holding received an "A (-)" score in the CDP's Climate Change Program in 2021.
- Tekfen Agri ranked 149th in Turkishtime magazine's annual R&D 250 list in 2020.
- In 2018, Toros Agri maintained its "Protect & Sustain" certificate by the International Fertilizer Association (IFA). And in 2021, the company protected its "excellence" status of the "Protect & Sustain" certificate by IFA.
- Tekfen Construction was deemed worthy of the Ethics and Compliance Award by BP, its customer, for its adherence to ethical principles and the support of its senior management in this regard.
- Tekfen Construction was awarded the IPLOCA Health and Safety Award in 2021 for its "Operator Training with Virtual Reality Equipment" project.
- Tekfen Manufacturing achieved a total of 1,197 business days without lost time since 2018.

<sup>45</sup> Includes Tekfen Holding and all Group Companies.

<sup>46</sup> Includes dividends, interest revenues, sale of assets and rent income.

<sup>47</sup> Includes cost of revenue, marketing, sales and distribution expenses, general administrative expenses, research and development expenses, interest expense, tax expense.

<sup>48</sup> Includes donations and sponsorships.

<sup>49</sup> Economic Value Retained: Revenues – (Expenses + Social Investments)

<sup>50</sup> Investment Expenditures: Audit Report - 4c is taken as a point reference.

## **TEKFEN CONSTRUCTION OHS ACHIEVEMENTS**

- Al-Thumama Stadium Project (Qatar): 25 million work hours without lost time.
- Haradh Satellite Compressor Stations Pipeline Project (Saudi Arabia): 20 million work hours without lost time.
- Area 51 Multi Well Pad Pressure Management Project (Kazakhstan): 15 million work hours without lost time.
- Kharampur Gas Pipeline Project (Russia): 3 million work hours without lost time.
- Tüpraş İzmit Refinery, FCC Revamp Installation Works Project (Turkey): 1 million work hours without lost time.
- Tax Ministry Administration Building (Azerbaijan): 2 million work hours without lost time.
- Tüpraş İzmit Refinery, Maintenance, and Repair Services Project (Turkey): 1 million work hours without lost time.

## 5. GRI CONTENT INDEX



**MATERIALITY  
DISCLOSURES SERVICE**

2022

GRI Standard	Disclosure	References
<b>GRI 101: Foundation 2016</b>		
<b>General Disclosures</b>		
<b>GRI 102: General Disclosures 2016</b>	<b>Organisational Profile</b>	
	102-1	About the Report
	102-2	Bridging Prosperity – 03 About Tekfen Holding
	102-3	<a href="https://www.tekfen.com.tr/en/contact">https://www.tekfen.com.tr/en/contact</a>
	102-4	Bridging Prosperity – 03 About Tekfen Holding
	102-5	2021 Annual Report page 201
	102-6	Bridging Prosperity – 03 About Tekfen Holding
	102-7	Bridging Prosperity – 03 About Tekfen Holding, Operational Roots – 01 Economic Performance
	102-8	Appendix - 02 Performance Indicators – Social Performance Indicators
	102-9	Operational Roots – 01 Economic Performance
	102-10	Not found.
	102-11	Operational Roots - 02 Corporate Governance – Risk Management
	102-12	Operational Roots - 02 Corporate Governance – Corporate Memberships and Supported Initiatives
	102-13	Operational Roots - 02 Corporate Governance – Corporate Memberships and Supported Initiatives
	<b>Strategy</b>	
	102-14	Bridging Prosperity - 02 Message from the Chairman, Message from the President
	102-15	Bridging Prosperity - 06 Sustainability Vision
	<b>Ethics and Integrity</b>	
	102-16	Operational Roots - 02 Corporate Governance – Business Ethics and Compliance
	102-17	Operational Roots - 02 Corporate Governance – Business Ethics and Compliance
	<b>Governance</b>	
	102-18	Bridging Prosperity - 06 Sustainability Vision - Sustainability Management, Operational Roots - 02 Corporate Governance
	102-19	Bridging Prosperity - 06 Sustainability Vision - Sustainability Management
102-20	Bridging Prosperity - 06 Sustainability Vision - Sustainability Management	
<b>Stakeholder Engagement</b>		
102-40	Appendix - 01 Communication Methods with Stakeholders	
102-41	Appendix - 02 Performance Indicators – Social Performance Indicators	
102-42	Bridging Prosperity - 06 Sustainability Vision - Materiality Matrix	
102-43	Bridging Prosperity - 06 Sustainability Vision - Materiality Matrix	

	102-44	Bridging Prosperity - 06 Sustainability Vision - Materiality Matrix
	<b>Reporting Practices</b>	
	102-45	About the Report - Scope
	102-46	Bridging Prosperity - 06 Sustainability Vision - Materiality Matrix
	102-47	Bridging Prosperity - 06 Sustainability Vision - Materiality Matrix
	102-48	Not found.
	102-49	Not found.
	102-50	About the Report - Scope
	102-51	About the Report
	102-52	About the Report
	102-53	semin.ekeke@tekfen.com.tr / surdurulebilirlik@tekfen.com.tr
	102-54	About the Report
	102-55	GRI Content Index
	102-56	No external assurance.
<b>GRI 200: Economic Standard Series</b>		
<b>Economic Performance</b>		
<b>GRI 103: Management Approach 2016</b>	103-1	Operational Roots – 01 Economic Performance
	103-2	Operational Roots – 01 Economic Performance
	103-3	Operational Roots – 01 Economic Performance
<b>GRI 201: Economic Performance 2016</b>	201-1	Operational Roots – 01 Economic Performance, Appendix - 02 Performance Indicators – Economic Performance
<b>Anti-Corruption</b>		
<b>GRI 103: Management Approach 2016</b>	103-1	Operational Roots - 02 Corporate Governance – Business Ethics and Compliance
	103-2	Operational Roots - 02 Corporate Governance – Business Ethics and Compliance
	103-3	Operational Roots - 02 Corporate Governance – Business Ethics and Compliance
<b>GRI 205: Anti-Corruption 2016</b>	205-2	Operational Roots - 02 Corporate Governance – Business Ethics and Compliance
	205-3	Operational Roots - 02 Corporate Governance – Business Ethics and Compliance
<b>GRI 300: Environmental Standard Series</b>		
<b>Energy</b>		
<b>GRI 103: Management Approach 2016</b>	103-1	Strategic Drivers - 01 Climate Crisis – Net-Zero Economy, Management Structure
	103-2	Strategic Drivers - 01 Climate Crisis – Net-Zero Economy, Management Structure
	103-3	Strategic Drivers - 01 Climate Crisis – Net-Zero Economy, Management Structure
<b>GRI 302: Energy 2016</b>	302-1	Appendix - 02 Performance Indicators – Environmental Performance Indicators
	302-4	Strategic Drivers - 01 Climate Crisis – Climate Targets
<b>Water and Effluents</b>		
<b>GRI 103: Management Approach 2016</b>	103-1	Strategic Drivers - 01 Climate Crisis - Natural Resources and Waste Management- Water Management
	103-2	Strategic Drivers - 01 Climate Crisis - Natural Resources and Waste Management- Water Management
	103-3	Strategic Drivers - 01 Climate Crisis - Natural Resources and Waste Management- Water Management

<b>GRI 303: Water and Effluents 2018</b>	303-1	Strategic Drivers - 01 Climate Crisis - Natural Resources and Waste Management- Water Management
	303-2	Strategic Drivers - 01 Climate Crisis - Natural Resources and Waste Management- Water Management
	303-3	Appendix - 02 Performance Indicators – Environmental Performance Indicators
	303-4	Appendix - 02 Performance Indicators – Environmental Performance Indicators
	303-5	Appendix - 02 Performance Indicators – Environmental Performance Indicators
<b>Emissions</b>		
<b>GRI 103: Management Approach 2016</b>	103-1	Strategic Drivers - 01 Climate Crisis – Net-Zero Economy, Management Structure, Climate Targets
	103-2	Strategic Drivers - 01 Climate Crisis – Net-Zero Economy, Management Structure, Climate Targets
	103-3	Strategic Drivers - 01 Climate Crisis – Net-Zero Economy, Management Structure, Climate Targets
<b>GRI 305: Emissions 2016</b>	305-1	Appendix - 02 Performance Indicators – Environmental Performance Indicators
	305-2	Appendix - 02 Performance Indicators – Environmental Performance Indicators
	305-3	Appendix - 02 Performance Indicators – Environmental Performance Indicators
	305-4	Appendix - 02 Performance Indicators – Environmental Performance Indicators
	305-5	Strategic Drivers - 01 Climate Crisis – Climate Targets
<b>Wastes</b>		
<b>GRI 103: Management Approach 2016</b>	103-1	Strategic Drivers - 01 Climate Crisis - Natural Resources and Waste Management - Waste Management, Zero Waste
	103-2	Strategic Drivers - 01 Climate Crisis – Natural Resources and Waste Management - Waste Management, Zero Waste
	103-3	Strategic Drivers - 01 Climate Crisis - Natural Resources and Waste Management - Waste Management, Zero Waste
<b>GRI 306: Waste 2020</b>	306-3	Appendix - 02 Performance Indicators – Environmental Performance Indicators
	306-5	Appendix - 02 Performance Indicators – Environmental Performance Indicators
<b>Environmental Compliance</b>		
<b>GRI 103: Management Approach 2016</b>	103-1	Strategic Drivers - 01 Climate Crisis – Net-Zero Economy, Management Structure, Climate Risks and Opportunities
	103-2	Strategic Drivers - 01 Climate Crisis – Net-Zero Economy, Management Structure, Climate Risks and Opportunities
	103-3	Strategic Drivers - 01 Climate Crisis – Net-Zero Economy, Management Structure, Climate Risks and Opportunities
<b>GRI 307: Environmental Compliance 2016</b>	307-1	Gönen Plant received 2 fines due to a problem in the wastewater treatment plant in 2021. The total fine is less than 30,000 USD.
<b>GRI 400: Social Standard Series</b>		
<b>Employment</b>		
<b>GRI 103: Management Approach 2016</b>	103-1	Strategic Drivers - 03 Employees and Society
	103-2	Strategic Drivers - 03 Employees and Society
	103-3	Strategic Drivers - 03 Employees and Society
<b>GRI 401: Employment 2016</b>	401-1	Appendix - 02 Performance Indicators – Social Performance Indicators
	401-2	Appendix - 02 Performance Indicators – Social Performance Indicators
	401-3	Appendix - 02 Performance Indicators – Social Performance Indicators
<b>Occupational Health and Safety</b>		

<b>GRI 103: Management Approach 2016</b>	103-1	Strategic Drivers - 03 Employees and Society - Occupational Health and Safety (OHS)
	103-2	Strategic Drivers - 03 Employees and Society - Occupational Health and Safety (OHS)
	103-3	Strategic Drivers - 03 Employees and Society - Occupational Health and Safety (OHS)
<b>GRI 403: Occupational Health and Safety 2018</b>	403-1	Strategic Drivers - 03 Employees and Society - Occupational Health and Safety (OHS)
	403-2	Strategic Drivers - 03 Employees and Society - Occupational Health and Safety (OHS)
	403-3	Strategic Drivers - 03 Employees and Society - Occupational Health and Safety (OHS)
	403-4	Strategic Drivers - 03 Employees and Society - Occupational Health and Safety (OHS)
	403-5	Strategic Drivers - 03 Employees and Society - Occupational Health and Safety (OHS), OHS Training
	403-6	Strategic Drivers - 03 Employees and Society - Occupational Health and Safety (OHS), OHS Training
	403-7	Strategic Drivers - 03 Employees and Society - Occupational Health and Safety (OHS)
	403-8	Strategic Drivers - 03 Employees and Society - Occupational Health and Safety (OHS)
	403-9	Appendix - 02 Performance Indicators – Occupational Health & Safety Indicators
	403-10	Appendix - 02 Performance Indicators – Occupational Health & Safety Indicators
<b>Training and Education</b>		
<b>GRI 103: Management Approach 2016</b>	103-1	Strategic Drivers - 03 Employees and Society - Talent Management, Performance Management, Trainings and Leadership Programs
	103-2	Strategic Drivers - 03 Employees and Society - Talent Management, Performance Management, Trainings and Leadership Programs
	103-3	Strategic Drivers - 03 Employees and Society - Talent Management, Performance Management, Trainings and Leadership Programs
<b>GRI 404: Training and Education 2016</b>	404-1	Strategic Drivers - 03 Employees and Society - Trainings and Leadership Programs
	404-2	Strategic Drivers - 03 Employees and Society - Trainings and Leadership Programs
	404-3	Strategic Drivers - 03 Employees and Society –, Appendix - 02 Performance Indicators – Social Performance Indicators
<b>Equal Opportunity and Diversity</b>		
<b>GRI 103: Training and Education 2016</b>	103-1	Strategic Drivers - 03 Employees and Society - Equal Opportunity and Diversity
	103-2	Strategic Drivers - 03 Employees and Society - Equal Opportunity and Diversity
	103-3	Strategic Drivers - 03 Employees and Society - Equal Opportunity and Diversity
<b>GRI 405: Equal Opportunity and Diversity 2016</b>	405-1	Appendix - 02 Performance Indicators – Social Performance Indicators

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.