# TEKFEN HOLDING

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# NEKEN SUSTAINABILITY REPORT 2020

BILITY REPORT 2020



In our times, "to hold ground" may not necessarily mean "to stand against a hardship", but simply "to have some ground left to stand on".







# **ABOUT THE REPORT**

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

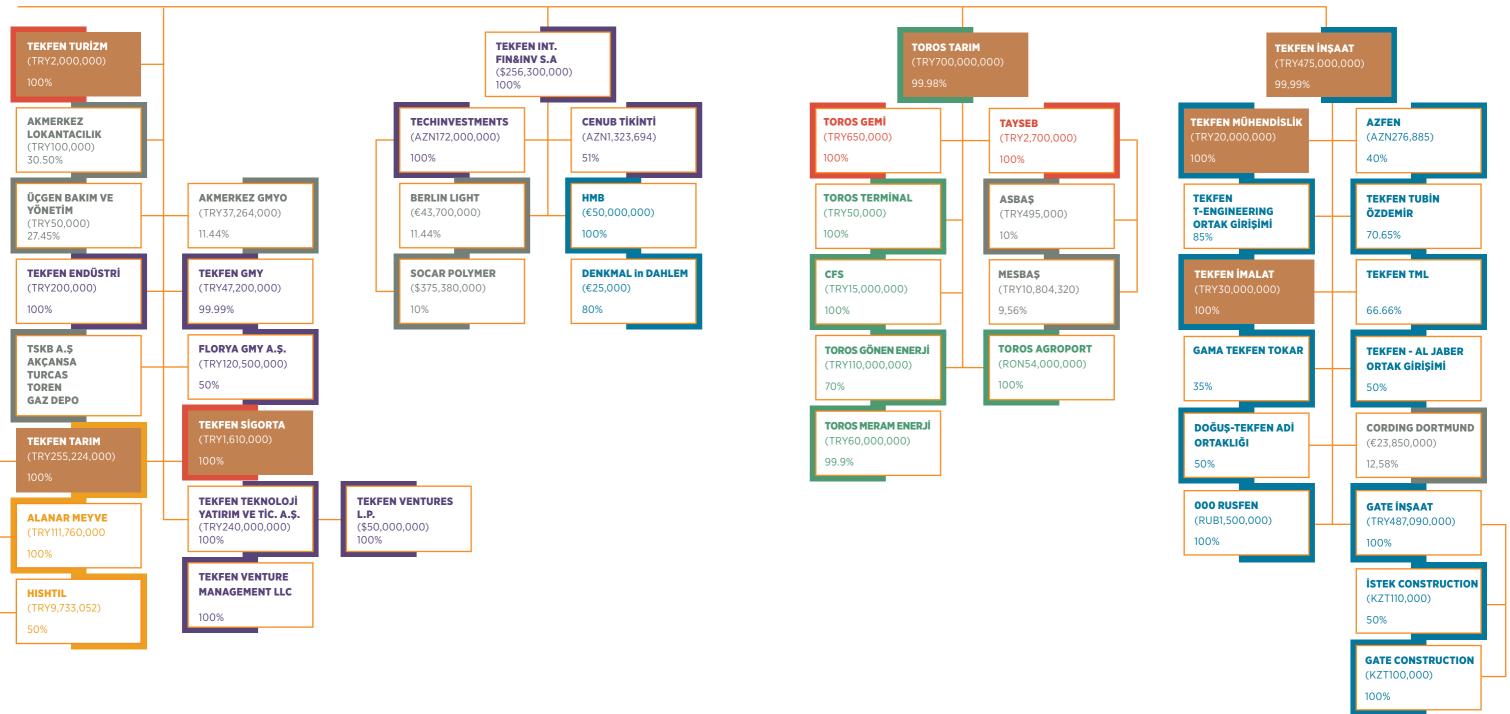
This report has been prepared in accordance with the "Core" option of the GRI Standards. The report also includes information about the progress regarding the United Nations Global Compact.

Tekfen Holding adopts all of the Sustainability **Principles published by the Capital Markets Board** of Turkey, and information on the principles that are fully and partially complied with is included in the Company's 2020 consolidated 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.





### **TEKFEN HOLDING**



### **SCOPE**

This report includes data regarding Tekfen Holding's Engineering and Contracting Group (Tekfen Construction, Tekfen Engineering, Tekfen Manufacturing), Chemicals Group (Toros Agri), Agricultural Production Group (Tekfen Agri), and Services Group (Tekfen Insurance, Tekfen Services) for the period of January 1 to December 31, 2020.<sup>1</sup> The report does not include data from the Investment Group (Tekfen Ventures), however, it showcases some of its good practices.

<sup>1</sup>These companies account for approximately 88% of Tekfen Holding's consolidated turnover.

The report covers the Group's operations in all countries, with the exception of environmental data pertaining to 2018 that includes solely its operations in Turkey. As of 2019, the scope of environmental data has been expanded to include the operations in all countries Tekfen operates in. For this reason, there has been an increase in the environmental data since 2019.

Subcontractors are included in all of the Occupational Health and Safety (OHS) data of this report. Tekfen as well as subcontractor employees are all subject to the same set of rules and presented with equal OHS opportunities without discrimination, and performance indicators are monitored on a consolidated basis for all employees. You can send your comments and suggestions regarding this sustainability report to surdurulebilirlik@tekfen.com.tr.



Companies covered by the Sustainability Report





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Operational

Roots

Economic Performance

**Corporate Governance** 

Business Ethics and Compliance

Risk Management

**Customer Loyalty** 

Operational Excellence

# Strategic **Drivers**

### **Climate Crisis**

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# Sustainability During the Pandemic

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The pandemic reminded the world of the importance of sustainable development and circular economy for our common future.



# SUSTAINABILITY DURING THE PANDEMIC

COVID-19, which neither was heard by any of us until the end of 2019 nor was figured among the risk predictions of companies, left its mark on 2020 and affected the societies' way of doing business and their way of life. While this unexpected situation, which no one had experienced before, threatened business continuity, it also forced decision-makers to make radical changes in their business models in a short period. This process, with its many unforeseen elements, brought along operational challenges caused by rapid change, as well as difficulties in adapting to new conditions and uncertainties. Fragilities in global supply chains have emerged and crisis and risk management have gained great importance.

ne of the biggest effects of COVID-19 on the business world has been the new trends in the daily way of doing business and the needs these trends have brought along. While digitalisation has accelerated significantly,<sup>2</sup> remote working models have become a part of our lives. Due to the threat posed by the pandemic on employees' health, working conditions where social distancing, mask, and hygiene rules are implemented and health risks are effectively monitored have become prominent. The hybrid working models that blend office and remote working are expected to continue after the pandemic.

The pandemic also reminded the world of the importance of sustainable development and circular economy for our common future. Companies that have already set out and made progress in their journey towards sustainability and have increased their environmental, social, and governance (ESG) performance have more easily adapted to the conditions of the pandemic. In parallel, investment in ESG funds reached a record level in 2020.<sup>3</sup> This acceleration is expected to further increase in the upcoming period. In a time when those companies which are able to adapt swiftly to the new conditions brought by the pandemic gain competitive advantage, Tekfen Holding has also successfully ensured its business continuity by responding to change with effective risk management, digitalisation capacity, and measures for its employees.

Tekfen Group has evaluated the risks that COVID-19 may pose on employees' health, business continuity, and financial outcomes as part of its risk management activities since the first days of the pandemic.

# **Risk Management**

In the Global Risks Report 2021 published by the World Economic Forum, infectious diseases rank first among the most important risks according to the severity of their effects. On the other hand, the report equally draws attention to the shortterm pressures that can be created by health, economic, and technological inequalities triggered by the pandemic. The global epidemic is now the top priority in the risk management activities of companies.

Tekfen Group has evaluated the risks that COVID-19 may pose on employees' health, business continuity, and financial outcomes as part of its risk management activities since the first days of the pandemic. In the following period, business continuity, one of the more important risk factors caused by the pandemic, was successfully managed, and production was usually maintained at full capacity without any significant disruption, especially



<sup>2</sup> https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/how-covid-19-has-pushed-companies-over-the-technology-tipping-point-and-transformed-business-forever

<sup>3</sup>https://www.forbes.com/sites/chukaumunna/2020/12/18/esg-investing-came-of-age-in-2020millennials-will-continue-to-drive-it-in-2021/?sh=-370b24e6409a

in the manufacturing and agricultural production operations, which constitute the majority of the Company's domestic activities. Business continuity was a greater challenge for the Engineering and Contracting Group's construction sites outside of Turkey, due to the many and different measures taken by countries and employers, and their respective lockdown decisions.

The economic and financial effects of COVID-19 have also been carefully monitored within the scope of risk management. Major negative impacts on financial goals, such as economic recession, postponing of non-essential infrastructure investments by employer countries, decline in oil prices, fluctuations in exchange and interest rates, and problems in supply chains have been evaluated since the first days of the pandemic. Analyses and stress tests for possible scenarios were carried out and proactive measures were taken against the foreseen risks.

# Digitalisation

Digitalisation, which is on the rise globally, has gained even more strategic importance with COVID-19, and the pandemic has become an "accelerator" for digital transformation all over the world. Being able to meet the work, education, and shopping needs through online platforms has shown that the transition to a digital life is just as critical for business continuity as it is for social resilience. During this period, the world experienced to what extent digitalisation was crucial in adapting to the pandemic and the crisis it brought about.

Thanks to the digital transformation that started in 2017 with a holistic approach across Tekfen Holding and the Group Companies, the pandemic period was effectively managed. Remote connection, cybersecurity, collaboration platforms, and digitalised business processes have facilitated the transition to the new working model, and flexible and remote working models have been rapidly implemented. With the pandemic:

• The Unified Regulations (UFR) Document, which includes the principles and procedures of remote working, has been published and system installation works were begun to monitor the process on ERP.

• An intensive training, support, and information process has been planned and implemented with the objective to enable employees work remotely efficiently.

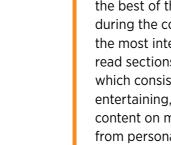
• With the start of remote working, communication tools such as online meetings, correspondence, file sharing, remote support, and webinars to meet all Group Company employees' needs were provided flawlessly.

• A self-service portal for online applications (Office 365, Active Directory) was installed, so that computer passwords could be easily yet safely managed without the need for IT support.

• Internet and company resources and infrastructures were backed up.

• Infrastructure and digital applications were developed to cater for the needs of the construction site workers who are away from their families, securing their regular communication with their families.

• Trainings have continued on digital platforms. (Detailed information on Tekfen Atelier and other training programmes can be found under the Employees and Society heading).



### Uninterrupted Communication with Employees During the Pandemic

After the first COVID-19 case was announced in Turkey in March 2020 and the first curfew measures were taken. Tekfen Holding quickly transformed its 3-month in-house publication, T-Bulletin, to a weekly one, in addition to its existing communication channels, to ensure the continuous flow of information for its employees. The COVID Special Issue of the online T-Bulletin, provided the most up-to-date company news for a period of nine weeks, as well as entertaining reading for the employees and their families so that they could make the best of their time at home during the confinement. One of the most interesting and widely read sections of the T-Bulletin, which consisted of educational, entertaining, and informative content on many different topics, from personal development and culture and arts all the way to advice about plant care and children's games, was the selfproduced videos showcasing Tekfen employees' solidarity from around the world. Nurturing the sense of belonging and supporting communication among employees during this difficult period, T-Bulletin reached record viewing numbers with 63 thousand unique users and 161 thousand page views.



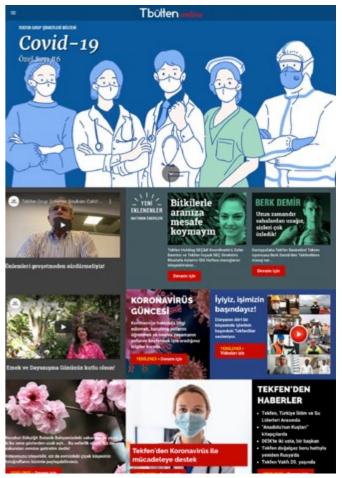




• With the TekNET - Tekfen Corporate Network and Security Project, business continuity was ensured during the pandemic period by creating an infrastructure that is high quality, efficient, compliant with regulations, and invulnerable to cybersecurity threats.



Thanks to the digital transformation that started in 2017 with a holistic approach across Tekfen Holding and the Group Companies, the pandemic period was effectively managed.



T-Bulletin Covid Special Issues

# **Occupational Health and** Safety

In the field of OHS, the fight against COVID-19 became a priority in 2020 among Tekfen Group Companies, as in the rest of the world. With the first days of the pandemic, specific Crisis Committees were established in offices and project sites, and the existing Crisis and Emergency Plans were revised according to COVID-19 conditions. Throughout the year, the fight against the pandemic was carried out in line with these plans and under the strict supervision of these Crisis Committees.

Since the first wave of the pandemic and its rapid spread, all employees were given the initial trainings on COVID-19 and methods of protection from the disease, and their awareness was kept at a high level within a regular course.

Additional protective measures have been taken for employees throughout the Group. In this context, physical protective barriers were placed on the open office desks, and personal hygiene kits containing masks and disinfectants were placed on the desks. In addition, disinfection stations have been established in all offices, construction sites, and facilities. Work areas were regularly disinfected and ventilation systems were inspected.

In order to reduce the risk of people working in the offices, especially in open offices, and to keep the number of people contaminated at a minimum, a remote working system with rotating shifts was guickly implemented. The health status of all employees was followed up daily by means of an online guestionnaire. Temperatures were measured using a thermal camera at the entrances of buildings and facilities, and the common areas were rearranged according to social distancing rules. Meetings, trainings, and events via remote access were encouraged, while travel and visitors were restricted to the maximum extent. In the period of gradual return to work after the lockdown, an internal communication campaign was conducted for all the measures to be taken by the employees in order to keep the level of awareness high by way of attentioncatching posters.

Diagnoses of the suspected COVID-19 cases, identification of close contacts, management of guarantine processes, decision to return to work. etc. were managed in compliance with the guidelines of the World Health Organisation and the Turkish Ministry of Health.

As the pandemic caused socio-economic difficulties due to the closure of many workplaces or the interruption of business processes, Tekfen Holding increased its support to society during this period. Supports in this context are included under the Employees and Society heading.

### Number of Infected People 1,371 Infection Rate 6.65% Number of deaths caused by COVID-19 1 0.07%

Fatality Rate



In order to reduce the risk of people working in the offices, especially in open offices, and to keep the number of people contaminated at a minimum, a remote working system with rotating shifts was guickly implemented.

Posters of the pandemic awareness campaign

# **TEKFEN CONSTRUCTION**

The COVID-19 pandemic has required many new and different measures to be taken at Tekfen Construction, including collective work and sheltering places. The construction sites have been made suitable for the pandemic conditions and the works were carried out under intense measures. In addition to regular cleaning, disinfection, training, and the supply of personal protective equipment, arrangements were made regarding working hours, refectories, social areas, and working areas, while a remote working system was implemented in the offices.

In addition, the following actions were taken to combat the pandemic:

• Beginning from 30 January 2020, before the pandemic was declared, "Safety Flash" documents and e-mail notices regarding the severity of COVID-19, its transmission routes, possible effects, and protection methods were prepared and published in the projects and workplaces. In addition, a COVID-19 Guide was prepared to inform employees about the COVID-19 symptoms, effects, and prevention methods. Briefings on COVID-19 were held at both the projects and workplaces.

• Crisis Desks were set up in all projects and workplaces, as well as in the headquarters. Thanks to the installation of a case tracking system, information about the COVID-19 cases in all projects and workplaces was reported to the Crisis Desk on a daily basis.

• Crisis and Emergency Plans were prepared and regularly updated for each project and workplace in cooperation with the HSE Directorate.

• A daily reporting system was launched to monitor the measures taken in all projects and workplaces. Due to the decisions taken by the country's administrations and the risks posed by the disease, the problems experienced in the projects and workplaces, and the measures taken were monitored on a daily basis.

# **TOROS AGRI**

In all workplaces and production facilities of Toros Agri, and within the scope of combating COVID-19, the infrastructure, system, process, and equipment needs were identified and met in order to protect the employees' health and to ensure business continuity in line with the evaluations of the Crisis Desk and the actions of the Crisis Management Plan. Effective measures have been taken against the epidemic and



backup scenarios have been created for the critical personnel. These actions are as follows:

• Thermal cameras were placed at the entrances of the buildings and facilities, and visitor restrictions have been imposed. In addition, the areas used by the employees collectively were arranged in accordance with the social distancing measures, and arrangements regarding internal document traffic, service and transportation were made.

• Hygiene and cleaning practices were put into use in workplaces and facilities, ventilation systems

were revised, and automatic disinfectant machines were placed in common areas. Personal protective equipment kits (masks, gloves, and overalls) were provided to the employees.

 A remote working system with rotating shifts was implemented in the offices. Travels were minimised, and meetings, trainings, and events were mostly carried out remotely.
 Air handling units were programmed to provide 100% fresh air, and the air circulation in the offices was increased by increasing the units' operational hours. Furthermore, additional hygiene was achieved by adding filters with UV-C lamps effective against microorganisms to 26 air handling units.

• A daily survey and notification system was established. Procedures for potential case management and the identification and evaluation of contacted workers were determined and implemented.

# **TEKFEN AGRI**

The works of the company, which operates in the field of direct agricultural production, continued uninterruptedly by taking strict measures. After having the company's pandemic management practices audited by an independent institution, Adana Agripark, Nevşehir Warehouse, Alanar Fruit İznik and Alaşehir Facilities were all awarded the COVID-19 Safe Production Certificate by the Turkish Standards Institution.

# **TEKFEN SERVICES**

Tekfen Services closely followed the special conditions regarding building management created by the COVID-19 pandemic in 2020, meticulously implemented the published regulations and decisions, and quickly and effectively implemented the necessary precautions and regulations in the buildings it manages. In this context:

• Necessary caution and warning signs were placed in all buildings, arrangements were made to ensure social distancing at crowded spots, hand disinfectant and solution dispensers were placed at building entrances and common areas, and waste disposal points were set up for used masks, gloves, and visors.

• Thermal cameras were placed at the building entrances to measure body temperature.

• The shifts and working order of the service personnel were rearranged according to the requirements of the pandemic process, and the necessary trainings were given by providing the employees with protective equipment. The number of cleaning shifts and points was increased, and special arrangements were made to ensure the hygiene of the heavily used common areas during the day.

• Meal service hours were extended to prevent congestion, cafeteria usage was limited to certain hours on a company basis, and meal delivery service to the floors was introduced.



Safe Working Rules during the COVID-19 Pandemic

# "Bridging Prosperity"

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 the people, social benefit, and the environment.



# WHY "BRIDGING PROSPERITY"?

As Tekfen Group, we have been one of the building blocks of the Turkish economy with the values we have created and the jobs we have secured for the past 65 years. Since day one, our motto has been "Do your best at what you know best", and this is how we have been in the pursuit of excellence in all 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 the people, social benefit, and the environment.

oth our core business lines of contracting and agriculture are fundamental in "Bridging Prosperity". Our Engineering and Contracting Group contributes 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 highrise buildings, while we also build facilities and dwellings 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 operations offer safe, comfortable, and environmentally friendly living and working spaces to tens of thousands of people.

As Tekfen Foundation, we provide scholarships to successful students towards a brighter future and contribute to social life with a focus on culture and art.

We work to lay the foundations of 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 allow us to use our resources in the most efficient way. We closely follow megatrends such as the climate crisis, population growth, demographic and social change, urbanisation, and technological developments that are rapidly transforming the world we live in. Besides integrating digital transformation and innovation into our business, we allocate resources to initiatives that will feed our activities with new technologies. We are genuinely proud to set an example for the industries we operate in with our good practices and remarkable performance in occupational health and safety.

As a Group with deep historical roots and one that serves the welfare and development of societies, it is our responsibility to set the foundations of a sustainable future. What better words than "Bridging Prosperity", to express our quest for sustainability!



# The Earth Is in Trouble, Mother Earth Is Crying the Blues

You make me long for green, but you also long for food, work, water, and happiness.

Has my eroding done you any good?

Your fields and pastures have become barren, migration has accelerated, Your biological diversity is gone, natural disasters have intensified, The lifespan of your dams has been shortened. You couldn't protect your waters.

Haven't floods put you in agony just as they put me? What hurts most though, is that while grieving for your losses, Not a single soul came to think about me. You neither cared that I, too, was alive, nor that I wouldn't return.

How easily you forget that it takes 2000 years for me to be a fertile soil at a depth of 10 cm?

Your livestock that you put out to grass as soon as the snow melts Devours what could be a rich pasture to you and a protecting cover for me, Treading on me, leaving me no air to breathe. But for my motherly love, I wish I would never forgive you for this pain!

You may not realise that roots when left in the open Would leave you hungry and unharboured, But what wrong did I do to you, To part me from the roots that hold me strong?

Against all odds, I stood firm against rain and wind, and sacrificed myself for you, buried in the grave of seas, dams, and lakes. It hurts when not a soul sheds a tear for me.

Where were all of you When Organisations for Land and Water - struggling for my rescue were dissolved?

Why not think about the rights of the earth just for a day, While trying to keep human rights on the agenda?

I was left alone in agony, as more than 20 years went by before the environmental law was passed. You didn't deem me worthy of a law, But alas! You made your laws for those who chopped my forests for more farming land

Nor did you refrain from regulations favouring the misuse of agricultural lands for that matter! With wild flooding, I was victim to salinisation. You competed in misusing me.

Nor did you refrain from regulations favouring the misus of agricultural lands for that matter!

# A Story of the Soil

### By ploughing me down the slope, You made me slide and erode.

Careless that I am a living being, you burned stubbles on me, And unleashed hell upon a myriad of creatures living in my caring bosom.

You neglected rotating your crops, thus making me poorer, And the pests wilder, while you poisoned me with pesticides. You brutally dumped your garbage on me, buried hazardous waste into my bosom, and poisoned me further.

You see a doctor before taking any medicine, don't you? Am I not alive, too? Why don't you think of having a soil analysis And prevent wrong or excessive usage of fertilisers?

You always took from me. Let it be! But you never gave in return, and I got nothing left. You fed my produce to animals, I hope they, too, enjoyed it! But you never gave back their manure; you burned it as dung.

"Forage is essential for livestock and poor soil", said the scholars. No one listened.

Uncontrolled and excessive grazing Rendered your pastures unproductive. You led erosion to victory.

For the sake of farming land, your tractors ploughed the pastures Regardless of their slopes. I lost my fertility, and couldn't but erode in no time With your pasture gone, you, too, were bound to migrate.



You may have the right to many children, But when the day comes, they inherit me, What right do you have to cut me in pieces And render me impossible for cultivation

Just so that they all have a view on the road or the waterfront.

Careless of the dangers my most productive wetlands Pose for earthquakes and floods, You filled them with roads, plants and housing

may not object to give away all the natural richness that I carry in me But again, what right do you have to destroy my lush green And leave me battered as if I had just come out of a world war?

Once, we were very happy with the green oak sea of Anatolia, We used to serve all living things, we were their shelter.

You made feed from my dear oaks' leaves, And fuel from their branches. And I say, let it be! The branches grew back, in spite of you. But it was never enough. You took out their roots and burned them. I was losing ground, but you didn't hear my silent cries, While the entire world was warning, "Anatolia is becoming a desert", Why didn't you raise your voice until TEMA came forward?

What have I done to you? You deprived me of the oak's roots I held on to, to fight erosion and its leaves that fed me I'm tired, I can't bear it any longer.

I want my quilt back from you, give me back my oaks.

You've always been the one who asked for things, and I always gave you what you needed. Now, it is I who wants two things from you: Don't make me long for my green and treat me right.

I beg you, if you're looking for a place for respect, remember me, too.

You might say, "Don't we all join God in your bosom? If this is not respect, what is?" And I say, "Learn to respect me before you become incapable of harming me"

As you become more and more, I become less and less. I'm Mother Earth, and as such I can't tell you "You don't have a place to sleep". But I'm afraid, heaven forbid, you will not find land to lie down on!

On behalf of Mother Earth, A. Nihat Gökyiğit



# **MESSAGE FROM THE CHAIRMAN**

Dear stakeholders,

t has been about a year and a half since the first announcement of the COVID-19 virus by the World Health Organisation. The global economic effect of the COVID-19 period has been devastating. According to Worldometer's data, more than 180 million cases of coronavirus have been detected in the world to date, while 3.9 million people have died from the disease. Turkey also took its share from this devastating toll. Ranking 6th in the world in terms of the total number of cases, we lost nearly 50 thousand people in our country.

Our world is no longer the same in any way as it was before COVID-19. First, the pandemic had disrupting effects on the economy. According to the World Economic Outlook Report published by the IMF, while the global economy shrank by 3.5% in 2020, the poor regions of the world felt this effect much more deeply. As investments decreased and unemployment increased, many sectors came to the point of collapse. Schools, workplaces, shopping malls, and entertainment venues have been closed, and people were locked up within four walls. Daily routines and consumer habits have also changed radically. Being online has become a way of life. While digital transformation took a giant leap forward, significant changes took place in business and production models.

On the other hand, the COVID-19 pandemic has created a distinct awareness of the huge risks for our world due to the "uncontrolled course" caused by the dizzying speed of globalisation and exponentially increasing consumption. Social scientists and theorists who claimed in the 1980s that unpredictable risks increased with the rapid growth momentum, societies turned into "risk societies", and risks reached a power that could affect all humanity due to globalisation without any discrimination unfortunately proved to be right. Indeed, the pandemic has imposed a great uncertainty to humanity today. Moreover, we cannot say that this is the last great threat humanity will face. None of us can predict today what kind of threats our world, which has turned into a big tangle of risks due to uncontrolled growth, more

profit-making, and excessive consumption habits, will pose to humanity in the future.

It is past time that we as individuals and as institutions say "Stop!" to this dangerous trend. The real question is "How should we do this?". At the World Economic Forum, convened at the beginning of 2020, it was shared that the thing that will turn the efforts for limiting global warming within 1.5°C from being a dream to a reality is the transition from "Shareholder Capitalism" to "Stakeholder Capitalism", and this was stated as a goal in the renewed Davos Manifesto. The concept of "Stakeholder Capitalism", which can be summarised as "The aim of a company is to see all its stakeholders as partners and involve them in the sustainable value creation process. A company serves not only its shareholders, but also its stakeholders, that is its employees, customers, suppliers, local communities, and society in general", is increasingly accepted today, with the driving effect of the pandemic.

As Tekfen Holding, the concept of creating value for our stakeholders is not unfamiliar to us. As a Group that aims at "Building Prosperity", the goal of creating benefit for people is at the core of all our activities. While our Engineering and Contracting Group contributes to the development of societies and increases the quality of life with the infrastructure and facilities it has built, our Chemicals and Agricultural Production Groups play an important role in assuring food security, one of the biggest risks of humanity in the future. Our R&D Centres and organisations such as Tekfen Ventures, which support entrepreneurship, spread innovation and technology to all our fields of activity, paving the way for developing more effective solutions to environmental and social issues. This understanding, which prioritises creating value for people, is also supported by our Occupational Health and Safety, Ethics, Supply Chain, Human Rights, Combating Domestic Violence, and Customer Loyalty policies and manners that produce social benefits. Our Group adopts a responsible and sensitive approach to stakeholder expectations in all business lines, in accordance with the values which it has historically adhered to.



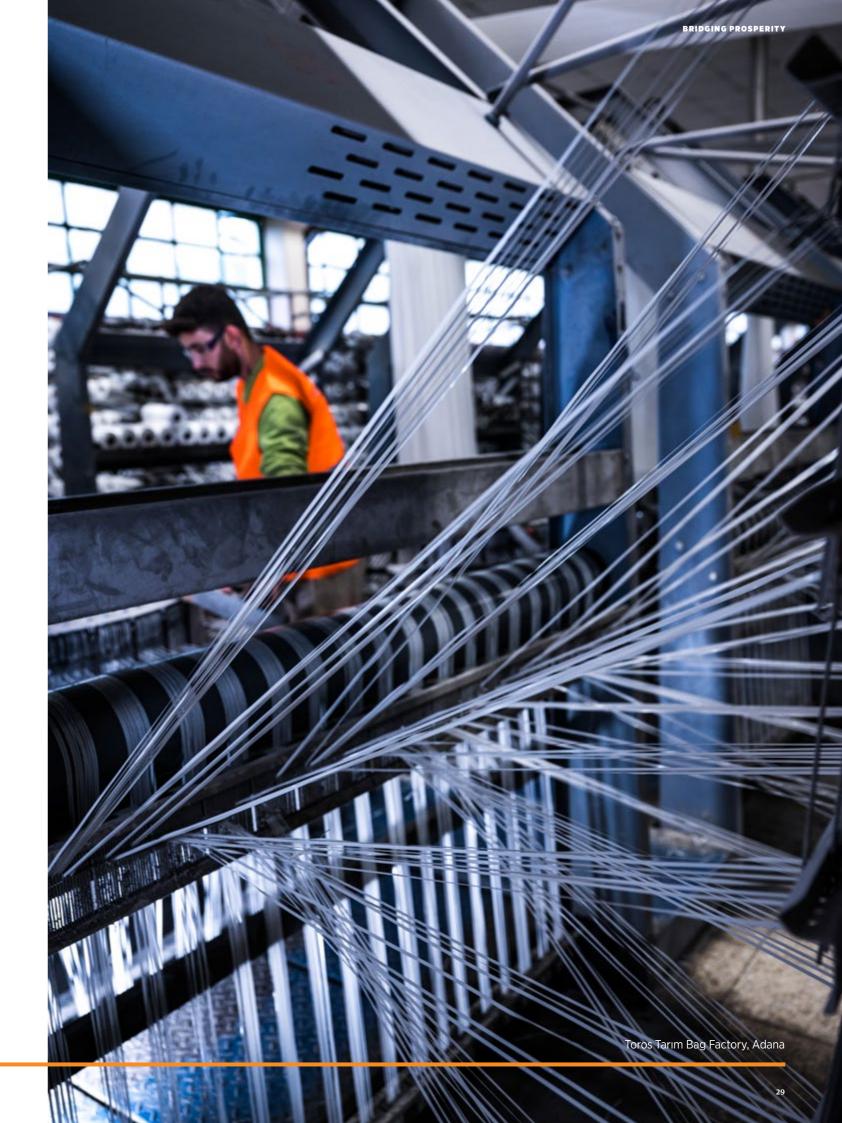
sustainability goals. In the light of Tekfen's corporate vision which is based on "technology" (tek) and "science" (fen), we moved on incessantly with our efforts to solve various environmental and social problems, by making use of the power of innovation and R&D. In the post-pandemic period, we expect a recovery period all over the world in which humanity focuses on repairing nature by minimising its impacts on it. The European Green Deal and the successive announcement of 2050/2060 net zero emission targets by countries against the climate crisis are strong signals that support this expectation. Like all countries of the world, companies have to be a part of this great transformation. As Tekfen, we regard the climate crisis as one of our top priorities due to our construction and agriculture-based activities and take steps towards the net zero emissions target in line with the global agenda.

International regulations, such as the European Green Deal, have the potential to directly affect the business volume of companies operating on a global scale like ours, with the new rules, taxes, and business models it brings. We want to turn this process, which may pose a risk, into an opportunity by correctly analysing this transformation, where competition rules are changing in almost every field of the economy, from industry and agriculture to technology and logistics. The distance covered by our Sustainability Committee and the working groups in line with the strategic sustainability roadmap gives us hope to progress in this direction. In 2020, we became one of the 63 companies in the world to be included in the Global "A" List of CDP's Climate Change and Water Security programmes at the same time. The fact that we are the only company from Turkey to be included in the Global "A" List of both programmes has encouraged us for the upcoming stages. Another achievement that made us proud in 2020 was our win of the Women Empowered Board Award for the third time in a row. We dedicate this award, which is a confirmation of our belief in gender equality at all levels, to all our female employees who add value to Tekfen with their efforts at every point, from our construction sites to our factories.

Despite all the operational difficulties caused by the pandemic, 2020 has been a year where we have not deviated from our sustainability goals. In the light of Tekfen's corporate vision which is based on "technology" (tek) and "science" (fen), we moved on incessantly with our efforts to solve various environmental and social problems, by making use of the power of innovation and R&D. We did not take the coronavirus as an obstacle to slow us down in achieving our goals, but as a strong message that we need to quicken our steps towards sustainability. Today, when our world is at a turning point for an irreversible future or a more harmonious and sustainable life, we have to leave behind the oldstyle business approach that focuses entirely on profitability, and make common sense, by which we approach social and environmental problems with much more sensitivity, prevail in the world. As Tekfen, we are ready to take responsibility within this approach, which will enable us to lay the foundation of the future on a much stronger ground as humans. Our third Sustainability Report, which you are holding in your hands, is a document of our efforts in this direction.

Best regards,

Zekeriya Yıldırım Chairman of the Board





"

Our main priority in crisis management, which we have been carrying out at the highest level from the first day, has been to implement protective measures for both our employees and stakeholders, with whom we work closely, in order to minimise the effects of the pandemic.

# **MESSAGE FROM THE** PRESIDENT

Dear stakeholders,

e are facing a great test as humans. The increasing expectations of humanity for the future, especially with the acceleration of technology in recent years, have been replaced by a general awareness that human values have come to the fore again and that technology alone will not be enough to bring our common future to a better point. COVID-19 reminded us that despite the roles assigned to autonomous robots, data, the internet of things, and virtual reality, we still need cooperation, empathy, common sense, and sharing more than ever for the construction of a better future. Again, this very virus served as a lens that helped us focus on the environmental and social factors that threaten our world.

Within this picture, we, as Tekfen, have experienced the effects of the pandemic as a multifaceted process in line with the developments in the world and in Turkey. Our main priority in crisis management, which we have been carrying out at the highest level from the first day, has been to implement protective measures for both our employees and stakeholders, with whom we work closely, in order to minimise the effects of the pandemic. Occupational Health and Safety is among the top priorities of our Group Companies. In line with this priority, we have implemented regulations in a very short time that enables our employees to continue their work in the safest conditions, and in accordance with the requirements of our different activities and workplaces. We managed to maintain the continuity of our business by responding to the uncertainty and changes caused by the pandemic with our effective risk management, agile organisation, and digitalisation capacity.

One of the most important effects of the pandemic in the world was experienced in the field of digitalisation. The pandemic gained a great pace to digital transformation investments and practices. Research shows that the number of industries that have identified digital transformation as their main business strategy has increased during this period. The digital transformation campaign, which we started a long time ago at Tekfen, has become perhaps our most important tool in adapting to the conditions of the pandemic. Thanks to our strong



digital infrastructure, our companies were able to switch to the remote working system almost overnight, while this transition process was also supported by online applications such as a selfservice portal and various communication platforms. In the same process, training programmes were also moved to online platforms.

Our work on innovation, which we see as an important tool that will improve our social and environmental performance and increase our operational excellence and efficiency in achieving our sustainability goals, continued throughout the year. Allocating 8.5% of its turnover to research and product development in 2020, Tekfen Agri ranked among the top three in the agriculture category in the "Turkey's Top R&D Spenders in 2019" list prepared by the Turkishtime magazine. Attaching great importance to seed development for a sustainable agriculture, Tekfen Agri also won an award in the "Cooperation" category of the 7th Sustainable Business Awards for its "Developing National and Domestic Bread Wheat Varieties Using Ancestral Seeds" project. Projects aimed at reducing the effects of the climate crisis and supporting the increasing world population's access to food continued at the Toros Agri and Agripark R&D Centres. On the other hand, our investment company Tekfen Ventures continued to invest in ventures that largely overlap with the fields of activity of our Group Companies and offer cooperation opportunities in many areas for sustainability.

For the first time 2020, using Science-Based Target initiative (SBTi) tools, we set our middle- and longterm carbon emission reduction targets. At the first stage, our aim is to reduce our total Scope 1 and Scope 2 emissions by 15% by the end of 2025, and then by 40% by the end of 2037, compared to the values in 2019.

Under the roof of Toros Agri, Gönen Renewable Energy is a very successful example of the circular economy, which produces biogas from local organic wastes, then energy from biogas. The company also serves agriculturally by converting composted wastes into organic and organomineral fertilisers which our country's soil desperately need. A similar project to Gönen Renewable Energy, but on a larger scale, was put into operation in Konya Meram

(Central Anatolia) in 2020. In addition, despite all the uncertainties caused by the pandemic, we continued our work uninterruptedly at our R&D Centres under both Toros Agri and Tekfen Agri, without allowing for any retrenchment.

Unfortunately, women are among the most affected by the pandemic. While the pandemic has rendered existing inequalities more visible, it has also deepened gender inequality. Women suffered the most job loss due to the pandemic. There has also been a marked increase in violence against women who have lost their jobs and had to take on even more responsibilities at home. As Tekfen, we support the participation of women in all levels of business life and attach importance to increasing women's employment in all areas. Having a female ratio of 36% in our Board of Directors is one of the indicators of the importance we attach to equal opportunity and diversity. In addition to winning the Women Empowered Board Award for the third time in 2020, we were proud to be one of the three companies with the highest score in the "Women Empowered Board Index".

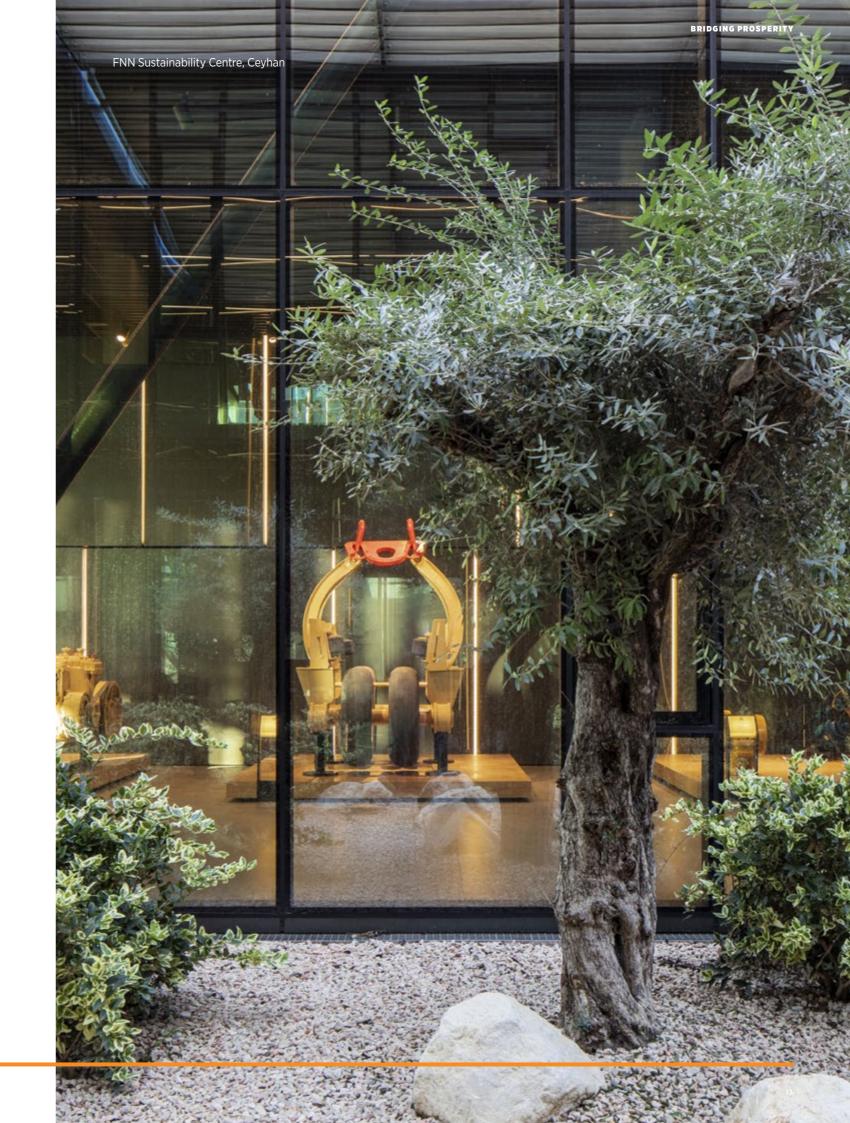
That being said, we see violence against women as a violation of the most basic human rights. As an indicator of this approach, we joined the "Business Against Domestic Violence" Project with all our Group Companies in 2020. At the same time, we prepared our Policy on Combating Domestic Violence and published the Guide on Combating Domestic Violence Against Women in order to proclaim our support to our employees who have been subjected to violence.

As a Group that embraces its social responsibilities and produces many projects toward social benefit, we continued our social investments to the extent permitted by the pandemic and by adapting to the new conditions. In order to guide our work in this area in the coming period, we have developed a social approach based on creating common value throughout the Group and determined our main criteria that should be observed in our social investments. Tekfen Group Companies have made donations that totalled to 15.5 million TRY in 2020. As part of the fight against the pandemic, in Tekfen Holding, we also participated in the "We Are Enough for Each Other" (Biz Bize Yeteriz Türkiyem) nationwide campaign with TRY 5 million. In addition, as Tekfen Foundation, we allocated TRY 3.75 million of funds to meet the medical device needs of pandemic hospitals with in-kind support.

In our report, you can find information about our activities carried out in 2020 within the scope of sustainability, which we cannot iterate here one by one. Our previous Sustainability Report, which we published in 2019, was deemed worthy of the Gold and Technical Achievement awards by the League of American Communications Professionals (LACP) and was ranked 50th among the top 100 reports. I am confident that our 2020 report will attain a similar success, for that I would like to thank all our supporters and stakeholders who have enabled us to achieve this fast and impressive progress in our sustainability journey.

Best regards,

Ali A. Pandır President



# **ABOUT TEKFEN HOLDING**

Tekfen Group, whose foundations were laid in 1956 by Feyyaz Berker, Nihat Gökyiğit, and Necati Akçağlılar, all three of whom were civil engineers, is one of the important building blocks of the Turkish economy. Traded on the BIST 30 Index of the Istanbul Stock Exchange, Tekfen Holding carries out its activities with 38 companies and 13 subsidiaries, all of which are reputable in their respective sectors, under five main headings: Engineering and Contracting, Chemicals, Agricultural Production, Services, and Investment. Tekfen Holding, one of the most respected brands in Turkey with the values it represents and its great recognition, shapes its culture of doing business in line with people, social benefit, and the environment, and continues its activities in line with the principles of focused growth and sustainable profitability.



### \*Figures are the total of all companies within the scope of the report.





Tekfen Tower, İstanbul



\*Figures are the total of the Engineering and Contracting Group.

# **Engineering and Contracting Group**

Tekfen Engineering and Contracting Group, whose foundations were laid on an engineering/consulting firm in 1956, is one of the flagship brands and successful representatives of the Turkish contracting industry worldwide, with nearly 18,000 employees<sup>4</sup> and more than 400 projects undertaken to date. In addition to its experience and competence, the Group is a solution partner preferred by the world's leading employers with its understanding of quality, sustainability-oriented approach, and a business model based on loyalty to its word.

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

# **TEKFEN CONSTRUCTION AND INSTALLATION, INC.**

Tekfen Construction, the group's flagship company, is one of Turkey's most established contracting companies with 65 years of history. The company is a preferred partner in the industry thanks to its extensive global experience, values and competencies.

<sup>4</sup>Includes Tekfen's and subcontractors' employees.

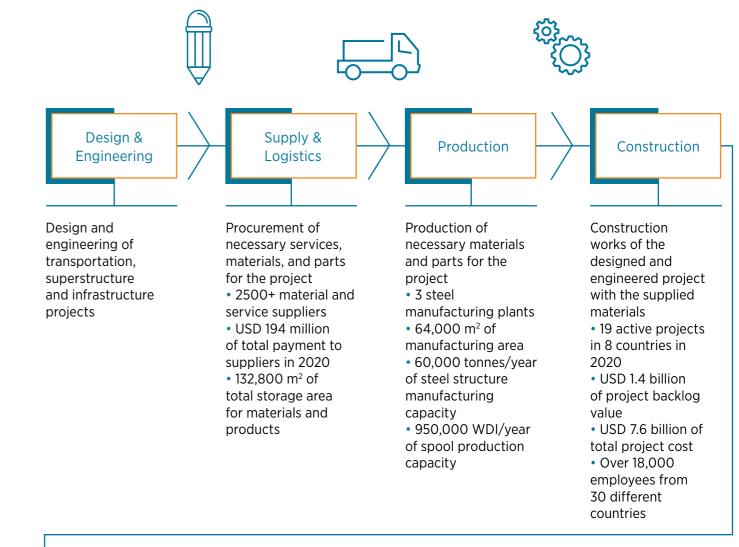
### **TEKFEN ENGINEERING, INC.**

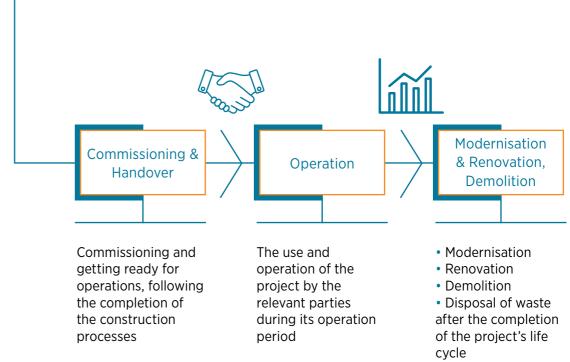
Founded in 1984 to undertake the engineering services of the Group's turnkey projects, Tekfen Engineering is a solution partner capable of providing engineering and consultancy-supervision services for largescale infrastructure projects that require special expertise, with its proficient staff of nearly 600 people.

# **TEKFEN MANUFACTURING AND ENGINEERING, INC.**

Tekfen Manufacturing was established in 1970 to provide engineering, manufacturing, and installation services of international standards related with the storage and process equipment needed, especially by the oil, petrochemical and chemical industries, as well as industrial facilities such as gas plants, iron & steel mills, and power plants. Apart from the Tekfen Group, the company also provides services to international contracting companies and domestic and foreign industrial establishments, and exports to a wide range of countries.

## **TEKFEN CONSTRUCTION VALUE CHAIN**





# **Chemical Industry Group**

# **TOROS AGRI INDUSTRY AND** TRADE, INC.

Focusing mainly on the production of plant nutrients (fertilisers), Toros Tarım Sanayi ve Ticaret A.Ş. (Toros Agri Industry and Trade, Inc.), the roof company of the Tekfen Chemicals Group, continues its activities of producing mineral fertilisers, specialty watersoluble fertilisers, and organic/organomineral fertilisers. Toros Agri holds 38% of the total installed capacity of the classical fertiliser production in Turkey and is the largest company in the sector in terms of production and market share. The company ranked 52nd on the "Turkey's Top 500 Industrial Enterprises in 2019" list published by the Istanbul Chamber of Industry.

Within the scope of mineral fertiliser operations, the company produces classical fertilisers in its three factories in Ceyhan, Mersin and Samsun, as well as inhibitor-added and water-soluble fertilisers at its Mersin facility. Toros Agri also imports varieties that it does not produce, in order to meet all plant nutrient needs of farmers from a single source. The company also manufactures bags used in fertiliser packaging in its own facility with a capacity of 33 million bags/year.

Toros Gönen Yenilenebilir Enerji A.Ş. (Toros Gönen Renewable Energy, Inc.), which Toros Agri acquired in 2019, and Toros Meram Yenilenebilir Enerii A.S. (Toros Meram Renewable Energy, Inc.), which began its operations in 2020, generate electricity from biogas that is produced through the fermentation of organic wastes, in addition to producing solid and liquid organic and organomineral fertilisers from wastes that have completed the gasification process.

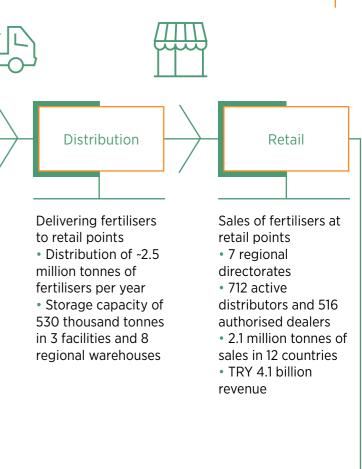
**Tekfen Holding carries out its** activities with 38 companies and 13 subsidiaries, under five main headings: Engineering and **Contracting, Chemicals, Agricultural Production, Services, and Investment.** 

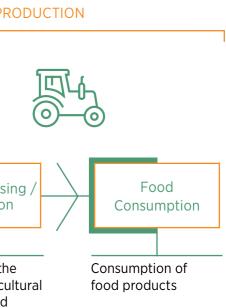


**TOROS AGRI VALUE CHAIN** AGRICULTURAL INPUT .... Fertiliser Procurement Production Procurement of Fertiliser, bag and energy production in ammonia and 4 plants phosphorite, which constitute 660 thousand approximately 70% tonnes of nitrate of the input, and nitrogen fertiliser other materials and production services • 1.14 million tonnes Procurement of of compound raw materials and fertiliser products from 19 32 million tonnes of different countries bag production • 234 GWh of energy and 35 different suppliers production • Total of 2,371 suppliers AGRICULTURAL PRODUCTION Food Processing Plant Production Production Use of fertilisers and Processing of the various inputs in produced agricultural plant production products / food • Farmer trainings production with the Toros Agri Bus

\*Figures are the total of the Chemical Industry Group.

 Toros Farmer Fertiliser Application







\*Figures are the total of the Agricultural Production Group.

# **Agricultural Production Group**

# TEKFEN AGRICULTURAL RESEARCH, PRODUCTION AND MARKETING, INC.

Tekfen Tarımsal Arastırma. Üretim ve Pazarlama A.S. (Tekfen Agricultural Research, Production and Marketing, Inc.) is the umbrella company of the Tekfen Agricultural Production Group and was established in 2017 with the aim to bring a corporate perspective to agricultural production, which plays a vital role in securing a sustainable future, and to transfer the Group's know-how in the field of agricultural inputs to fresh produce with a scientific approach and strong financial structure. With 76 agricultural engineers on its payroll who blend agriculture and science and the most up-to-date technologies, Tekfen Agri produces bread wheat seeds, edible-seed potatoes and bananas, in addition to exporting fresh fruits such as cherries, Bursa black figs, apricots, pomegranates, Japanese plums, nectarines, and bananas to 80 different customers in 22 countries under the Alanar Fruit brand name, which Tekfen entirely acquired in May 2019. Tekfen Agri (Alanar Fruit) is one of the few agricultural production companies in the world to produce such a diverse range of species. Toros-Hishtil, a subsidiary of Tekfen Agri, provides farmers with guality nongrafted and grafted seedlings.





\*Figures are the total of the Service Group.

# **Services Group**

Tekfen Services Group consists of companies operating in terminal management, free zone management, building and facility management services, and insurance brokerage services. The Group companies act with a focus on high customer satisfaction in every domain and take the best practices in their sectors as a reference.

# TOROS SHIPPING AGENCY AND TRADE, INC.

Terminal services provided by the Group are carried out through two terminals at Toros Agri's Ceyhan and Samsun Production Facilities, and are also supported by services such as shipping agency. Torosport Ceyhan Terminal, one of the first-generation private sector ports in Turkey, is an important bulk cargo and general cargo port among the ports in the Gulf of Iskenderun. Torosport Samsun Terminal also has a structure suitable for unloading both solid bulk cargo and liquid chemical products.

# TOROS ADANA-YUMURTALIK FREE ZONE FOUNDER AND OPERATOR, INC.

TAYSEB, one of the subsidiaries of Toros Agri, is the founder and operator of Adana-Yumurtalık Free Zone, the first free zone ever for industrial enterprises in Turkey. The operation period of TAYSEB, one of the largest free zones in Turkey which is established over an area of 4 million 635 thousand m<sup>2</sup> with a completed infrastructure, has been extended until 2030 in 2020.





# TEKFEN TOURISM AND SERVICES, INC.

Tekfen Turizm ve İşletmecilik A.Ş. (Tekfen Services, Inc.), which operates under the "Tekfen Services" brand, is a company specialised in assets and facilities management, and provides operational and management services for the real estate projects developed by Tekfen, such as Tekfen Tower, Kâğıthane OfisPark, Taksim Residences, Bomonti Apartments, and Yalıkavak Tekfen Houses. The company also carries out asset management, leasing, contract management, strategic portfolio management, and revenue-increasing methods services for these projects.

# TEKFEN INSURANCE BROKERAGE SERVICES, INC.

Tekfen Insurance, which was founded in 1982 under Tekfen Holding, today offers brokerage services on behalf of 18 leading insurance companies from Turkey and the world. In addition to Tekfen Group Companies, the company provides services for all insurance needs of many companies operating in the construction, agriculture, engineering, banking, and production sectors, as well as services for individual customers.



# **Investment Group**

# **TEKFEN VENTURES L.P.**

Tekfen Ventures is a corporate venture capital company established in 2016 with the aim of seizing the opportunities in the world of global entrepreneurship and investing in early-stage technology companies. The company closely follows the innovative initiatives in the sectors Tekfen operates, such as contracting, construction, manufacturing, agriculture, fertiliser and real estate. As of 2020, the company has invested in 11 ventures.

Detailed information about the groups can be found in Tekfen Holding's 2020 Annual Report.



# **TEKFEN HOLDING'S SUSTAINABILITY MILESTONES**



<sup>6</sup> Tekfen Construction has received IPLOCA's 2004 Environmental Award for its Sangachal (Azerbaijan) and BTC (Ceyhan-Turkey) projects.

7 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.



Sustainability Coordinator's Office & Sustainability Committee are established.

> Tekfen Construction receives the IPLOCA Social Responsibility Project Award.7

First CDP Climate Change Report published.

Tekfen Holding becomes a member of the Business Council for Sustainable Development Turkey (SKD Türkiye).



under the Sustainability Committee are established.

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.

Tekfen Holding publishes its Policy on Combating Domestic Violence as part of the Business World Against Domestic Violence Project.

activities focused on social

investment.

Change and the Water

Security Programmes at the

same time.

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.

# **HIGHLIGHTS OF 2020**

The 2019 Sustainability Report received the Gold and Technical Achievement awards by the League of American Communication Professionals (LACP) and was ranked 50<sup>th</sup> among the top 100 reports.



By the end of 2037, the total amount of Scope 1 and 2 emissions is aimed to be reduced by

40% compared to 2019.

**Tekfen's Policy for Combating Domestic Violence and a Guide** to Combating Domestic Violence Against Women were published as part of the Business Against **Domestic Violence (BADV) project.** 

A total of 250,175 MWh of renewable energy was produced from solar and waste heat.



Tekfen Holding was included in the **Global "A" List of CDP's Climate Change** and Water Security programmes at the same time, placing itself among the 63 companies in the world. In 2020, Tekfen was the only company from Turkey to be included in the Global "A" List in both programmes.

**The Meram Renewable Energy** investment was put into service.



Tekfen Agri's Adana Agripark R&D Centre, Nevşehir Warehouse, and Alanar Fruit Alaşehir Facility, and Toros Agri's Ceyhan, Samsun, and Mersin Plants, as well as Adana **Motorway Facilities have received** Zero Waste Certificates.



Tekfen Construction was awarded the IPLOCA grand prize in the Health and Safety category for its "Applied HSE Training Area" project in the Kıyıköy -**TurkStream Receiving Terminal Project.** 

2,349 person-hours of training was provided to 4,634 people within the scope of the Learning Management System (LMS).

Tekfen Atelier provided a total of

**5,177** person-hours of training with the participation of 461 people in competence development trainings, and

5,968 person-hours of training with the participation of 746 people in technical trainings.







Tekfen Foundation, in cooperation with the Turkish Foundation for Waste Reduction (TİSVA), has granted microcredits to 1.521 women so far.

A corporate social responsibility (CSR) approach based on creating shared value was developed.



Tekfen Holding received the Board of Directors Empowered by Women Award for the third time, with a 36% of female presence on its Board of Directors, making itself one of the three companies with the highest score in the "Women Empowered Boards Index".

> Tekfen Agri was awarded in the "Cooperation" category of the 7th Sustainable Business Awards for its "Developing National and Domestic Bread Wheat Varieties Using Ancestral Seeds" project.

Tekfen Agri, which allocates 8.5% of its turnover to research and product development, was ranked 3rd in the agriculture category of the "Turkey's Top R&D Spenders in 2019" list prepared by the Turkishtime magazine.



Pivot Bio, one of Tekfen Ventures' investments, which aims to utilise microorganisms in the production and uptake of nitrogen by plants, was included in TIME magazine's "100 Best Inventions of 2020" list.



Tekfen Ventures made its 11th investment in Phospholutions, which increases the efficiency of phosphorus fertilisers while reducing their environmental impact.

# **SUSTAINABILITY VISION**

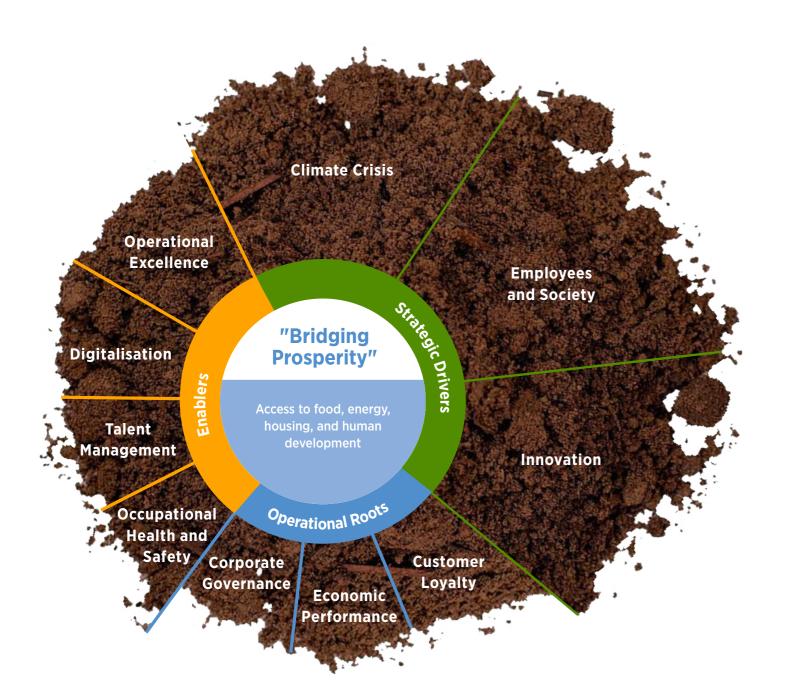
Tekfen's sustainability vision is embodied in Tekfen's motto, "Bridging Prosperity". The primary goal of all economic activities is to increase social well-being and to improve the individual's quality of life. Tekfen Holding's fields of activity, which cover the engineering and contracting, chemical industry, agricultural production, investment, and service sectors, directly overlap with fundamental elements of social welfare such as infrastructure services, access to food, energy, and shelter. Through its activities, Tekfen acts as a bridge for individuals to access the essential elements of a better life and wellbeing and lays the foundation stones of a sustainable future.

# **Strategic Drivers**

The three strategic drivers, which are Tekfen Holding's main drivers that create value, have been identified as climate crisis and energy, employees and society, and innovation.

# **Operational Roots**

These roots define the business approach and priorities of Tekfen Holding, which has been one of the flagships of the Turkish economy for 65 years. Economic performance, corporate governance and customer loyalty will continue to be the building blocks of the company's future, as they have always been.





Today, mega trends such as rapid population growth, demographic and social change, urbanisation, technological developments, and climate crisis not only shape the world, but also lead to radical transformations in the business world. Tekfen's vision of "Bridging Prosperity" expresses its goal of responding in a sustainable and flexible manner to these changes that redefine the Group's ways of

doing business.



# **Enablers**

Operational excellence, digitalisation, talent management, and OHS stand out as the main tools that will facilitate the realisation of the "Bridging Prosperity" vision.

## **Megatrends**

# **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 Sustainable Development Goals (SDGs). The 17 main goals set by the United Nations Development Programme (UNDP) to eradicate poverty, protect our planet, and ensure that all people live in peace and prosperity offer a global agenda to everyone, from governments to local administrations, from the public sector to the business world. Being one of the signatories of the UN Global Compact, Tekfen Holding aims to create common value by basing its sustainability vision on certain SDGs in line with its fields of activity.

## **PRIORITY ISSUES**



The basis of Tekfen's vision and the contents of the Sustainability Report, as seen in the materiality matrix, is the "top priority" issues that fall within the intersection of Tekfen and its stakeholders' parts. This year, in order to address top priority issues with more intensive focus, they have been grouped as follows:

"Employee Development and Talent Management" and "Employee Engagement and Satisfaction": Talent Management and Employee Engagement
"Business Ethics and Compliance" and "Employee and Human Rights": Business Ethics and Human Rights
"Operational Excellence" and "Customer Satisfaction and Quality Management": Operational Excellence and Customer Loyalty
Raw Material Management; included in the Circular Economy.

Details of the materiality analysis can be found in the appendices.

High

**Priority** 

nan R

Talent Management and Employee Engag

Profitabl conomic Growth

R&D and Inno

Operational Excellence and **Customer Loyalty** 

Digitalisation

Importance for Tekfen

Top Priority Issues	Heading in the Report
Profitable economic growth, contribution to local economy and employment	Economic Performance
Corporate governance, business ethics, and human rights	Corporate Governance
OHS, talent management, and employee engagement	Employees and Society
Climate crisis	Climate Crisis
R&D and innovation, digitalisation	Innovation
Operational excellence and customer loyalty	Customer Loyalty

Top priority issues and their headings in the report are given in the above table.

# **Sustainability Management**

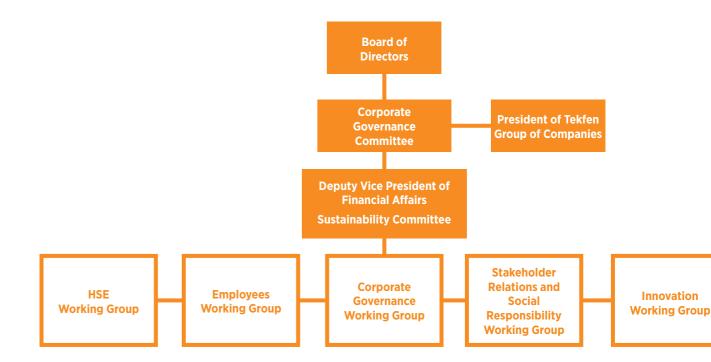
In 2017, Tekfen Holding's Board of Directors established and authorised the Sustainability Committee to implement its vision of "Bridging Prosperity". Operating under the Corporate Governance Committee, the Sustainability Committee consists of executive-level representatives appointed by the Managing Directors of Tekfen Holding, Tekfen Construction, Tekfen Engineering, Tekfen Manufacturing, Toros Agri, Tekfen Agri, Tekfen Services, and Tekfen Insurance. The Sustainability Committee is chaired by Tekfen Holding Deputy CFO.

The Sustainability Committee is responsible for creating the strategies, roadmaps, targets, policies, and reports necessary for 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 efforts. The Committee, consisting of 17 members, convened twice in 2020.

The members of the five working groups created to support the work of the Committee were determined by the leaders of the working groups to provide the necessary expertise and inclusivity for the implementation of the strategic sustainability roadmap. As a result of the activities of the working groups that meet regularly throughout the year, progress was made with regards to the actions determined for each group.

Tekfen Holding's Board of Directors is responsible for monitoring the approach, target and performance development within the scope of sustainability. Reporting to the Board of Directors at least once a year about its own activities and the works of the five working groups, the Corporate Governance Committee is responsible for the execution of sustainability policies. Sustainability issues are regularly discussed on the agenda of the Corporate Governance Committee and the Board of Directors.

The responsibilities of the working groups include creating policies for priority areas and publishing them on the website. In addition, trainings on different subject matters were given, new key performance indicators were created, and new tools were developed to involve stakeholders, especially employees in the processes in 2020. Progress targets related to the actions on the sustainability roadmap and key performance indicators of occupational safety and environment are included in the scorecard targets, with an impact on the annual performance evaluations of both the senior management, including the CEO, and employees.







### **Work Issue**

### 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

### **CORPORATE GOVERNANCE**

- Ethics and Compliance
- Human rights
- Supply chain
- Risk management

# DIGITALISATION AND INNOVATION

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

### EMPLOYEES

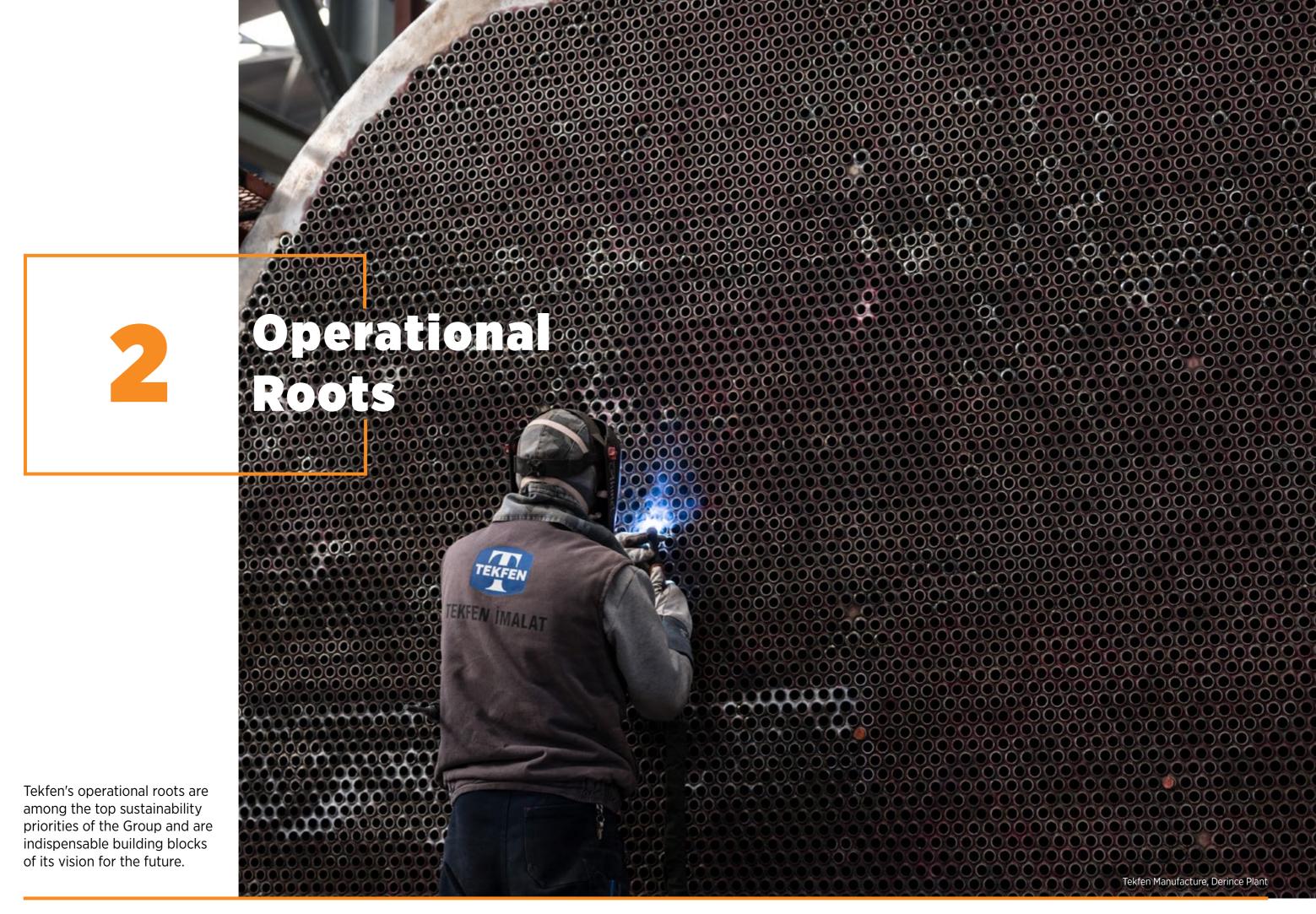
- Setting and tracking targets
- Leadership, coaching, and mentoring programmes
- Programmes in cooperation with

universities to attract young talents

- Employee satisfaction and engagement
- Balance between work and private life

### 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 analyses for projects



# **OPERATIONAL ROOTS**

Established in 1956 as a small engineering and consultancy company, Tekfen continues its journey today as one of the most reputable groups in Turkey whose shares are traded on the BIST 30 Index. The Group blends its vast experience and knowledge in the engineering and contracting, chemical industry, agricultural production, investment, and service sectors with values such as reliability, integrity, and guality, thereby turning it into a value for the economy, its stakeholders, and society. The Group companies, each of which is a reputable brand in its field, have a leading and respected position in their sectors 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**

he adverse conditions brought on by the pandemic and the associated economic contraction in the world caused Tekfen Holding's consolidated financial performance in 2020 to fall short of expectations.

Tekfen Construction was unable to meet its targets for undertaking new projects in 2020 due to the global shrinkage of the budget allocated to infrastructure expenditures and the postponement of new investments, while also suffering delays and losses in its current projects due to the restrictions caused by the pandemic. However, despite the fact that the contracting sector was one of the sectors most affected by the pandemic, Tekfen Construction had one of its most active years in terms of business development and bid preparations, and was able to expand its portfolio with new projects in the second half of the year. Tekfen Engineering, the technology leader of the Contracting Group, left behind a very successful year by broadening its horizons with the national and international cooperation agreements it signed in many different fields, including defence industry projects that require the highest level of engineering and innovation competence.

In the production of plant nutrients, another Tekfen Holding's main line of business, Toros Agri displayed a very successful economic performance in 2020, with a 12% increase in sales revenue and a 45% increase in net profit, despite the uncertainties and fluctuations experienced during the year.

The Agricultural Production Group, on the other hand, followed a flat course compared to the previous year in terms of sales revenue, especially due to the restrictions in foreign markets caused by the pandemic.

In general, Tekfen Holding's sales revenue in 2020, which was TRY 1,729,779 thousand on a consolidated basis, had decreased by 20% compared to the previous year, resulting in an EBITDA of TRY 458,752 thousand and a loss of TRY 67,398 thousand. The Group's prediction for 2021 is first to reach the prepandemic size in terms of sales revenues and to achieve profitability again on a consolidated basis, without compromising the principles of protecting the welfare of all its stakeholders, reducing environmental impacts, and increasing social impacts.



**Toros Agri displayed a** very successful economic performance in 2020, with a

in sales revenue and

hincrease in net profit, despite the uncertainties and fluctuations experienced during the year.



GRI 103-1, GRI 103-2, GRI 103-3









### **Support to Local Suppliers and** Employment

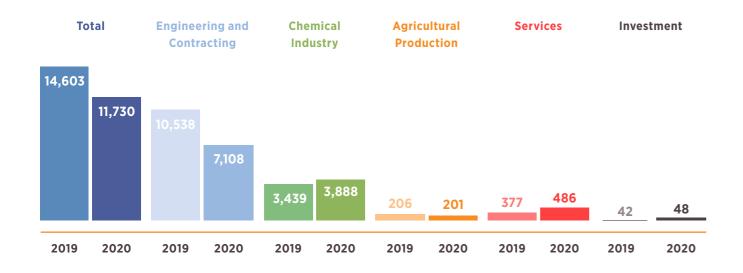
With the economic value it creates and a local employment rate of 73%, Tekfen plays a considerable role in the employment and development in its countries of operation. Tekfen also prefers to work with local business partners in the supply chain. The Group companies have a total of 12,266 suppliers, and 51% of the payments made to suppliers are made to local suppliers.

## From "Shareholder Capitalism" to "Stakeholder Capitalism"

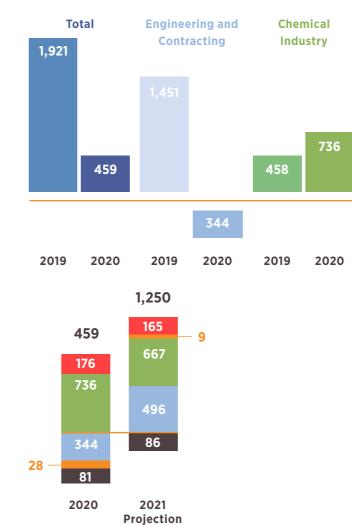
The World Economic Forum (WEF) convened this year with the theme of "Stakeholders for a Cohesive and Sustainable World" and updated the Davos Manifesto of 1973 with the title of "The Universal Purpose of a Company in the Fourth Industrial Revolution". Emphasizing the concept of "Stakeholder Capitalism", the manifesto states that in order to find solutions to today's social and environmental problems, companies must create value with an understanding that covers not only their shareholders but all their stakeholders.

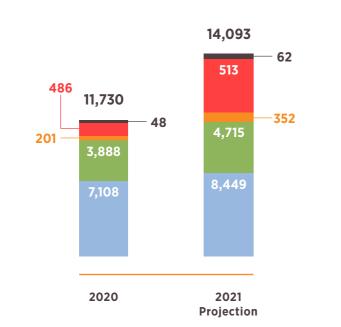
**Tekfen's local employment** rate is





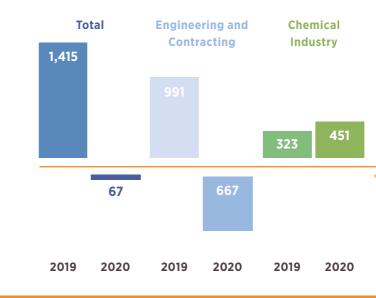






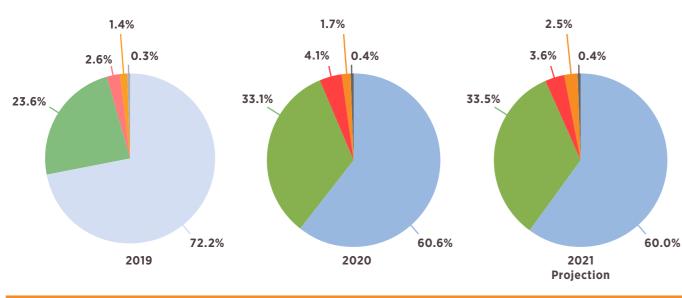


### Total Profit/Loss for the Period (Consolidated Million TRY)

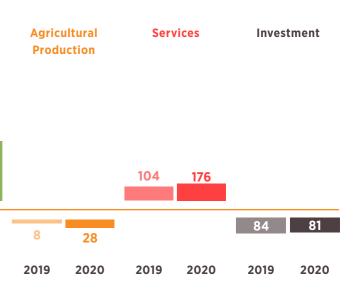


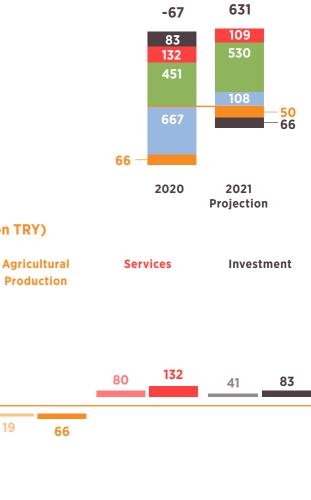
### **Distribution of Sales Revenue (%)**

Sales Revenues (Consolidated Million TRY)



GRI 102-7, GRI 201-1



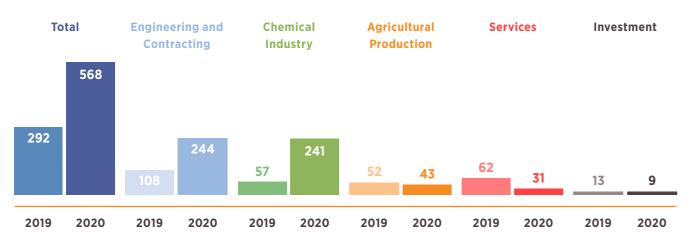




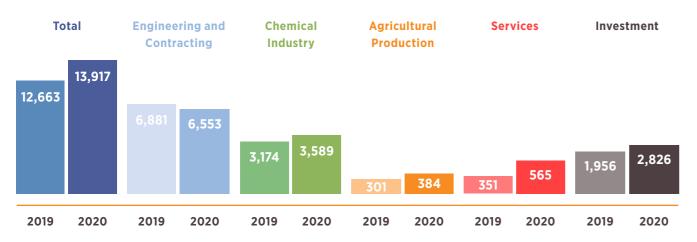
19

65





### Total Assets (Consolidated Million TRY)









Ceyhan Steel Structure Fabrication Plant

# **CORPORATE GOVERNANCE**

ekfen Group, which has built its relations with management, partners, employees and third parties on the principles of equality, transparency, accountability, and responsibility since the day it was founded, considers its deep-rooted values, strong corporate tradition, and adherence to basic management principles as indispensable elements of its existence. The Group faithfully adheres to the corporate governance approach in order to protect the rights of its shareholders and stakeholders in every step it takes.

Tekfen Holding's Board of Directors consists of 11 members, four of which are independent. The Board has four female members, two of which are independent. In order for the Board of Directors to fulfil its duties and responsibilities in a duly manner, committees have been created to operate under the Board in issues such as creating strategy and policy, monitoring compliance with the action plans, evaluating performance, etc. The Sustainability Committee, Audit Committee, Corporate Governance Committee, Early Detection of Risk Committee, and Remuneration Committee are tasked with meeting periodically and presenting their evaluations and reports to the Board of Directors. The duties of the Chairman of the Board of Directors and Managing Director are carried out by different individuals in line with the Corporate Governance Principles.

Tekfen Holding, which went public in 2007, adopts the Capital Markets Board of Turkey's (CMB) Corporate Governance Principles and prepares a Corporate Governance Principles Compliance Report every year, paying due attention to the proper implementation of these principles.<sup>8</sup> On the other hand, works for full compliance with the Sustainability Principles Compliance Framework published by the CMB in 2020 continue. Detailed information on compliance with the principles can be found in the 2020 Annual Report (pp. 167-171).



<sup>8</sup> Detailed information on the Tekfen Holding Board of Directors, the composition of the committees, the number of members and their responsibilities: https://www.tekfen.com.tr/en/board-of-directors-4-20











## **Diversity on the Board of Directors**

According to the results of the "Women on the Board of Directors 2020 Turkey Report", the proportion of women on the Board of Directors of BIST (Istanbul Stock Exchange) companies increased from 15.9% to 17% in 2020. Tekfen Holding has a female representation of 36% on the Board of Directors, well above the average.

In addition to receiving the "Women Empowered Board of Directors" awards given at the Women Directors Conference 2018, 2019 and 2020 Turkey, Tekfen Holding was one of the three companies with the highest score in the "Women Empowered Boards Index". Tekfen Holding also takes part in the activities of the Women's on the Board of Directors Association, which aims to support social development by increasing women's representation on the Boards. Tekfen Holding's CFO contributed to the Mentor Programme, the association's first and only certification programme in Turkey, as a mentor in both 2019 and 2020.

While the percentage of women on the Board of Directors of BIST companies is

17%

on average, this figure reaches

in Tekfen Holding.

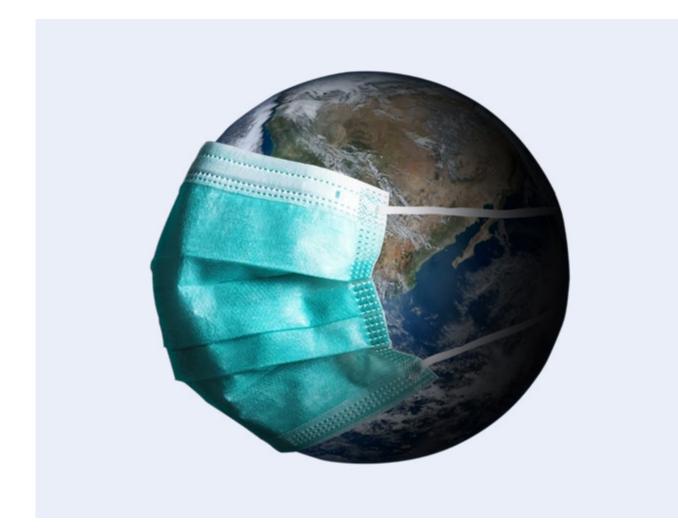
## **CORPORATE MEMBERSHIPS AND SUPPORTED INITIATIVES\***

FOUNDING MEMBERSHIPS	]		
TUSIAD		TÜRKİYE TEKNOLOJÎ GELÎŞTÎRME VAKRI	
Türkiye Üçüncü Sektör Vakfı Third Sector Foundation of Turkey	TAPV Türkiye Aile Sağlığı ve Planlaması Vakfı	KRIDERAL KETTIDECILER EDENHED	AIESEC
MEMBERSHIPS	Türkiye Kurumsal Yönetim Derneği	TEIDE Et ve Isbar Derneji Etwis & Nyadoor Society	<b>United Nations</b> Global Compact
Skd TÜRKİYE	DENIZTEMIZ TURMEPA	SCOLUMN STATE	DIS EKONOMIK İLİŞKİLER KURULU FOREIGN ECONOMIC RELATIONS BOARD
İSTANBUL KÜLTÜR SANAT VAKFI	A MERICAN TURKISH COUNCIL	INSTITUTE OF INTERNATIONAL TINANCE	A K U T D O S T U

<sup>9</sup> Corporate Governance Principles Compliance Reports: https://www.tekfen.com.tr/en/corporate-governance-principles-compliance-report-4-21

AFFILIATE MEMBERSHIPS			
	TÜRKİYE MÜTEAHHİTLER BİRLİĞİ	TÜRKİYE İNŞAAT SANAYİCİLERİ İŞVEREN SENDİKASI	<b>EXPERIENCE</b>
	ZINC international zinc association	Cedbik	TÜRKLİM
TRFMA	PETFORM	TÜRKİYE RÜZGAR ENERJİSİ BİRLİĞİ TÜRKİYE RÜZGAR ENERGY ASSOCIATION	
TSUAB CHINA SARANGELISI VE NETICLUSI KIT SINGS	TÜRKİYE TOHUMCULUK ENDÜSTRİSİ DERNEĞİ	<b>Exercised</b> Fran Detector: At Brig	bisab bilki islahçıları alt birliği
AKÎB	ULUDAD MARACATCH BARLIKLEHE	eib ege Infracatçi Birlikleri	SÜRDÜRÜLEBİLİRLİK A K A D E M İ S İ SUSTAWABILITY ACADEMY

\* In 2020, dues of TRY 1,591,499 were paid to the trade associations and tax-exempt groups of which Tekfen Holding and Group Companies are members.

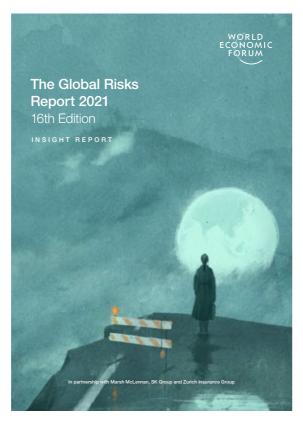


## **Risk Management**

In addition to the uncertainties and transformations it caused, the COVID-19 pandemic created unpredictable challenges for society, employees, company operations, and stakeholders, thus increasing the importance of risk and crisis management all over the world. Amidst a number of uncertainties, able and effective risk management is the key to the successful operation of companies.

Employees' health, business continuity, and financial impacts, which are the main risks posed by the pandemic, have been effectively managed thanks to Tekfen's measures since the first day. The steps taken in this regard can be found under the "Sustainability During the Pandemic" heading.

In the Global Risks Report 2021 published by the World Economic Forum, for the first time after 2006, the risk of communicable diseases found itself a place at the top of the global risk table, overtaking climate change. As a result of the negative effects of the pandemic on the economy, employment and livelihood crises were also among the top short-term risks. On the other hand, issues



such as extreme weather events, failure to fight the climate crisis, digital inequality, and cybersecurity continue to be important risk factors.

Due to the global nature of its core business activities, Tekfen Holding closely monitors the cyclical developments in the world and implements effective risk management with a prudent approach in order to accurately identify the risks in advance, to foresee their possible effects, and to take necessary measures. The Group companies act in coordination with Tekfen Holding and use a common reporting method in managing the possible risks in their domains. The Group shares a common risk management structure that is in line with international risk management standards (COSO - The Committee of Sponsoring Organisations of the Treadway Commission). In this context, risks are identified and evaluated (measured), necessary steps (actions) are taken in response, after which risks are being reported, and followed-up. Steps are followed within the context of departmental risk inventories in all group companies and with a bottom-up participation approach. With the cooperation of departments, all risk inventories are thoroughly reviewed once a year in order to comprehensively evaluate the external risk factors. Thus, the dynamism of the risk management process and the principle of continuous improvement are warranted.

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

The task of the Early Detection of Risk Committee, chaired by an independent Board Member, is to bring important risks to the agenda of the Tekfen Holding Board of Directors, along with its own views and assessments after reviewing the risk documents. Risks are evaluated at the highest level and appropriate measures are determined. The risk reports are also shared with an independent auditor.

Tekfen Holding addresses its risks under five main headings: financial, operational, strategic, reputational, and compliance.

In addition to the above titles, issues such as climate change, water crisis, occupational health

and safety, human rights, ethical rules, compliance, business continuity, cybersecurity, the Law on Protection of Personal Data (LPPD), executive succession management, etc. are also followed up within the scope of risk management activities. You can find detailed information on climate and water risks under the "Climate Crisis" heading.



The Group shares a common risk management structure that is in line with international COSO risk management standards.

Risk Type	Definition	Management Method
	<b>Collection Risk (Credit Risk):</b> These are the risks for the full and timely collection of receivables.	Where possible, sales of goods and services against cash payment, obtaining collateral from customers and asking for bank guarantee/surety, grading customers according to their risk.
Financial Risks	<b>Liquidity Risk:</b> It is the risk 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 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.
	Market Risks: Financial losses that may be incurred as a result of the fluctuations in the market parameters.	Using derivatives for hedging against currency risk, making efforts to pre-fix the purchase prices of raw materials and materials that will be needed in the production process of goods and services.
Operational Risks	Cover the risks that may arise during the operational processes of Tekfen Group companies in different 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 as 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.
Strategic Risks	Risks that will affect the realisation of the company's long-term goals and services are managed within this context. These are the risks 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 risks related to industry and competition trends, internal resource allocation, entry into new fields of business, mergers and acquisitions, and product development processes and business opportunities.	These issues are evaluated and followed up by the Boarc of Directors, senior management, and the expertise committees created under them, and necessary actions are taken. If deemed necessary, services are obtained from consultancy firms with proven international competence and expertise.
Reputational Risks	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.
Compliance Risks	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.

## **Business Ethics and Compliance**

Ethical rules determine the basis of Tekfen's way of doing business. The Group guarantees a responsible approach towards customers, employees, shareholders, suppliers, business partners, competitors, the environment, and finally, society with the ethical rules adopted by all employees, on the basis of integrity, confidentiality of private information, conflict of interest, and compliance with laws and regulations. In this context, the Company's standards are put into writing via policies and shared with all stakeholders. In 2020, seven new company policies were published under the leadership of working groups, and all policies were gathered under the heading "Policies" on the Tekfen Holding website.

## **COMPLIANCE WITH THE PRINCIPLES**

All notifications regarding the violation of ethical rules can be submitted 24/7 anonymously both in Turkish and English via the "Ethics Hotline", which became operational in 2018, via phone number +90-212 257 0 110, e-mail (etikhat@tekfen.com.tr), and website (www.etikhat.com). Notifications are collected by an independent company.

Tekfen Holding has a Compliance Committee, formed with the participation of the Internal Audit Director and the Compliance Coordinator and chaired by a Board Member. In addition to the Compliance Committee, which is responsible for the implementation and monitoring of business ethics rules, all Group Companies have a Compliance Officer appointed by the Company's Board of Directors and a Compliance Committee. These individuals and committees work in cooperation with the Compliance Coordinator and report monthly to both the Company's Board of Directors and the Tekfen Holding Compliance Committee. All calls to the Ethics Hotline are evaluated by the Compliance Committee according to ethical and disciplinary rules. In 2020. 31 calls were received on the Ethics Hotline and 22 of them were found suitable for review. During the year, 14 notifications were finalised and closed. The review of eight notifications is still ongoing.

## TRAININGS

Employees of the Contracting Group receive training on the Code of Business Ethics and Anti-Bribery and Anti-Corruption Principles upon their employment and sign a covenant stating that they have read and understood these principles. In addition, updated trainings on ethical values are held every year at the headquarters and the project sites with the supervision of the Compliance Officer or Project Compliance Representative. In 2020, a total of 15,406 person-hours of business ethics training was provided within the Group, in general online and in particular in classrooms for Tekfen Construction's projects. During the year, ethics training was made available to all employees as an online module. Within the scope of the training, the issues of fighting against corruption and bribery are also discussed.



Attaching importance to the adoption of its values and way of doing business by its subcontractors and suppliers, Tekfen conducts merit assessments and encourages its subcontractors and suppliers to provide training to their employees.

In 2020, a total of **15,406** person-hours of business ethics training was provided within the Group.

# **CUSTOMER LOYALTY**

ekfen Holding bases its success on the strong ties it has established with its customers, and on its clear objective to always provide high-quality service

in order to maintain this commitment. Customer satisfaction surveys are held every year in order to regularly monitor customer satisfaction at Tekfen Group Companies.





Total number of customers of Tekfen



Tekfen Construction's customer satisfaction survey result





96%

**Tekfen Services** 

customer satisfaction

survey result

Tekfen Agri's customer satisfaction survey result

Tekfen Engineering's customer satisfaction survey result

## **TEKFEN CONSTRUCTION**

As an international contractor, Tekfen Construction employer representatives under the "nonconformity determines the quality performance criteria such as report", the relevant project departments determine the action plan to correct the nonconformity by way error rates, repetitive work volumes, field test results, non-conformities, and material losses on a project/ of root cause analysis. Action plans include measures site basis, taking into account the scope of the to be taken to correct the current situation, as well activities of projects and workplaces and customer as to prevent it from happening again. The number expectations at the beginning of each year. The of nonconformity reports and their timely closing criteria are monitored monthly and cumulative values are among the quality performance indicators of are calculated at the end of the year. The company's the projects. In this context, monthly reports are quality performance was recorded as 89.7% in 2020. submitted to the headquarters and all complaints are tried to be resolved before the completion of the In order to ensure customer satisfaction and loyalty, project. In addition, feedbacks are evaluated annually Tekfen Construction pays the utmost attention to at the headquarters with the participation of senior regularly collecting feedback and taking necessary management, and suggestions for improvement are actions. For this purpose, notifications in the projects made. A total of 236 noncompliance reports were are evaluated on-site as soon as they are received dealt with at Tekfen Construction in 2020, all of from the customers, and improvements are made which were resolved.

immediately. According to the feedback from



## **TOROS AGRI**

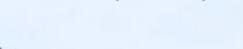
Every two hours, Toros Agri analyses product samples in its laboratories and constantly monitors the compliance of the fertilisers it produces with the quality standards. Toros Agri maintains close contact with its dealers through regular visits and meetings, since dealers in the field play a key role in ensuring customer satisfaction, along with product quality, and in determining their needs. Notifications received from dealers and farmers regarding product quality are examined on-site, if necessary. If the quality complaint is justified, the product is returned, the reason for the guality problem is investigated and the necessary steps are taken immediately to eliminate it.

• In 2020, 4,960 interviews with dealers and 5,286 interviews with farmers, 369 visits to agricultural institutions, 12 meetings with farmers and 35 events in different locations with the Toros Agri Training Bus were held in all seven regions across Turkey.

• Due to the pandemic, Toros Agri Training Bus activities could only be carried out in the Aegean and Western Mediterranean regions. Within the scope of these activities, 801 farmers were interviewed oneon-one and informed about Toros Agri products and correct fertilisation methods.

• The Toros Farmer application, providing weather forecast, soil, and plant data, and offering advice for agricultural production processes, has been developed to support farmers and make them benefit more from technological opportunities. Detailed information about the application can be found under the "Social Investments" heading.

In 2020, 4,960 interviews with dealers and 5,286 interviews with farmers, 369 visits to agricultural institutions, 12 meetings with farmers and 35 events in different locations with the Toros Agri Training Bus were held in all seven regions across Turkey.



Toros Agri Mobile Training Vehicle







## STAKEHOLDER PERSPECTIVE

# On the Importance of Education in Agriculture



## İsmail Sırkıntı (Toros Agri dealer since 2007, Mediterranean Region)

Toros' delivery of the products where and when necessary, and its speed of reacting to our problems, that is, its corporate understanding, is very important for us. Whenever we want, we can reach a Toros Agri official. We haven't had any problems with this so far. Farmers also prefer Toros because it stands behind its brand and quality.



## Adil Arslan (Agricultural Engineer, Tarsus)

I work as an agriculturalist in a private company in the Tarsus region. We have been using Toros Agri's products regularly for about 5.5 years. We find their training very useful, and I follow them with my friends on a regular basis. It is very important for us to increase the yield by giving the right fertiliser at the right time in plant nutrition.



Mükerrem Akça (Farmer, Mediterranean Region)

I have been using almost all the products of Toros continuously since the day I started farming. And I have been farming for 30 years now. Farming teaches you something new every day. In fact, we receive a lifelong education. We also learn about the content of fertilisers from Toros representatives, and use our fertilisers with the methods they have shown us. We get to know about nutrients from their brochures. They show us short videos as well as how to apply the fertiliser. They particularly explain the benefits of organomineral and solid organic fertilisers. We used them last year and we were very satisfied.



## İsmail Güven (Toros Agri dealer since 1990, Ankara)

We are a farming country, and I am a farmer's son. The importance of agriculture was once again understood by the entire world during the pandemic. I would like to thank Toros for providing the best service to our country and to Turkish agriculture in every aspect, primarily in terms of providing quality. Toros has appointed two agricultural engineers to work with us in the service of the farmers in the fields. This has been very beneficial in terms of providing better service to the farmers, raising their awareness towards us dealers and in promoting our products. Toros means quality, quality, quality! You should believe in a cause, in your job, you should love it. I also believe in Toros Agri and love them. Toros is a family. And I am proud to be a member of that family.





## Sider Soy Yıldız (Agricultural Technician, **Bala Agricultural Enterprises, Ankara)**

Agriculture means tillage, right planting, (using) the right seed, and the right fertiliser. Toros' contributions to us are enormous. Because they do everything right. When fertiliser is applied correctly, it has a really big impact. If the fertiliser is applied 10 days early or late, it causes great financial losses. Toros does not leave the farmer alone, the relationship doesn't end with sales. After our training, the results and the yield was superb, and we understood the importance of plant nutrition better.



**Rifat Ulucan** (Farmer, Kavseri)

I have been farming for over 50 years. I have been using Toros products for 20 to 25 years. Last year we were invited to a meeting. There, our teacher Bülent (Erenoğlu) from Toros gave a nice speech. I listened carefully, it got into my ear. He presented the organomineral fertilisers. I have a field where I am planting snack seeds. Whatever I tried on that field, I couldn't get any results. I used the 12.12.12 organomineral fertiliser with the advice of my teacher Bülent. The produce I had, had several nodes. Its stem was wide, and the stalks were strong like the nodes. I want these trainings from Toros to be held on a more comprehensive and annual basis.



## **Sema Döngel (Professional Agricultural** Engineer, Toros Agri dealer since 2007, Manisa)

In our cooperation with Toros Agri, it is a great assurance for us to know that we will not receive any complaints from our farmers regarding the products we sell. As well as its quality, another assurance is the support from all its technical staff. The fact that farmers trust its quality products and delivery network sets Toros apart from others. As a dealer, farmer, and agricultural engineer, we are fighting for sustainable agriculture in these lands. And I want no one to forget, this land was entrusted to us! We are trying to protect it in the best way we can and hand it to the following generations in the best way possible. I think that Toros Agri shares the same view with us and that we will work side by side for many years in sustainable agriculture.



## **Tolga Demir (Agricultural Engineer,** Sevinc Hanım's Farm, Manisa)

This is a farm established in 2016. Together with our teammates from Toros Agri, we are constantly assessing the situation about the use of fertilisers. We have seen that the recommended fertilisers we have used so far are successful. Our productivity has increased, the amount of produce we have received has shown that we have achieved successful results.



## Şensöz Santepeli (Farmer, Manisa)

I turned 50 years old this year. When I was 18, we used to fertilise these fields with Toros. I received Toros' training in 2020. After the presentations. I started to do more reasonable and scientific farming. I got more efficiency by using less fertiliser. I switched to conscious fertilisation and put up 100%. Such trainings take people further scientifically. Because the age is the age of science!



there!



## Ahmet Erol (Professional Agricultural **Engineer, Yeşil Küre Agricultural Products**, Samsun)

In 2019, at the Bafra Chamber of Agriculture, Toros Agri held a meeting on the use of correct and balanced fertilisers. We, too, attended this meeting and saw some of the mistakes we made in fertilisation and the mistakes we thought were right. By correcting these mistakes, we have achieved a serious saving in our fertiliser use, and it has also had a serious impact on produce efficiency. At the same time, since we are an organic farming business, organomineral products have been very helpful in regulating our soil structure. The Black Sea Regional Manager of Toros Agri, Kurtuluş Bey, frequently visited our lands and gave us information, which made a significant contribution and got us to the point where we are at today.

## Aytekin Aydın (Toros Agri dealer since 1999, Ordu)

What does Toros Agri mean? First, it is a pioneering organisation with its corporate structure, product variety, product richness, dealer network, and employees. We attach great importance to the training activities that they have initiated as a CSR project, especially in recent years. Both the farmers and we take this activity, carried out with the training bus, very seriously, we care about it, and we want it to continue. We also conduct trial activities and trial studies together. Where there is agriculture, Toros Agri is

# A STORY OF THE SOIL Soil Health Check: Soil Analysis!

Soil is the heart of agriculture. Knowing the properties of the soil and the fertiliser to be used for a balanced nutrition of a plant is of great importance. And to know the soil is possible by soil analysis. This analysis shows how much nutrients the soil can provide to the plant. The nutrients that the soil is insufficient to meet must be met with the right amount of fertiliser, taking the needs of the plant into account.

For high yield, quality produces, a profitable season, and sustainable agriculture, it is important to apply the right fertiliser in the right dose, at the right time, and in the right place (4Rs). The primary condition for this is to know the soil and measure the nutrients in it, that is, to analyse the soil. Soil analysis contributes to increasing the productivity of the plant and its resistance against external conditions by choosing the right fertiliser, while helping to protect the soil and reduce the fertiliser costs by preventing excessive fertilisation. Through soil analysis, the pH value of the soil, the amount of organic matter in it, its cation exchange capacity, and its structural properties can be measured, in addition to the nutrients it contains. Thus, the presence of the factors that prevent nutrient intake can be determined. Soil analysis is recommended 1.5 to 2 months before planting and fertilising for annual plants, and once every 4 to 5 years for perennial plants.

## How to take a sample for soil analysis?

First, the litter on the surface of the area to be sampled is removed, then pits of 0 to 60 cm are dug in a "V" shape, depending on the capillary root depth of the plant to be planted, with a soil auger, probe, or garden shovel (digging fork). 3 to 4 cm of soil strips are taken from different depths of the pit and collected in a bag. This process is done in 10 to 15 different spots, depending on the size of the field (1-2 kg in total). The soil sample taken is cleaned of stones and foreign materials. Field, farmer, and crop information is noted, and the sample is sent for analysis. Care should be taken not to take samples from fields and roadsides, close to tree trunks, the border of the neighbouring field, and near manure piles.

Toros Agri Trial Field

## **Operational Excellence**

The following components comprise Tekfen's operational excellence approach:

• To systematise and perfect all processes with international standards and good practices in the sector.

• To make operational excellence a part of Tekfen's culture with the aim of lean production, management of quality processes, effective and efficient use of resources, and continuous improvement.

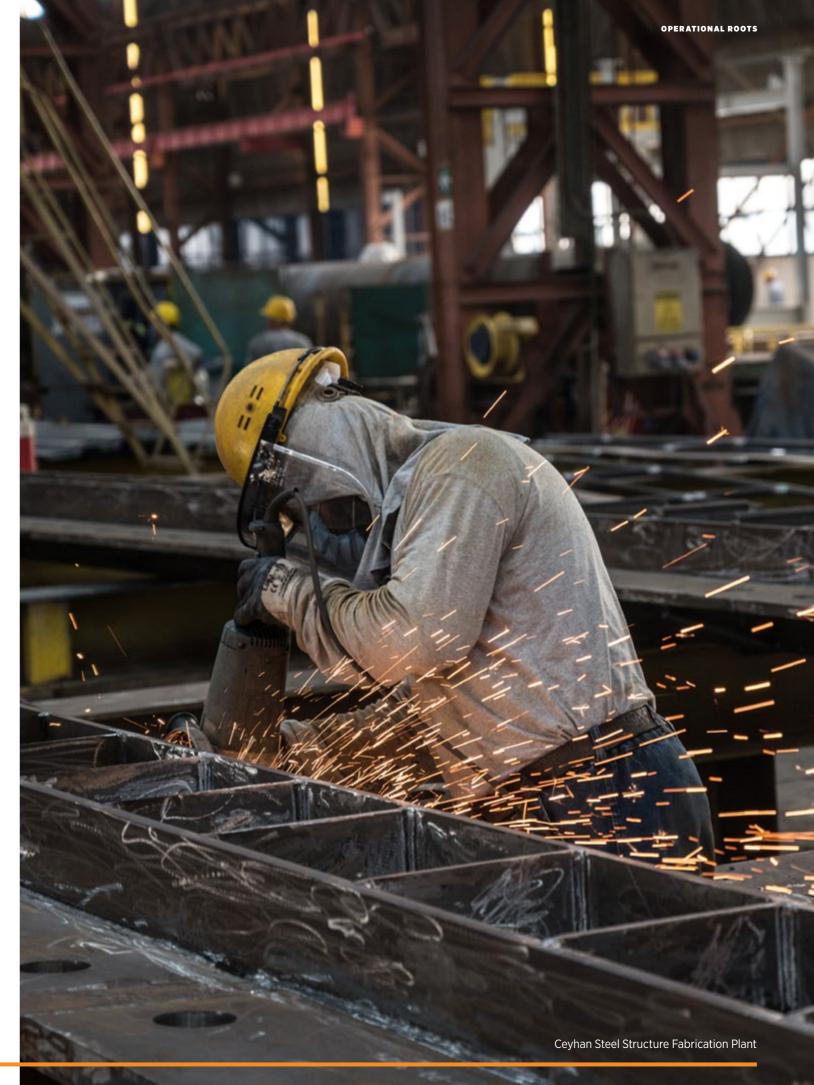
• To continuously increase the quality of services offered to customers with the aim of long-term sustainable growth.

• To increase efficiency, improve employee and customer loyalty, and reduce the environmental impact of operations, while reducing costs.

Tekfen Holding and its Group Companies conduct all their operations in compliance with international standards. Quality, Occupational Health and Safety, Environment, Energy, and Information Security Management Systems are implemented in all Group Companies. The effectiveness and adequacy of the practices are regularly evaluated through internal and third-party audits. As a result of the evaluations, areas open to improvement are identified and corrective measures are taken. The management systems implemented within Tekfen are presented in the table below:

Managemen	t Certificates	Tekfen Construction	Tekfen Manufacturing	Tekfen Engineering	Toros Agri	Tekfen Holding	Sales Revenue Share
ISO 9001	Quality Management System	x	x	x	x		84%
ISO 14001	Environmental Management S	ystem <b>x</b>	x		x		83%
ISO 45001	OHS Management System	x	x		x		83%
ISO 27001	Information Security Management	System 🗙	x		x	x	83%
ISO 50001	Energy Management System				x		32%

Tekfen Holding and its Group Companies conduct all their operations in compliance with international standards.



## **TEKFEN CONSTRUCTION**

Tekfen Construction continued its efforts in 2020 to increase efficiency and operational excellence through digitalisation by developing projects that improve business processes. Such noteworthy projects are as follows:

## **Cevhan Project**

The following works have been carried out within the scope of the improvement project at the Ceyhan Steel Manufacturing Facility and the GAT Facility:

- Digital processing of all data produced in the field and their instant monitoring via mobile devices.
- Tracking of all the documents via mobile devices following their transfer to digital media.

• Ensuring that design and cost information for different customer demands are generated guickly and reliably from the system.

• Establishing a digital system for the planning of material and equipment needs and their stock control, optimisation of spare parts stocks, and for maintenance activities.

# Ceyhan Steel Structure Fabrication Plant

## **Procurement Project**

The central and field procurement processes were improved, and digital transformation was completed. The overall approach to developing a closed-loop ERP-based business process minimises the human impact and reduces the risks during procurement. With the help of specially created user interfaces and workflows, some processes operating outside the ERP system are digitised, resulting in cost, energy, and time savings.

## **TOROS AGRI**

In line with the operational excellence target of Toros Agri, Turkey's largest fertiliser producer, lean production, productivity and quality increase, savings, and OHS are the topics that stand out.

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

Within the scope of 6-Sigma, which is one of the most common operational excellence methodologies used for the definition, measurement, analysis, improvement, and control of the processes, the first wave process has been completed for 17 Green Belt candidates. During the four-module training, 1,728 person-hours of training and 209 hours of coaching were given to Green Belt candidates. In 2020, 15 6-Sigma projects were initiated, and a potential income of TRY 11,289,560 was obtained.

## Lean Manufacturing Activities and Practices

Toros Agri has continued its activities in 2020 in line with its lean production and continuous improvement (Kaizen) philosophy:

• Within the scope of lean production, 279 personhours of online training was given to improve the competence of front-line employees.

• Team Leader 5-Mission (Occupational Safety -Human Development - Quality - Delivery - Cost) tasks have been worked on and the reporting of these works has begun.

 Standardisation and best practice studies were carried out for the main subjects of Early Equipment Management, Product Replacement, Spare Parts Management, Loss-Cost Matrix, and Quality-Maintenance Matrix.

• The 3M practices, muda (waste) - muri (overburden) - mura (unevenness), for the analysis and identification of wastes and losses in the operational areas were carried out.

• Within the scope of continuous improvement projects, 55 Kaizen projects were initiated in 2020. and a potential income of TRY 1,975,278 was obtained.

**OPERATIONAL ROOTS** 

**Toros Agri obtained a** potential income of





**Toros Agri was awarded** the "Protect & Sustain Excellence" certificate for the second time in 2020.



## "Protect & Sustain Excellence" Certificate

Toros Agri became the first and only company in Turkey to be awarded the "Protect & Sustain" certificate of the International Fertilizer Association (IFA) in 2018 with its OHS, environment, product safety, and safety practices. Following the 2019 audit, Toros Agri earned the "Excellence" status by increasing its success rate from 73% to 96%, and successfully completed the interim control audits in 2020, which in turn brought the company the "Protect & Sustain Excellence" certificate for the second time.

## **TEKFEN AGRICULTURE**

Quality and food safety are the fundamentals of operational excellence at Tekfen Agriculture. In addition to R&D activities aimed at increasing efficiency, projects are being developed to run the operations more efficiently within the company.

"Full traceability" practices are carried out in all processes considering quality and food safety in direct agricultural production, and for this purpose, the assessment of agricultural managers and consultants are taken into account when selecting the production site and during the implementation of the practices. Due attention is paid to ensure that all practices are carried out in a way that will protect natural agricultural resources and farmers, and ensure food safety and production continuity. Alanar Fruit has the GLOBAL GAP and Good Agricultural Practices certification, which guarantees that the products offered to the consumer do not carry any safety risks in terms of food hygiene and that all products are produced considering their environmental impacts.

## **R&D** Activities

With its R&D activities, Tekfen Agri aims to continuously improve its operations and increase productivity, particularly with seed breeding projects, and to develop productive and resistant species through seed breeding and production practices. Among the seed practices carried out, triticale, barley, wheat, and sesame breeding studies stand out with the classical hybridisation and DNA marker methods. In addition, banana and dragon fruit are produced with the tissue culture method.

## **Cherry Processing and Packaging Line**

A cherry processing and packaging line using the latest technologies has been established at the Alanar Fruit Alaşehir Facility. Thanks to this new line that features optical sorting technology, it has become much easier to separate the defective products and pack the quality cherries according to desired sizes and colours. The newly installed system provides a significant reduction in labour, energy, and water consumption required for sorting and packaging operations, while increasing efficiency.

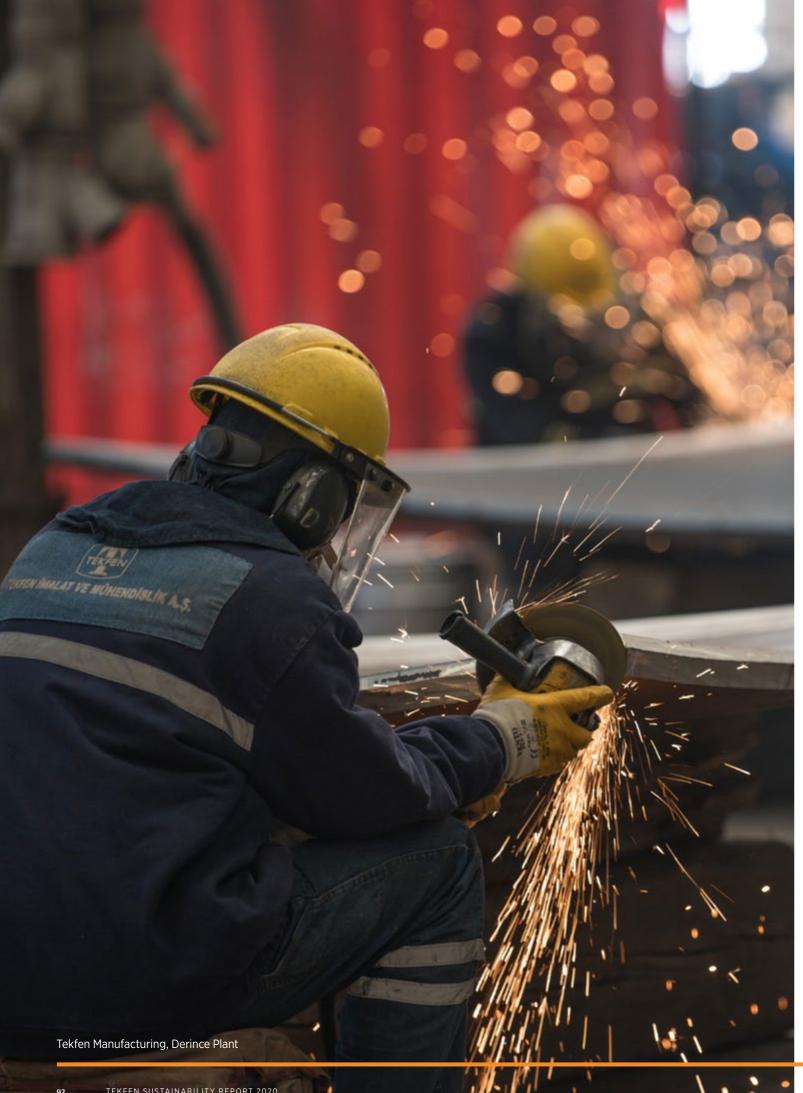
Alanar Fruit has the GLOBAL GAP and Good Agricultural Practices certification.







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## **TEKFEN MANUFACTURING**

Tekfen Manufacturing, which undertakes the manufacturing of the storage and process equipment of industrial facilities, attaches great importance to quality management in order to fully meet its customers' expectations with both its products and services. The company fully complies with the Occupational Health and Safety rules in all production processes and has a sensitive approach to the environment.

## **HCL Notes Application**

All reports, statistics, and documents, such as the HSE statistics, performance targets, nonconformity reports, preventive and corrective actions, training programmes, customer satisfaction statistics, calibration plans, quality control test requests, internal audit plans and reports, competency assessments for human resources, welder performances, visitor records, and LPPD data forms for all processes are tracked through the HCL Notes application and records are stored electronically within the application.

## Maintenance Tracking and Stock Software

A software has been developed to create maintenance plans for all machines used at the Derince Production Facility, to track their periodic maintenance, to save information forms, and to monitor the stock status of spare parts. In addition, a special stock allocation software is used to improve the inventory records of the materials, to give electronic approval, and to track their records.



**Tekfen Manufacturing attaches great** importance to quality management in order to fully meet its customers' expectations with both its products and services.



# Strategic Areas

The major issues Tekfen Group focuses on within its Sustainability Strategy in order to continue its existence in the future have been defined as the Company's "Strategic Areas".



### Toros Agri R&D Centre's pilot scale greenhouse, Mersin

# **STRATEGIC AREAS**

The major issues Tekfen Group focuses on within its Sustainability Strategy in order to continue its existence in the future have been defined as the Company's "Strategic Areas". The three main headings designated within this context, "Climate Crisis", "Innovation" and "Employees and Society", are also among the main headings of the global agenda for sustainability.

# **CLIMATE CRISIS**

he rapidly increasing world population, together with the accompanying production and consumption habits and trends, causes the climate crisis to grow by putting pressure on natural resources. The world population is expected to reach approximately 10 billion in the next 30 years, with an increase of 2 billion people.<sup>10</sup> It is inevitable that this increase will lead to a significant increase in demand and pressure on basic needs such as food, energy, and water.

As in previous years, extreme weather events, failure in combating climate change, damage by humans to nature, and loss of biodiversity are among the most important environmental risks in the Global Risks Report 2021 published by the World Economic Forum.<sup>11</sup>

The climate crisis, unlike other economic or social crises, will have irreversible consequences and will negatively affect the lives of future generations. Events such as extreme climatic events, sea level rise, heat waves, and drought pose great risks to the future of the world.<sup>12</sup> In order to be protected from these risks and to keep global warming below 1.5 degrees centigrade, greenhouse gas emissions must be reduced by 7.6% each year until 2030.<sup>13</sup>

## The European Green Deal

Among the international steps taken to combat the climate crisis, it is necessary to open a special parenthesis to the European Green Deal. The Green Deal, which offers a new economic growth strategy against the climate crisis, is an environmental plan that aims to make the European Union climate neutral by 2050 and creates an important opportunity for the transition to a zero-carbon economy. The plan, which aims to end the dependence of economic growth on the use of resources, has targets that concern many sectors, such as sustainable agriculture, clean energy, sustainable industry, food sustainability, sustainability and efficiency in buildings, biodiversity, sustainable mobility, combating pollution, and climate change.<sup>14</sup> Although the Green Deal has been designated for the EU member states, its scope is quite wide, as it has the potential to affect other countries that have relations with the EU. To date, more than 110 countries, including the UK, Japan, and South Korea, as well as EU countries, have announced their net-zero emissions target for 2050.<sup>15</sup>

On the other hand, the "Carbon Border" tax, which is expected to be implemented by the EU in 2022 within the scope of the Green Deal, will also significantly affect companies that have trade relations with the EU. Minimising these risks and turning them into opportunities will only be possible by the studies, researches, and investments to be made by the private sector, in order to create plans and strategies to adapt to the new conditions.

<sup>10</sup> UN, N/A, Global Issues: Population: https://www.un.org/en/global-issues/population

- <sup>11</sup> WEF, 2021, The Global Risks Report 2021: http://www3.weforum.org/docs/WEF\_The\_Global\_Risks\_Report\_2021.pdf
- <sup>12</sup> NASA, N/A, The Effects of Climate Change: https://climate.nasa.gov/effects/
- 13 UNEP, N/A, The Facts about Climate Emergency: https://www.unep.org/explore-topics/climate-change/facts-about-climate-emergency
- <sup>14</sup> EU Commission, N/A, A European Green Deal: https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal\_en

15 UN, 2020, Net-Zero Emissions Must be Met by 2050 or Covid-19 Impact on Global Economies Will Pale Beside the Climate Crisis: https://www.un.org/press/en/2020/sgsm20411.doc.htm



## **Climate Crisis Management**

The Group's chemical industry activities, namely the fertiliser sector with the highest Scope 1 and 2 emissions, and its contracting activities, particularly the oil and natural gas sectors, are the key areas in Tekfen Holding's climate crisis management. The Engineering and Contracting Group and the Chemicals Group, which have the largest share in Tekfen Holding's turnover, are sectors vulnerable to the effects of climate change. As such, the climate crisis poses a significant risk to both groups.

One of the sectors most affected by the climate crisis is agriculture. Extreme climatic events such as increased number of storms, floods, hail, and heat waves have led to the loss of agricultural lands and deterioration of soil quality, as well as negatively affecting agricultural production and threatening food security. Agriculture is one of the key elements of sustainable development with the employment it generates. For instance, 60% to 70% of the people with a high poverty level in the Near East and North African regions live in rural areas dependent on agriculture.<sup>16</sup> The Climate Change and Land Report published by the Intergovernmental Panel on Climate Change (IPCC) in 2019 emphasised that climate change affects food security and that rural areas particularly are under great risk.<sup>17</sup> In short, climate change carries the risk of causing serious social and economic damage in addition to its environmental effects on natural resources and agricultural lands.

The decrease in investments and government support for natural gas, oil and petrochemical facilities, which are among the business domains of Tekfen's Engineering and Contracting Group, and the shift toward new energy sources pose a risk for the Group in terms of business potential. Investors' tendency toward resources that have higher social and lower environmental impacts also creates risks in terms of the sector's access to financial resources.<sup>18</sup> In addition, extreme climatic events may adversely affect the projects in progress. Areas such as insurance and facility management, which are also among Tekfen's lines of business, are also sectors at risk due to the climate crisis. Tekfen Holding identifies climate and water-related risks and opportunities and integrates them into its business strategies.

The main climate risks Tekfen has identified are as follows:

• With the effects of climate change, the share of fossil fuels in energy production is gradually decreasing. By the same token, new investments in fossil fuels are expected to show a decreasing trend in the coming period. This situation poses a significant risk for our Engineering and Contracting Group Companies, of which the oil and gas industries comprise a significant portion of the projects.

• One of the most important tools of the European Green Deal's goal of being climate neutral by 2050 is the "Carbon Border" regulation. With this new tax scenario, the carbon tax to be paid at the border for our products exported to the EU may lead to a decline in revenues.

• With the European Green Deal, a 20% decrease in chemical fertiliser consumption is expected in EU member countries, leading to a decrease in our chemical fertiliser exports.

• With the Emissions Trading System, which is likely to be implemented in Turkey in the near future, our operational costs are expected to increase.

• The change in precipitation regime and the increase in the frequency of extreme weather events as a result of climate change will adversely affect our agricultural production efficiency.

Tekfen Group Companies take various steps to manage climate risks and seize arising opportunities. Within this context:

• A working group was formed within Tekfen Engineering to develop the company's competencies in the design of environmental technologies. This group has conducted researches on traditional and next-generation environmental technologies and identified new target markets for the Engineering and Contracting Group. The content of the studies is basically covered under the following headings:

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

## **Clean Energy and Production Technologies:**

Energy production from waste (traditional biogas production), biofuel/biochemicals production from waste (gasification process), plastic recycling (chemical recycling), solar energy, wind energy, hydrogen and fuel cells, biofuel/biochemicals production from 2G biomass, carbon capture, storage, and reuse.

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

• Following the Gönen Renewable Energy investment, Toros Agri has invested in Meram Renewable Energy in 2020. The company aims to increase its share in the organic fertiliser market with these investments.

• Toros Agri aims to reduce its  $N_2$ O-based emissions by 80-85% with the filter investment, which is currently being commissioned within the Nitric Acid Unit at its Mersin Plant.

• Toros Agri researches specialty fertilisers with less greenhouse gas emission.

• Tekfen Agri works on seeds that are resistant to new climatic conditions and drought through seed breeding projects.

• Energy studies are conducted at all Group Company facilities and projects on energy efficiency are developed and implemented.

• Regarding real estate development and facility management activities, Tekfen Group also contributes to its vision of "Bridging Prosperity" with highly energy-efficient, sustainable buildings and infrastructure services.

Detailed information on climate risks and management can be found in the Carbon Disclosure Project (CDP) report.

<sup>16</sup> UN, N/A, Global Issues: Population: https://www.un.org/en/global-issues/population

<sup>18</sup> NASA, N/A, The Effects of Climate Change: https://climate.nasa.gov/effects/

Toros Agri aims to reduce its N<sub>2</sub>O-based emissions by 80-85% with the filter investment, which is currently being commissioned within the Nitric Acid Unit at its Mersin Plant.



Carbon Disclosure Project (CDP) Climate Change Report

<sup>&</sup>lt;sup>17</sup>WEF, 2021, The Global Risks Report 2021: http://www3.weforum.org/docs/WEF\_The\_Global\_Risks\_Report\_2021.pdf

## **CLIMATE TARGETS**

For the first time in 2020, Tekfen Holding has set medium- and long-term carbon emission reduction targets using Science-Based Targets initiative (SBTi) tools. The aim at the first stage is to reduce the total Scope 1 and Scope 2 emissions by 15% by the end of 2025 compared to 2019, while the reduction rate of the total Scope 1 and Scope 2 emissions by the end of 2037 has been set at 40% of that of 2019. In addition to these targets, Tekfen Holding has also started to work towards achieving the "Net-Zero Emissions" target.

Within their effort towards minimising their operational emissions, Tekfen Group Companies have completed eight projects in 2020 that contribute to emission reduction. Thanks to these projects, 10,839 MWh of energy and approximately TRY 7.4 million were saved.

## **TOROS AGRI**

• Slated to reduce the emission of  $N_2O$  (nitrous oxide) - the company's largest source of emission - the installation of the new  $N_2O$  filtration system at the Nitric Acid Production Facility of the Mersin Plant is currently in progress. The investment for this new filter is expected to reduce the  $N_2O$  emission, a major factor in climate change, by as much as 80-85%. The project is still in progress, expected to be completed in 2023.

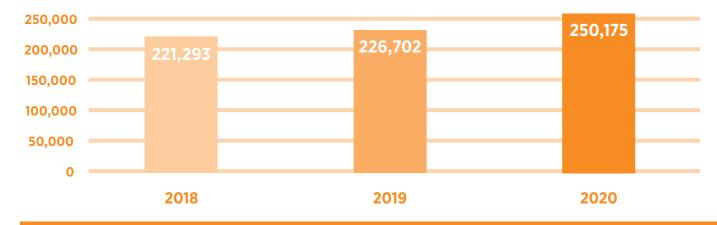
• In 2020, controlled sulphuric acid feed into the gas washing system at the Samsun Plant was started. With the changes made, natural gas consumption was reduced, and an emission of 5,710 tCO<sub>2</sub>e was prevented, while 9,255 MWh of energy and approximately TRY 6.1 million were saved. On the other hand, with the 195,490 MWh of electricity produced as a result of turning waste heat generated at Toros Agri's Samsun and Mersin Plants to steam energy, a total of 90 tons of greenhouse gas emission was prevented. The Board of Directors has been monitoring the Group's carbon emission performance since 2010 and climate-related risks are evaluated within the scope of corporate risk management.

Participating in CDP's climate change programme for the first time in 2017, Tekfen Holding scored A (-) in the programme in 2019, and became one of the climate leaders of Turkey.

Tekfen Holding also found itself a place in the Global "A" List of both the Climate Change and Water Security programmes of the CDP in 2020, among 63 companies from all over the world, being the only company from Turkey to be included in the Global "A" List in both programmes.



## Total Renewable Energy Production (Waste Heat and Solar - MWh)



## **TEKFEN AGRI**

• The Agripark R&D Centre works on issues such as increasing agricultural productivity and farmer welfare, developing new drought-resistant species, and reducing environmental impact by rendering the production processes more efficient through studies carried out jointly with international organisations and universities within the scope of Horizon 2020 and TUBITAK projects. Detailed information about these projects can be found under the heading of Innovation.



Within their efforts towards minimising their operational emissions, Tekfen Group Companies have completed eight projects in 2020 that contribute to emission reduction. Thanks to these projects, 10,839 MWh of energy and approximately TRY 7.4 million were saved.

# A STORY OF THE SOIL Tekfen Agri - A Natural, Climate-Controlled Warehouse in the Bosom of Mother Earth!



Soil is a fruitful resource presenting mankind with a wide array of creative solutions for their various needs. Such examples are the underground warehouses around Nevşehir, located in the Central Kızılırmak basin in Central Anatolia. The region, which is surrounded by three large volcanic mountains, namely Erciyes, Hasandağı, and Göllüdağ, is basically a vast plateau, also known as Cappadocia, formed by lava accumulated millions of years ago. The soft rocks slightly below the soil surface harden as they come into contact with the air. As such, the fairy chimneys that make the region a tourist haven is caused by the erosion due to climatic factors such as wind, rain, cold, and heat on these rocks.

The rocks, which have a spongy structure due to the volcanic tuff, have provided shelter to the local people for thousands of years, while at the same time providing a means to store their food and winter needs through small caverns. Traditional cellars have now been replaced by larger warehouses opened with the help of tunnel boring machines. Besides bedding fruits such as lemons, grapefruits, and pomegranates, potatoes and potato seeds are also stored in these warehouses. The spongy structure of the rocks also absorbs the vehicle exhaust gas that can form in the warehouse. The humidity in the warehouses is between 80-95%. This ensures the prevention of quality and weight loss of the products stored. These underground

warehouses have a high level of insulation; they naturally stay cooler in summers and warmer in winters compared to the outside environment. Similarly, they offer a much more stable environment in terms of temperature differences compared to above-ground warehouses and therefore require less energy in terms of heating and cooling, an advantage which in turn leads to significant energy savings.

The 5,600 m<sup>2</sup> underground warehouse that Tekfen Agri established near the Nar town of Nevşehir in order to store potato seeds is the warehouse operating with the lowest waste rate in Turkey, thanks to its fully computer-controlled ventilation and cooling system. In 2020, the waste rate was only 5.6% in the warehouse. The facility can store up to 7,000 tons of potato seeds.

## **Natural Resource and Waste Management**

Tekfen invests in resource efficiency, and aims to use natural resources such as raw materials, energy, and water more effectively and to create more value with less input. The Group also helps its stakeholders

reduce their environmental impact by offering products and services such as green buildings and correct fertilisation guidelines/practices that support reducing water consumption.

## WATER MANAGEMENT

Water, one of the most vital natural resources, is also one of the elements most at risk in the world. Factors such as increasing weather temperatures and drought due to global warming, uncontrolled consumption of underground water resources, increase in water demand with increasing population growth, negligence of water efficiency and its reuse in agriculture and industry, and pollution are among the leading causes of water scarcity in the world.<sup>19</sup>

Turkey is among the countries experiencing water shortage in the world. According to the projections, in 2040, when the population of the country will reach approximately 100 million, the amount of usable water per capita will be approximately 1,120 m<sup>3</sup>. This situation reveals the risk of Turkey becoming a waterstressed country in the future.<sup>20</sup> Inefficient use of water resources and excessive water withdrawal cause the loss of freshwater ecosystems.

The Tekfen Group takes international standards as a reference in determining water management and risks, identifies water risks and incorporates them into its business strategies, and does reporting in this matter. Studies are carried out to generate innovative solutions in line with related targets and in order to reduce the current water footprint.

The main water risks Tekfen has identified are as follows:

• With the deterioration of the water supply/demand balance, an increase in the unit price of water will increase operational costs.

• With the increasing water stress, agricultural production efficiency is expected to decrease.

• Small farmers are likely to be negatively affected economically as the water crisis reduces productivity in agriculture. This may lead to a decrease in the number and purchasing power of farmers, who are among the most important customers of Toros Agri, and a decrease in fertiliser sales.

<sup>19</sup> WRI, 2017, 7 Reasons We Are Facing a Global Water Crises: https://www.wri.org/insights/7-reasons-were-facing-global-water-crisis 20 Republic of Turkey Ministry of Agriculture and Forestry, 2019, National Water Plan (2019-2023): https://www.tarimorman.gov.tr/SYGM/ Belgeler/NHYP%20DENIZ/ULUSAL%20SU%20PLANI.pdf

• A decline in water quality as well as water supply are among the predictions. Pressure may increase against nitrate pollution due to the use of chemical fertilisers that decline water guality. Consequently, compliance costs against nitrate pollution may increase.

Detailed information on water risks and management can be found in the Carbon Disclosure Project (CDP) report.

Tekfen Holding became one of Turkey's Water Leaders in 2019, scoring "A (-)", the highest grade in Turkey, in CDP's Water Programme. Tekfen also found itself a place on the CDP Global Water "A" List, being the only company from Turkey to be included in the list.

The Group Companies take different steps to manage water risks on one hand and to seize opportunities on the other.

 Toros Agri increases its production and sales of specialty water-soluble fertilisers through its R&D studies. Specialty fertilisers are preferred in drip and sprinkler irrigation systems and require less water.

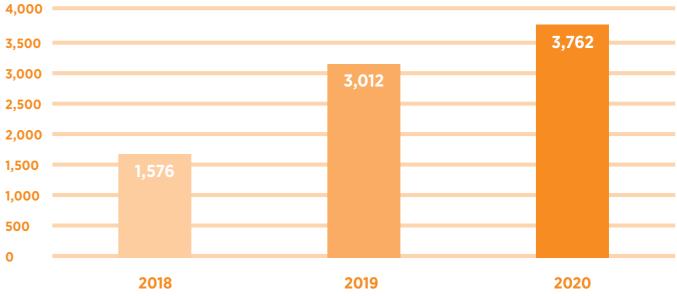
• Toros Agri is currently working on the Water and Wastewater Treatment and Recycling Project at its Mersin Plant. Once the project is completed, wastewater treatment, recovery of ammonia and nitrate in wastewater as products, and rehabilitation of the existing demineralisation system will all be possible.

 Toros Agri tries to prevent nitrate pollution by teaching farmers how to use the right fertiliser at the right time, in the right place and in the right amount (4Rs of fertiliser usage). Various tools such as training videos, Toros' Smart Farmer Application, and one-onone farmer trainings serve this purpose.

 Tekfen Agri reduces water consumption by using smart irrigation systems (Metos) and digital farm management applications (Doktar).

 At Tekfen Agri's and Toros Agri's R&D Centres, studies for developing produces and seeds that can adapt to the changing climatic conditions are carried out.

## Amount of Reused Water (megalitre)



<sup>21</sup> Republic of Turkey Ministry of Environment and Urbanisation, 2018: https://cevreselgostergeler.csb.gov.tr/su-kullanimi-i-85738



## **Technology for** efficient irrigation

The agricultural sector uses the most water in Turkey, having a share of 71.5% among all other sectors,<sup>21</sup> the reason being that most of the irrigation is done through inefficient traditional methods ("wild irrigation"). It is therefore of crucial importance to promote and support those state-of-the-art irrigation methods that use water resources efficiently.

Tekfen Agri uses sensors to measure soil moisture and meteorology stations to reduce water use in Alanar Fruit's orchards. In light of the data collected from these devices, irrigation is done in the required amount, while drip irrigation and mini sprinkler systems are used to ensure effective and efficient water use in the orchards.



## WASTE MANAGEMENT

Reducing waste at its source, its correct disposal, and the adoption of circular economy principles are critical for sustainability.<sup>22</sup> In addition to its environmental dimension, the fact that companies' business models are based on the circular economy also creates an economic opportunity. Models such as reducing waste through production with less raw materials, recycling and reusing, and transforming waste into other value-added products can provide many benefits for companies financially and in terms of competitiveness and innovation.

Tekfen Group Companies work to prevent waste at its source and to minimise/zero waste:

• The Contracting Group recycles or reuses most of the waste generated during construction. Dust is minimised through the reuse of asphalt wastes at temporary construction sites.

• No process-related product waste is generated at Toros Agri plants. Wastes from production are used in re-production in accordance with the quality criteria.

• Tekfen Tourism (Tekfen Services) collects organic and oil waste, electronic waste, and other recyclable wastes from its refectory separately and sends them to companies licensed for proper disposal.

• Toros Gönen Renewable Energy, a subsidiary of Toros Agri, and Toros Meram Renewable Energy, which started production in 2020, both produce biogas and electrical energy from the organic wastes collected in their respective regions, and also produce organic and organomineral fertilisers from wastes that have completed their gasification process. Businesses that provide new products and energy to the economy, while ensuring the disposal of regional organic wastes, are successful examples of the circular economy.



## Zero Waste

Tekfen Group Companies support the "Zero Waste" campaign organised by the Republic of Turkey Ministry of Environment and Urbanisation and fulfil the requirements for certification. Compost and energy production from organic wastes, regaining of wastes to the economy, re-use of construction wastes as inputs in other operations, and reducing food losses in agriculture with climate-resistant agriculture models are among the company's noteworthy practices. Tekfen Agri's Adana Agripark R&D Centre, Nevsehir Warehouse and Alanar Fruit Alasehir Plant and Toros Agri's Ceyhan, Samsun, and Mersin Plants and its Highway Facilities in Adana were also deemed worthy of Zero Waste Certificate.



## **TEKFEN AGRI**

Tekfen Agri has started to measure the environmental footprint of its products by performing their Life Cycle Assessment (LCA). In 2020, the cradle-to-gate Life Cycle Assessment for sesame seeds has been completed.

**Agripark Zero Waste Project:** Vegetal wastes from Agripark are sent to the biogas facility for energy and organic fertiliser production. In the last two years, a total of 272 tons of vegetal waste were recovered.

**Agripark Compost Project:** The company invested in a compost machine in order to convert organic wastes of the Agripark Facility into compost. In addition to its own wastes, Agripark also collects and processes the wastes from the neighbouring vegetable market. To date, a total of 3,390 kg of organic waste has been converted, and a total of 641 kg of compost has been produced and used in the landscaping of Agripark.

**Nevşehir Potato Seed Warehouse:** The Nevşehir Cold Storage Warehouse, with a total storage capacity of 7,000 tons of potato seeds, operates with the lowest waste rate among similar warehouses in Turkey, thanks to its high-tech ventilation and cooling systems. The waste rate, which was 6.52% in 2019, decreased to 5.6% in 2020.



22 Ellen MacArthur Foundation, 2021, Universal Circular Economy Policy Goals: https://emf.thirdlight.com/link/kt00azuibf96-ot2800/@/preview/1?o

## Innovative Agricultural Production Using New Technologies: Tekfen Agri's "Innovative Agricultural Production Using New Technologies" project, carried out in collaboration with TürkTraktör and Doktar, was awarded in the "Our Dream is Similar - Collaboration Program Awards" category of the awards event organised by KoçZer.

## **Biodiversity**

Biodiversity is an essential part of sustainability in many industries. Genes, species, and nature's services are critical inputs for many production processes, and businesses need healthy ecosystems to treat and distribute their waste and maintain soil and water quality.

Operating in constructing and agriculture sectors, which have an impact on biodiversity, Tekfen Group takes the necessary measures to protect the ecosystem and species during its operations. The management of biodiversity risk is based on the Biodiversity Action Plan, the Ecology Management Plan, and the Environmental Impact Assessment Reports. In this context, actions such as fauna observation and protection, relocation of the species in the project areas to similar habitats, and rehabilitation are carried out to keep the species out of the affected areas.

# A STORY OF THE SOIL Tekfen Construction Vegetative Soil Management

"Vegetative soil" is defined as the most fertile part of the soil that contains the nutrients necessary for the survival of all living things, especially plants. This rich layer covers only 5 to 30 cm from the surface. Deeper than that, yield decreases due to lack of microorganisms. The formation of vegetative soil, which is a largely non-renewable natural resource rich in organisms and microorganisms, takes centuries. For this reason, Tekfen Construction considers the protection and proper management of the soil as one of the most important issues for a sustainable future.

Within the scope of vegetative soil management, trainings are given in order to increase the awareness of all employees at construction sites with regard to this issue. Those working in soil and excavation-filling works are subjected to more detailed and special training. In addition to fulfilling the requirements specified in both national and international legislation, and the specs of the projects, practices that will have a positive impact on this issue are supported.

After completion of the legal procedures concerning agricultural lands, pasture areas, forest areas, or natural habitats, necessary arrangements are made for stripping the vegetative soil and storing it under appropriate conditions, taking into account the soil fertility of the region and the working site, as well as the observations and recommendations of the on-site HSE team. In critical habitats, works are carried out under the supervision of soil experts. While adequate machinery and equipment are used for the stripping process, the machines work without compacting the soil and strip the soil at the appropriate depth. Thus, the vegetative soil maintains its fertility, while its mixing with the subsoil is prevented. Measures are taken in accordance with legal regulations and good practice examples in order to protect the removed soil from wind and rain, or any other harm, and to ensure that the soil maintains its fertility. For this, additional measures such as vegetation, covering with geotextile, and compaction are taken whenever

necessary for the vegetative soil that is properly stocked on the land. Seed combinations suitable to the region's geography are used in vegetation.

In addition, in order to keep employee motivation high and to enable them to have a pleasant time outside of work, hobby gardens are created with vegetative soil, allowing employees to plant. Furthermore, in case the local people demand soil to be used in horticultural activities in the immediate vicinity of the project site, their vegetative soil needs are met. Provided that necessary legal permits are obtained and analyses are made, fertile vegetative soil can be transferred to low-yield agricultural lands. Tekfen Construction also provides support for the moving of the fertile soil if the field owners do not have the means to move it.

Tekfen Construction has also carried out various studies on restoring unproductive lands upon requests. In 2020, upon a request from the local people, an old quarry in Vize was reintroduced to nature by cooperating with the relevant institutions after the permits were obtained for its rehabilitation, within the scope of the Kırklareli Kıyıköy TurkStream Project. Thus, while the region was given a brand new landscape, risks such as slips, falls, and traffic accidents that pose a danger to humans and animals were also eliminated. In due course, the area was made suitable for livestock activities and the surrounding woodland began to be used for recreational activities by the local community.





# STAKEHOLDER PERSPECTIVE

# **CDP** Performance and Goals

**TEKFEN HOLDING HSE&Q COORDINATOR** ZAFER DEMIRCI

In 2020, 9,526 companies reported to the CDP Climate Change Programme and 2,934 companies to the CDP Water Programme worldwide. 270 of these companies entered the "Global A List" in the CDP Climate Change Programme and 106 of them in the CDP Water Programme. The number of companies that received an "A" in both programmes is only 63 worldwide. Tekfen Holding is the only company from Turkey that found itself a place among these 63 companies.

## What is CDP?

Founded in London in 2000, the Carbon Disclosure Project (CDP) is considered the world's most powerful green NGO. Behind this initiative are 590 investors managing USD 110 trillion worth of assets. Calling on companies to publish their environmental policies, as a non-governmental organisation, CDP has the world's largest data on corporate climate change and water risk. It is also considered the world's most widely used environmental reporting system. In 2020, nearly 10 thousand companies worldwide have reported to CDP. From Turkey, 60 companies reported to the CDP Climate Change Programme and 34 companies to the CDP Water Programme.

## What are the topics that Tekfen reports to CDP?

Tekfen is a group that has been highly sensitive to the environment and constantly improving itself in this regard since the day it was founded. We are currently reporting to both the CDP Climate Change and CDP Water Security programmes. We started to

make our first emission calculations in 2010, based on 2009 data. However, even though we have prepared reports for six years since then, we have not made any official submission. We officially sent our first report to the CDP Climate Change Programme in 2017. As of the following year, we started reporting to the CDP Water Security Programme as well. We include all of Tekfen Holding's domestic and international operations in the reporting. This process is managed under the leadership of the Holding's HSE&Q Coordination Office. However, during the reporting process, we receive the support of more than 150 employees working in the HSE Departments of our Group Companies.

## How are CDP reports scored?

Independent organisations evaluate the answers given to CDP's questionnaire according to yet again the CDP's scoring. Companies participating in the programme are scored A, A(-), B, B(-), C, C(-), D, or D(-) according to their answers. Companies that reach the highest rating level "A" are included in the Global "A" List and are shown among the World Leaders.

## How have Tekfen Holding's CDP ratings changed over the years?

The scores given to Tekfen Holding so far is as follows:

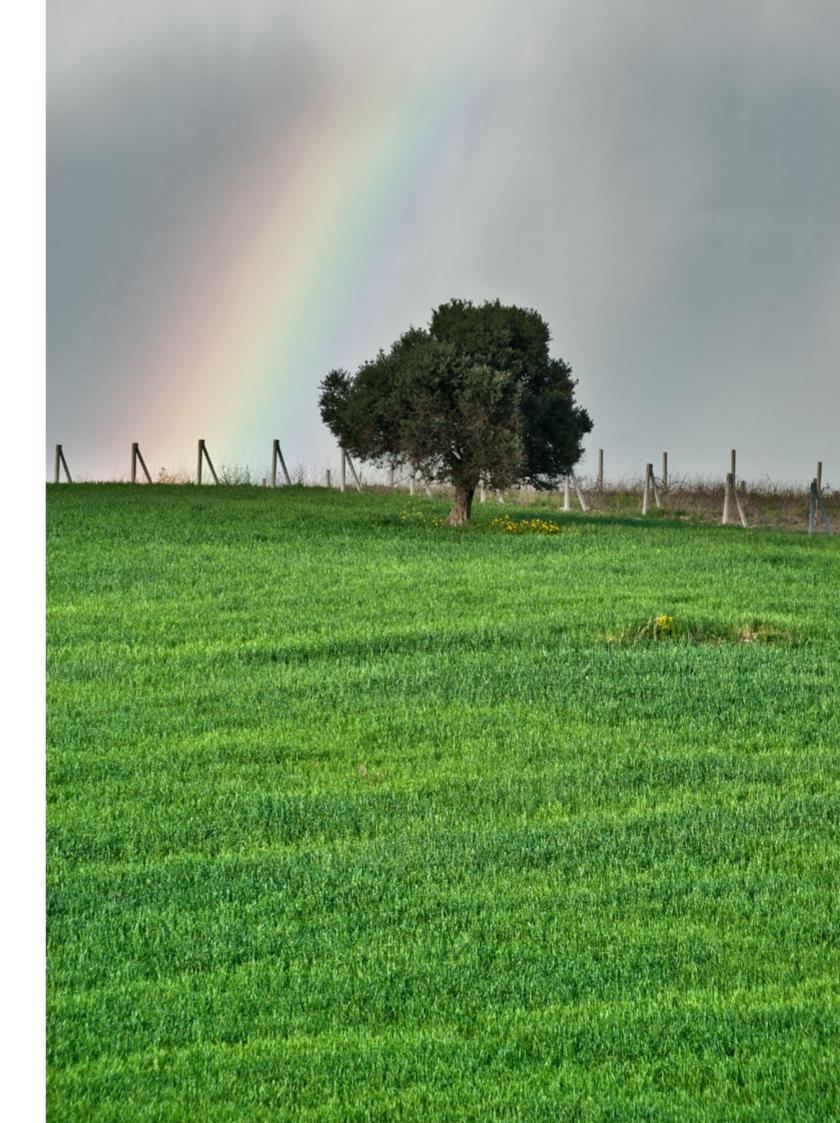
	2017	2018	2019	2020
CDP Climate Change	В	В	A-	А
CDP Water Security	-	В	A-	А

In 2020, 9,526 companies reported to the CDP Climate Change Programme and 2,934 companies to the CDP Water Programme worldwide. 270 of these companies entered the "Global A List" in the CDP Climate Change Programme and 106 of them in the CDP Water Programme. The number of companies that received an "A" in both programmes is only 63 worldwide. Tekfen Holding is the only company from Turkey that found itself a place among these 63 companies.

Number of companies reporting to the	Turkey	World
Number of companies reporting to the CDP Climate Change Programme	60	9,526
Number of companies reporting to the CDP Water Programme	34	2,934
Number of companies included in the "Global A List" in the CDP Climate Change Programme	2	270
Number of companies included in "Global A List" in CDP Water Programme	1	106
Number of companies included in "Global A List" in both CDP Climate Change and CDP Water Programmes	1	63

## Are we the cause of climate change?

According to scientific studies, the primary cause of global warming and therefore climate change is the increase in the amount of greenhouse gases in the atmosphere. Scientific studies clearly demonstrate this relationship. In the pre-industrial era, the  $CO_2$  level in the atmosphere was 280 ppm. When we look at the 800,000-year history, we see that the  $CO_2$  level fluctuates between 180-300 ppm. After the 1950s, an unusual increase in the level of  $CO_2$  draws attention. The current  $CO_2$  level is 418 ppm (as of Apr 05, 2021). That is why we measure the level of  $CO_2$  higher than ever before. Compared to the pre-industrial period, the average global temperature increase is 1°C. In other words, the effects of climate change we are experiencing today are the result



## of an increase of merely 1°C.

## What are the impacts of climate change?

In recent years, we all have been witnessing the impacts of climate change. We are encountering more and more extreme weather events every day, and the effects of these events are increasing. We live long rainless periods. Then suddenly, the rain that should fall in 1 year may fall in only 1 day. For example, the flood disaster in Australia in March is said to be the worst disaster in the last 50 years. Due to the insufficient supply to underground waters, dams, and lakes, serious decreases are seen in water resources. We know that the Mediterranean Basin will be among the most affected regions by climate change. We anticipate a 20-30% reduction in precipitation in this region.

On the other hand, the number of fires is rapidly increasing all around the world. The fires that started in Australia at the end of 2019 continued in 2020, and about 7% of the New South Wales state turned into ash. Biodiversity is rapidly disappearing. The worsening is both big and very fast. The global wildlife population has decreased by 60% in the last 40 years. This change is considered as the 6th mass extinction in the living world. Sea waters are rising. The average rise today is 3 mm per year. However, this increase is expected to accelerate with the increase in global warming. When all the glaciers melt, the sea level is expected to rise by an average of 80 metres. The acidity in the seas is increasing, which negatively affects marine life. We are now rapidly moving towards the tipping points of no return. If the tipping points are passed, we have no chance of going back. Major tipping points include melting polar ice caps, the destruction of the Amazonian forests, and the collapse of the Atlantic Gulf Stream.

# We experience all these effects with a temperature increase of only 1°C. Will global temperatures continue to rise? Or how much will it increase?

The answer to this question is given by the IPCC established by the UN. There are different scenarios of the IPCC regarding what will emerge until the year 2100. If we continue the same way without taking any measures, it is estimated that the average temperature increase in 2100 will be 4 to 6°C. In the optimistic scenario, it is predicted that emissions will peak between 2040 and 2050 and then stabilise. However, even in this scenario, the temperature rise exceeds 2°C.

## What is being done to stop global warming in such a critical situation?

One of the most important steps taken on a global scale in recent years is the Paris Agreement. With this agreement, targets for the year 2100 were determined. The goal is to keep global temperature increases below 2°C or even at 1.5°C by 2100, compared to pre-industrial levels. 196 countries ratified the treaty. 10 countries, including Turkey, have not yet ratified the agreement. Many practices such as reducing fossil fuel consumption, switching to electric vehicle production instead of diesel/gasoline vehicles, using green financing tools, etc. are being implemented. After the Paris Agreement, the second big and important step taken on a large scale is the "EU Green Deal". With this programme, the EU aims to become "carbon neutral" by 2050. One of the most important tools it will use to achieve this goal is the "Carbon Border Adjustment Mechanism".

## What does it mean to be carbon neutral?

Being carbon neutral means no net increase in the global emissions of greenhouse gases into the atmosphere as a result of a product, business operation, or service. In order to be carbon neutral, greenhouse gas emissions must first be reduced at their source, and emissions that cannot be reduced at the source must be offset and zeroed.

## Can Tekfen be carbon neutral too?

Yes, we too can be carbon neutral and set a target date. As of 2020, we accelerated our work in this direction. We have taken important steps to determine our roadmap for our companies under the guidance of SBT (Science Based Target). In 2020, we set two medium and long-term targets for our Scope 1 and Scope 2 emissions:

• **Target 1:** To reduce our total Scope 1+2 emissions by 15% by 2025, compared to 2019.

• Target 2: To reduce our total emissions by

In the longer term, we aim to be carbon neutral. We are working on our roadmap, which consists of the steps to be taken in order to realise this transformation. Once the roadmap is complete, we will be able to announce our target date to be carbon neutral. We have determined the necessary steps to be carbon neutral and the areas to focus on as follows:

• We must reduce the  $N_2O$  emissions of the Nitric Acid Unit at Toros Agri's Mersin Plant. This reduction will be realised by means of catalysts to be installed in the chimneys. Thus, we will be able to reduce our  $N_2O$  emissions by 80%. With this investment, a total of annually 600-650 thousand tons of  $CO_2$  reduction is targeted. Currently, the contracting process of the investment continues.

• We must supply our electricity from renewable sources. If possible, renewable electricity should be generated in our fixed facilities, and we should expand the use of autovoltaic panels.

• We must increase our energy efficiency. For this, we conduct energy studies at our fixed facilities. We aim to complete this work in the first half of 2021. We will prioritise the efficiency projects based on their return on investment (ROI) and savings. Together with the energy efficiency studies, we aim to improve energy consumption by 5 to 30%, depending on the workplace.

• We must complete LED conversions in all lighting



fixtures.

• We should carry out studies regarding thermal insulation in existing buildings.

• A study conducted in the USA reveals that buildings called "green" or "environmental" can reduce energy consumption by 24 to 50%,  $CO_2$  emissions by 33 to 39%, water consumption by up to 40%, and waste by up to 70%. We, too, must comply with green building standards in all of our new buildings.

• When purchasing or leasing vehicles, their carbon emission values should be among the selection criteria.

• During the transportation of products and raw materials, we must choose the appropriate transportation method and the right transportation company, taking the carbon emission into account.

• We should also question the carbon footprint of our suppliers.

• We should reduce our waste production amounts.

• We should develop an internal carbon pricing mechanism.

• Last but not least, in case the emissions cannot be reduced after all these measures are taken, we should use the "Carbon Offset" method and support the projects that reduce carbon emissions.

# **INNOVATION**

ndustry plays a key role in the transition to a sustainable development and society, while innovation and digitalisation are of vital importance in the business world in order to achieve the Sustainable Development Goals.<sup>23</sup> Companies that integrate sustainability into their business strategies render their business models adapt to constant change and varying conditions, while responding to risks and opportunities, and attain a sustainable growth by achieving higher efficiency with innovative products and services.<sup>24</sup> Research shows that organisations with a broader and more strategic approach to sustainability not only drive innovation within the organisation but also influence their customers' needs and the way their suppliers work.25

With the belief that a company which successfully takes responsibility in terms of sustainability and turns it into a competitive advantage will be among the leaders of the future, Tekfen Holding takes exemplary steps regarding sustainability and, as an institution whose foundations are laid on "technology" (tek) and "science" (fen), and is confident that innovation has a critical importance in solving problems in the future. Sustainability-oriented innovation which helps in finding solutions for OHS or the traceability of the supply chain issues, as well as environmental problems such as climate crisis, plastics, and air and water pollution, is also effective in minimising the effects of production processes on the environment by using the basic resources efficiently.

Tekfen Holding companies operate in sectors that are open to innovation and technological development. New engineering practices, digitalisation, and automation shorten the business processes and minimise the error rates in the contracting projects and contribute to the creation of a safer working environment by reducing OHS risks. In the agricultural sector, the main areas of innovation are the development of seeds that are resistant to drought and the changing climatic conditions, responsible use of natural resources, the introduction of innovative production methods that increase productivity, smart agriculture technologies, low-carbon fertilisers, and harvesting methods.<sup>26</sup> Tekfen Agri and Toros Agri both carry out their activities in this direction under the guidance of their R&D Centres.

23 Innovation Is the Only Way to Win the SDG Race, BCG.

- <sup>24</sup> Embedding Sustainability into core strategy and business operations, Deloitte.
- <sup>25</sup> Sustainability at a tipping point, Mckinsey&Company.
- <sup>26</sup> Countering climate change with innovation, FAO.

116

Tekfen Holding takes exemplary steps regarding sustainability and, as an institution whose foundations are laid on "technology" (tek) and "science" (fen), is confident that innovation has a critical importance in solving problems in the future.



Ceyhan Steel Structure Manufacturing Factory, Ceyhar

STRATEGIC AREAS

## **R&D and Innovation** Culture

The promotion of the R&D and innovation culture within the Group is among Tekfen's priorities within its sustainability roadmap. This culture is believed to be vital for the development of innovative solutions that will improve business processes and services, enable the development of new products and services, and improve the company's environmental, social, and governance performance. Tekfen encourages the participation of its employees and its external stakeholders in the processes so that innovative ideas can sprout in all business processes. Innovative approaches in a variety of different fields pertaining to the company's business areas are supported through competitions and award systems.

## **TEKFEN CONSTRUCTION**

At the Ceyhan FNN Sustainability Centre, established within Tekfen Construction's Machinery Maintenance Facilities (GAT) in Ceyhan, Adana, educational activities such as exhibitions and conferences are held in order to raise awareness of sustainability. The building has been awarded the LEED Platinum Certificate with the use of landscape areas, plant selection, lighting design, and its ability to produce 45% of the energy used in the building with photovoltaic panels.

## **TOROS AGRI**

The "Inovatif" (Toros innovation bulletin) is published with the participation of the R&D as well as other departments with the aim to share innovation-related studies and developments within the company. Thirteen bulletins were published in 2020, and also uploaded on the Toros Agri website. In addition, innovation surveys were conducted for the employees at the Mersin Plant while the 20 members of the "Brain Team" and "Support Team" have made 16 joint Tekfen Agri's Leader for Digital Agricultural Transformation and Innovation was awarded in the "Leadership Stories from R&D Organisations" category of the Technology Development Foundation of Turkey Awards.



## InoSuit – Innovation-Oriented Mentoring Programme

Tekfen supports InoSuit, a programme which was developed under the organisation of the Turkish Exporters Assembly (TIM) and in cooperation with the University-Industry-Sector in an attempt to increase innovation management competence, strengthen the innovation management infrastructure, and design corporate innovation systems. Toros Agri and Tekfen Agri have participated in the Innovation-Oriented Mentoring Programme both in 2019 and 2020.

presentations with the participation of different units.

## **TEKFEN AGRI**

The "Innovation Club" was founded to increase the innovation capacity of the company. The club has 45 members who convene in the "Innovation Room", an area specially designed to encourage innovation and creativity. In addition, thanks to Tekfen Agri's Idea Management System, which was implemented to allow employees to share their innovative ideas, employees can share their ideas via e-mail. A total of 24 ideas were received through the system in 2020. Feasibility studies have continued for these under four main headings. In 2020, Tekfen Agri's Leader for Digital Agricultural Transformation and Innovation was awarded in the "Leadership Stories from R&D Organisations" category of the Technology Development Foundation of Turkey Awards.

## **R&D Studies**

Research & Development, paired with innovation, protect companies from adverse market conditions and destructive competition companies by enabling them to offer products and services with high added value and also play an important role in improving the environmental performance, a key factor in sustainable development.

Tekfen's R&D activities that create shared value, improve business processes, and develop innovative products and services are all carried out within a corporate framework. The Group conducts its internal and external R&D, innovation, and entrepreneurship activities through its R&D Centres, Tekfen Ventures, and FNN Tekfen Incubation Centre at Boğaziçi University. In 2020, some TRY 18.5 million was invested in R&D throughout the Group. The Group has a total of 55 employees working at the R&D Centres and 33 employees at the Design Centre.

## **TOROS AGRI**

Established in 2017, Toros Agri R&D Centre is the first institution of its kind in the field of plant nutrition in Turkey and its main area of concentration is the development of new products that will contribute to agricultural productivity and that are environmentally friendly. Other tasks of the centre include making improvements in the existing products, producing products that are not yet domestically manufactured, improving the production processes, optimisation, and carrying out studies on issues such as energy saving in production and the reduction of environmental impacts. The amount of investment made in the R&D Centre, where a full-time equivalent team of 28 people work, has exceeded TRY 6 million in 2020.



In addition to the two TÜBİTAK projects that were accepted and continued to be worked on at the Toros R&D Centre in 2019, two new TÜBİTAK projects were entitled to receive support in 2020. Seven academic articles and three academic papers were published by the R&D Centre in 2020, while three presentations were made at different congresses. Throughout the year, three utility models and three patent applications were made to the Turkish Patent and Trademark Office. Within the scope of the Belmont Forum call, which supports research on global climate change, a "Sustainable Agricultural Matrix" (SAM) project proposal has been prepared, of which the evaluation phase is still ongoing.



## AgroChange: Agricultural Ecosystem Development **Project for Adapting to Climate Change and Reducing Carbon Footprint**

Emissions caused by agricultural operations and food systems constitute 25% of the total greenhouse gas emissions in the world.<sup>27</sup> Almost half of these emissions come from production and harvesting. On the other hand, extreme weather conditions caused by climate change have a negative effect on the growth of seeds. Growing seeds that are resistant to climate change and the reduction of greenhouse gas emissions arising from agricultural activities are some of the major issues in ensuring the sustainability in agriculture.

The AgroChange project, developed with the coordination of Çukurova University within the scope of the EU's research and innovation programme, Horizon 2020, aims to determine the ecological and socioeconomic impacts of climate change on the sensitive grain group and to produce fertilisers and similar substances that will support the adaptation of this group to climate change with biochemical waste conversion methods that have low carbon footprints. The information obtained from greenhouse and field trials throughout the project will create important scientific output for alternative studies on climate and agriculture. The products and the methodology developed in accordance with these products will contribute to the creation of new agricultural ecosystems that can work efficiently under extreme climatic conditions. AgroChange is carried out under the cooperation of nine local and international universities and research centres.









## LANS-FOOD: A Low-Carbon, Affordable, **Nutritious, and Safe Food System Transformation Project**

The world population, which is expected to reach 8.5 billion by 2030 and 10 billion by 2050,<sup>28</sup> raises serious concern in terms of natural resources and especially food security. Establishing a lowcarbon system that is resistant to climate change, keeping the input costs low, and access to high-quality and nutritious food are of great importance in being able to provide this high population with sufficient nutrients and food, to end hunger and poverty, and to build a healthy society.<sup>29</sup>

The LANS-FOOD project aims for a safe and accessible transition to low-carbon and nutritious food systems to manage the adverse effects of climate change. The aim is to establish a policy that provides assessments and solutions for 2050 in Europe and Africa in this regard. The project focuses on policy arrangements for nutritious and affordable food, low-carbon food production-consumption patterns, and a consistent food trade.





28 https://www.un.org/en/development/desa/population/publications/pdf/trends/Population2030.pdf 29 http://www.fao.org/food-safety/background/en/

27 https://ourworldindata.org/food-ghg-emissions

## **TEKFEN AGRI**

Tekfen Agri's Agripark R&D Centre, one of the few technological agricultural centres in Turkey, is also the first and only registered R&D centre in the field of plant production and improvement within the provincial borders of Adana. The breeding works carried out in the field of crop seed make a significant contribution to meeting the need for food in a sustainable way by increasing yield. In 2020, 10 projects were carried out with 27 R&D employees.

At the Agripark R&D Centre, studies are carried out to develop new seed varieties with high productivity and resistance to changing climatic conditions and diseases, within the scope of Horizon 2020 as well as TÜBİTAK projects and with the cooperation of universities and international organisations. At Agripark, high-quality bread, durum, and biscuit wheat seeds are developed by using the rich genetic resources of Anatolia, historically known to be the homeland of wheat. In 2020, Tekfen Agri received an award in the "Collaboration" category of the Sustainable Business Awards for its "Development of Domestic and National Bread Wheat Varieties through the Use of Ancestry Seeds" project carried out in cooperation with Cukurova University. The centre also produces more than 25 types of diseasefree and high-yield potato seeds using the tissue culture method. Banana saplings produced in a sterile environment offer higher yield and quality to the producers.



Allocating 8.5% of its turnover to research and product development in 2020, Tekfen Agri was ranked 3rd in the agriculture category of "Turkey's Top R&D Spending Companies in 2019" list published by Turkishtime.

Tekfen Agri received an award in the "Collaboration" category of the Sustainable Business Awards for its "Development of Domestic and National Bread Wheat Varieties through the Use of Ancestry Seeds" project carried out in cooperation with Çukurova University.

## **TEKFEN ENGINEERING**

Tekfen Engineering has undertaken all engineering services for the Hi-Flex concentrated solar power plant project to be carried out in Italy as part of the "Development of Solutions Based on Renewable Sources That Provide Flexibility to The Energy System", supported by the EU's Horizon 2020 programme. The aim of the project, in which particle technology is used for the first time in the world, is to achieve 2.5 times higher storage density than the traditionally used molten salt technology, 50% less cost, provide heat transfer and thermal storage for 24 hours, and to reach temperatures up to 1000°C.

Within the scope of the five-year "Collaboration and Technology Development Framework Agreement" signed between Tekfen Holding and TÜBİTAK Marmara Research Centre in January 2021, Tekfen Engineering has identified and started working on two research topics that it considers a priority.

## **TEKFEN MANUFACTURING**

Tekfen Manufacturing, which possesses the Design Centre Certificate of the Turkish Ministry of Industry and Technology, also develops various R&D projects in cooperation with TÜBİTAK. In this context, the "Development of a Storage Tank with 9 Nickel Materials" project, which was initiated in 2019 within the scope of TÜBİTAK Industry R&D Programme, is still ongoing while a new R&D project is scheduled to commence in 2021.

## **TEKFEN VENTURES**

Tekfen Ventures, one of the key actors that will move Tekfen Holding forward in the field of innovation and technology, closely monitors the innovative initiatives in sectors such as contracting, construction, manufacturing, agriculture, fertiliser, and real estate, in which Group Companies operate, and after examining the market positions, business models, and future plans of promising start-ups in detail, it invests in appropriate companies. Tekfen Ventures' portfolio also includes initiatives that operate directly in the field of sustainability. The company has included Phospholutions, its 11th investment, in its portfolio in 2020.



## **Collaboration with Tropic Biosciences**

Tekfen Agri collaborates with Tropic Biosciences, which is one of the companies in the investment portfolio of Tekfen Ventures, a Tekfen Group company, on banana saplings. Tropic Biosciences, which carries out breeding studies to increase the nutritional value and productivity of bananas free from viruses and fungal diseases, procures the male banana flower, which is the starting supply, from Tekfen Agri. In December 2020, 80 banana flowers and 80 tissue cultures in the root medium were exported to Tropic Biosciences in a special climate-controlled box. Tekfen Ventures' portfolio also includes initiatives that operate directly in the field of sustainability. The company has included Phospholutions, its 11th investment, in its portfolio in 2020.

## **Tekfen Ventures' Investments**

Arcbyt	Arcbyt provides underground installation of electricity, gas, water, and similar infrastructure facilities, making them more economical, and safe. The company develops non-contact tunnelling technologies that can drill efficiently and inexpensively in all geological structures, including rock types that do not allow for tunnelling, such as granite and basalt.
Claroty	Focusing on cybersecurity, Claroty protects and optimises the industrial environments, including operational technology, internet of things (IoT), and industrial internet of things (IIoT), with the platform it has developed.
Latch	Providing the ability to manage the entries to and exits from a building and every access point inside the building from a single platform in real estate projects, Latch supports more than 2 million unlocking transactions per month.
Phospholutions	The company's patented technology, RhizoSorb, increases the efficiency of phosphorus fertilisers while reducing their environmental impact.
Prospera	An imaging and artificial intelligence technology company that continuously monitors and analyses plant growth, health, and stress, has been selected as a "Technology Pioneer" by the World Economic Forum.
Quanergy	Manufactures LiDAR (Light Detection and Ranging) sensors that can map the field of view in real-time by measuring the distance between objects.
Sight Machine	Offers a software platform that provides fast increases in manufacturing productivity, produces data analysis solutions for the manufacturing sector and performs real-time reporting by collecting all production information in an industrial facility with the technologies it develops.
Soft Robotics	The precision grip solutions developed by Soft Robotics for variable, irregular, and sensitive products offer automation solutions, especially to machine manufacturers serving in the food industry.
StrongArm Technologies	Develops high-tech solutions to increase occupational health and safety and reduce the risk of accidents at workplaces.
Tropic Biosciences	An agricultural biotechnology company that uses plant breeding and gene editing technologies to develop high yield crops, primarily bananas and coffee.

You can find detailed information about the initiatives on pages 110-123 of Tekfen Holding's Annual Report.



## **Pivot Bio**

Pivot Bio, one of the initiatives invested in by Tekfen Ventures, aims to utilise microorganisms in the production and uptake of nitrogen, which plays a key role in plant growth.

Half of the world's current food supply is dependent on synthetic nitrogen fertilisers, which enables crops to grow faster and more efficiently. However, improper and excessive use of nitrogen fertilisers can lead to deterioration of the mineral balance in the soil, water pollution, and air pollution, as a result of the changes in the nitrogen compounds in the soil due to certain reactions. Therefore, meeting the nitrogen requirement of the produces in a more sustainable and safer way for the environment is an important issue in the agricultural sector, and various R&D studies are carried out on alternative solutions in this regard.<sup>30</sup>

Pivot Bio utilises the science of biology to produce a safer and more manageable source of nitrogen for the nutrition of plants and the protection of our earth's natural resources. Pivot Bio PROVEN® is the first product containing a microbial organism for in-field use that sustainably feeds corn crops with a certain rate and amount of nitrogen on a daily basis and adheres to the roots of the plant when applied through the furrow. This new approach, on the one hand, reduces the loss of nitrogen in the soil with water and prevents it from causing pollution by mixing with water resources, since the plant releases in accordance with its nitrogen requirement. On the other hand, it increases the yield by constantly feeding the plants with nitrogen. Pivot Bio has been included in TIME magazine's "The Best Inventions of 2020" list.







30 Is Too Much Fertilizer a Problem?

## Digitalisation

The progress made in artificial intelligence and robotic technologies in the 2000s has brought along a great transformation in production systems. This process, which led to the emergence of new business models, new professions, and new ways of working, in addition to the changes in production processes, also started the wave of digital transformation with the transition to systems that connect the physical world to the virtual computing world. While rapid digitisation of the business processes bring flexibility, agility, and speed to companies, they also increase their competitiveness through operational efficiency and enable them to manage their risks more quickly. While companies raise their profitability with digital transformation, they also make their business models more durable.

Digitisation processes, which have accelerated with the pandemic, have become inevitable for companies today. A recent study reveals that the pandemic has quickened companies' digitisation processes regarding customer-supply chain interactions and internal operations by 3 to 4 years.<sup>31</sup> It is now imperative for companies to integrate sustainability strategies across multiple dimensions of their digital transformation roadmap. In this regard, it is of great importance to harmonise digital transformation and sustainability goals and to base decision-making processes on data in order to make correct and accurate decisions.<sup>32</sup>

Thanks to its strong technology infrastructure, Tekfen Holding quickly adapted its work environment to a remote working system during the COVID-19 pandemic, and supported this transition process with online applications such as a self-service portal and various communication platforms. Tekfen employees have quickly adapted to the digital work environment with the ever-available support of IT units.

Tekfen Holding, Tekfen Manufacturing, Toros Agri (Mersin, Samsun, and Ceyhan facilities), and Tekfen Construction have the ISO 27001 Information Security Management System certificate.

## **TEKFEN HOLDING**

## TekNET- Tekfen Corporate Network and Security Project

As part of the digital transformation, the TekNET project aims to unite all information technologies in a common network and security infrastructure that is in compliance with legal regulations and that is durable, high quality, and efficient in terms of information and cybersecurity, ensuring that its business continues uninterruptedly.

## **HR Oracle system**

The HR Oracle system, which collects the human resources data of Tekfen Group Companies under a single roof, allows for simultaneous reporting and tracking of procedures such as recruitment, approval, and the leave and travel requests. In 2020, the transfer of all Group Companies to the platform was completed, while the transformation of HR processes was also finalised.

## Tekfen Postman

Tekfen Postman, which facilitates document tracking, was launched in. Thanks to the system, all information is tracked digitally during the document submission, preventing the risk of document loss. And thanks to special envelopes that can be used up to 25 times, a 96% reduction in annual envelope consumption has been achieved.

In addition to the abovementioned novelties, other accomplishments in 2020 were the Tekflow internal audit finding tracking application, legal contract management and proxy tracking application, the installation of the Oracle procurement module, and the uploading and tracking of Quality-HSE documents to the online system.

## **TEKFEN CONSTRUCTION**

Tekfen Construction completed 51 digital transformation projects in 2020, such as the Internet of Things (IoT) Platform, Business Intelligence (BI), and digitalisation of the HSE and procurement processes to mention just a few. In addition, a new welding unit was commissioned at the Ceyhan Steel Structure Manufacturing Plant to perform welding activities using robots. This new device enabled cost savings, the continuity of welding quality, the minimisation of welding supplies consumption, and low carbon emissions.

Tekfen Holding, Tekfen Manufacturing, Toros Agri (Mersin, Samsun, and Ceyhan facilities), and Tekfen Construction have the ISO 27001 Information Security Management System certificate.



<sup>32</sup> Here is how digital transformation and sustainability can flourish together, WEF.





Soft Robotics, Tekfen Ventures

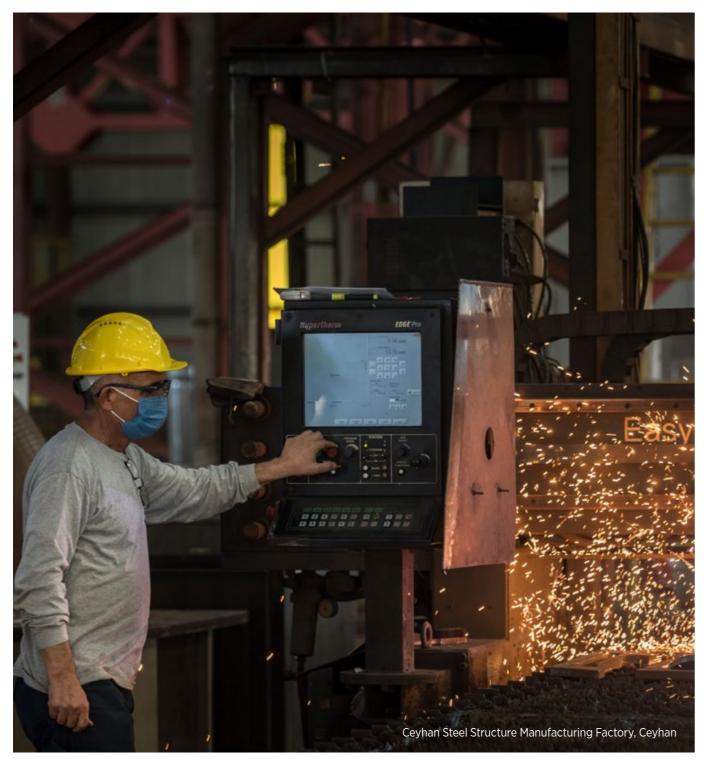
## **TEKFEN ENGINEERING**

Tekfen Engineering has continued its journey of industrial digital transformation, which it had started in 2019, by establishing the Digital Solutions Department in 2020. By specialising in this area, Tekfen Engineering aims to provide in-group and non-group companies with digital solutions that meet the operational needs of their new investments and existing businesses. Also, in 2020, the IPC Tracker Status digital application was introduced, with which the income and expense projections for ongoing projects can be made and then compared to the actual figures once the projects are completed.

## **TEKFEN AGRI**

Wipelot Construction Equipment Position and Condition Tracking System has been installed on 12 tractors at the Karaman Corporate Farming Site and Adala Bahce and their monitoring has begun.

Within the scope of the Tekflow Fruit Collection Point Digital Transformation (FCPDT) Project, programme development works regarding the digital transformation process of the fruit collection points continue. Digital measurement and monitoring of data have been ensured through new scales installed at fruit collection points.





## Tekfen Agri - Farm Management System (FMS)

At Tekfen Agri, new technologies are integrated into the business and smart solutions are developed to ensure the sustainability of agriculture. In wheat and potato production, where the company is engaged in contract and corporate farming, plant health is constantly followed by remote monitoring of the produces with satellite technologies.

Information on the temperature and humidity of both the air and the soil in the crop fields, the need for irrigation, and warnings about the risk of disease are communicated instantly through the land stations located on the fields. In this way, while saving labour and time, risks related to production are minimised. Satellite images, field health maps, climate data and data from field stations are collected and integrated on the web and mobile platforms, and the development of the crops is regularly followed by comparing the maps on different dates. In 2020, after wheat, barley, and potato fields, sesame fields were also registered in the system and were begun to be monitored by satellite. As much as 10% savings in total cost, 9% in fuel, and 17% in time can be realised in potato breeding.

Tekfen Agri's project entitled "Innovative Agricultural Production with New Technologies", carried out in cooperation with TürkTraktör and Doktar as a smart agriculture solution, was awarded in the application category of the "Our Dreams Are Similar Collaboration Programme Awards" organised by KoçZer.

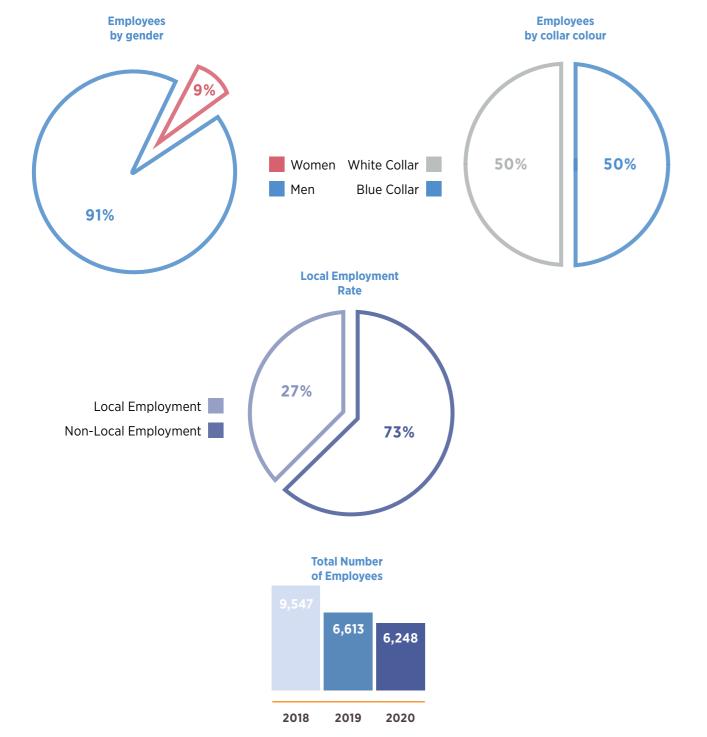


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# **EMPLOYEES AND SOCIETY**

ekfen Holding considers human capital as the most important resource for increasing productivity, adopting and improving a corporate culture that supports innovation and flexibility, gaining an advantage in global competition, and supporting sustainable growth, while acknowledging that qualified and happy employees are one of the key elements of success. The company considers a corporate culture that values diversity and internalises equality of opportunity as one of

the fundamentals of being a global player. Tekfen follows an inclusive, pluralistic, and diverse human resources strategy, where employees of different religions, languages, and cultures are offered equal working opportunities. As a family of 20,000 people, with more than 6,000 company employees and subcontractors, Tekfen's other fundamental priority is to provide its employees a fair, safe, innovationfriendly, healthy, and productive work environment that supports development.





GIC APEAS

## **Equal Opportunity and Diversity**

The increasing active participation of youngsters and women within the company provides a holistic benefit for both the employees and the companies. A human resources strategy focused on diversity and inclusion paves the way for companies to be more innovative and creative, while ensuring a higher financial performance at the same time.<sup>33</sup>

In line with the Human Rights Policy it has adopted, Tekfen Holding follows the principle of respecting fundamental human rights in its relations with its stakeholders and in all business processes in all countries where it operates. The company not only prohibits child employment and forced labour, but also offers equal opportunities to all employees; and stands against all forms of discrimination such as religion, language, age, colour, ethnic origin, sexual orientation, disability, and marital status. Tekfen sees the diversity of its workforce as an asset.



## **Business Against Domestic Violence Project**

Tekfen Group Companies became a participant in the Business Against Domestic Violence (BADV) project designated by the Sabanci University Corporate Governance Forum in 2020. The BADV project aims to raise awareness about women's rights in the business world, and to improve the working environment of women so that they can take a more active role in business life.

Within the scope of the project, a team of 7 was set up from relevant divisions to include Tekfen Holding and the Group Companies. This team participated in various trainings organised by Sabancı University and took part in the preparation of Tekfen's Policy on Combating Domestic Violence. The policy is available on Tekfen Holding's website. Similarly, a Guide to Combating Domestic Violence Against Women was prepared and published in order to inform employees about various support mechanisms, including psychological support and counselling, physical security support, financial support, and job performance support.



At Tekfen, where the participation of women in all levels of business life is supported, the rate of female employees is 9%, while the rate of female managers is 18%, both ratios being above the average rate of female employees in Turkey.

In line with the Human Rights Policy it has adopted, Tekfen Holding follows the principle of respecting fundamental human rights in its relations with its stakeholders and in all business processes in all countries where it operates.



## **Talent Management**

In the light of rapidly changing working conditions, ways of doing business, and accelerating technological developments, it has become imperative for companies to develop middle- and long-term strategies that will manage their human resources in the most effective way in order to exist in an increasingly competitive environment.<sup>34</sup> In this direction, it is a priority for companies to invest in skill development programmes, develop the skills of employees in the direction of the company's and individuals' needs, and change their job descriptions and ways of doing business to keep up with technological developments.<sup>35</sup>

Continuing the same diligence, it shows when selecting its employees in their future careers within the company as well, Tekfen Holding attaches importance to talent management and supports its employees in the following ways:

- Setting individual goals using the performance management system and evaluating the competencies needed by the employee to reach this goal.
- Creating training programmes to support the personal development of employees.
- Preparing an inventory that measures the competencies of the managers according to their roles in order to create the future management profile of the organisation.

## **EMPLOYEE DEVELOPMENT PLANS**

**Personality Inventory:** The purpose of the Personality Inventory tool is to raise awareness regarding the behavioural tendencies of managers in their personal development journey and to shape a pool of "Promising Managers". In 2020, a total of 443 junior, middle, and senior level managers from all Group Companies were evaluated using different inventory tools to measure their managerial competencies according to their roles.

Leadership Inventory: The Leadership Potential Inventory, created with the participation of senior executives, aims to determine which profiles will come to the fore in the future management staff of the organisation, again within the framework of the organisation's strategy and objectives. The

33 https://www.mckinsey.com/~/media/McKinsey/Featured%20Insights/Diversity%20and%20Inclusion/Diversity%20wins%20How%20inclusion%20matters/ %20Diversity-wins-How-inclusion-matters-vF.pdf

34 http://www3.weforum.org/docs/WEF\_NES\_HR4.0\_Accounting\_2020.pdf

35 https://assets.kpmg/content/dam/kpmg/mt/pdf/2017/10/mt-talent-development-programmes.pdf

Continuing the same diligence, it shows when selecting its employees in their future careers within the company as well, Tekfen Holding attaches importance to talent management and supports its employees.

Leadership Potential Inventories, which were first introduced in 2018, were repeated in 2020 in line with Tekfen's strategy and goals. More than 160 managers participated in the inventory studies conducted in order to determine the strong competencies or those that have room for improvement in the managers' continuous development journey. The inventory study is planned to be expanded to include yet more managers in 2021.

## **Performance Management**

Effective performance management supports companies in resource and employee management in order to help them realise their strategies to reach their targets.<sup>36</sup>

The Performance Management System implemented throughout Tekfen serves to set common targets in all Group Companies and to reward high performance fairly. The Performance Management System consists of the following applications:

• Company-based target cards that are prepared in line with the Holding and Group strategies provide the basis for individual targets. At the end of the year, individual achievements are measured through targetbased evaluations, and the performance management process is finalised after reaching a consensus. In 2020, a total of 1,276 scorecards were created for the indirect employees at the fixed premises of Tekfen Holding and Group Companies, and as many as 8,565 individual performance targets were set.

• Competencies are also being evaluated within the Performance Management System. The outputs of the evaluations made using the 360-degree feedback method are taken into account in the design of trainingdevelopment programmes and are followed to support the career planning of the employees.

• Personal and Leadership Inventory studies are carried out on a regular basis in order to determine which profiles will come to the fore in the future management staff and to shape the pool of "Promising Managers", within the framework of the organisation's strategy. The outputs of the evaluations made using the 360-degree feedback method are taken into account in the design of training development programmes and are followed to support the career planning of the employees.

## **Trainings and Leadership Programmes**

Training not only directly affects employee loyalty and motivation, but also contributes positively to the financial performance of the company in several ways.<sup>37</sup> The rapid change in technological developments, business models, and ways of doing business require employees to acquire new skills. According to a study published by the OECD on employee skills, one in four adults lacks the skills and abilities required by their job.<sup>38</sup>

Tekfen Holding organises various training and leadership programmes to improve the competencies of its employees and to support them in adapting to changing conditions. Tekfen Atelier continues its activities to meet all these needs company-wide.



## **Tekfen Atelier Online Classroom Trainings**

Tekfen Atelier is a platform that aims to meet all the training needs of Group Companies under a single roof, and with a comprehensive content from classroom trainings to seminars, in order to meet the development needs of all Group company employees.

Tekfen Atelier, which went digital in 2020 due to the pandemic, moved its classroom trainings to virtual classrooms after the first quarter of the year. Of the 66 virtual classroom trainings delivered throughout the year, 53% consisted of competence development and 47% of technical training. As for competence development trainings, a total of 5,177 person-hours of training was given to 461 people, while 746 people received 5,968 person-hours of technical training.

The traditional Tekfen Atelier seminars, hosting experts to keep a close eye on the current developments and global trends, also continued online. In 2020, a total of 2,542 people attended these seminars on the economy, finance, energy, and the pandemic with prominent speakers such as. Prof. Dr. Daron Acemoğlu from MIT (Massachusetts Institute of Technology), Dr. Fatih Birol, the President of the International Energy Agency, and Prof. Dr. Özgür Demirtaş from Sabancı University.



37 https://www.simplilearn.com/benefits-of-employee-training-and-development-article

38 http://www3.weforum.org/docs/WEF\_EGW\_White\_Paper\_Reskilling.pdf



<sup>36</sup> https://www.mckinsey.com/business-functions/operations/our-insights/performance-management-why-keeping-score-is-so-important-and-so-hard

**Learning Management System (LMS):** The LMS, which addresses issues such as project management, finance, risk management, occupational health and safety, information security, business ethics, quality management, team management, stress management, and effective communication, and its video content are available in all Group companies. E-learning orientations are also available for new recruits. In 2020, nine new titles were added to the LMS content. All content was viewed by a total of 4,634 people, while 2,349 person-hours of training was provided.



**Leadership Programme:** The Leadership Programme, organised in cooperation with Koc University and with the participation of senior and middle level managers from all Group Companies, supports the personal development of managers. Topics such as leadership, strategy, innovation, economy, and global trends are covered during the trainings, and executive meetings are held with experts. The group of managers to first participate in the programme in 2018 had graduated. A total of 6,136 hours of training was provided to 145 managers within the scope of the 2020 Leadership Programme, while the programme for new managers is scheduled to start in 2021.

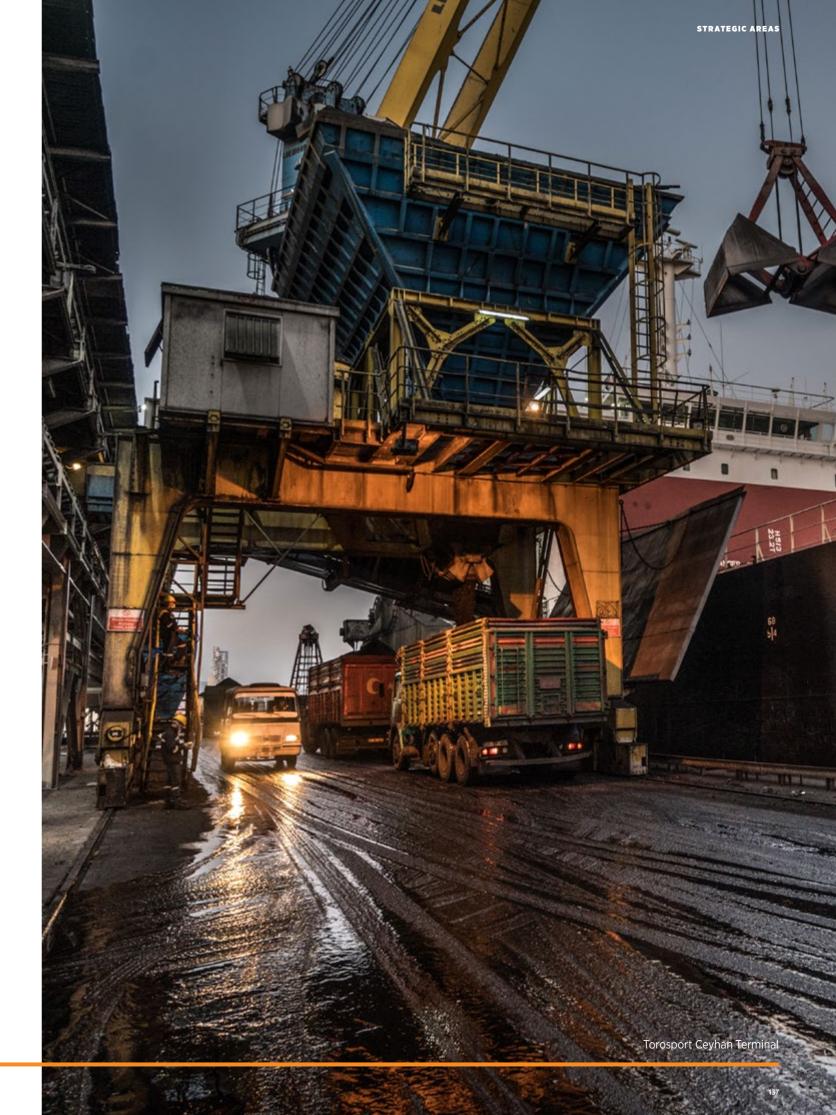
## In 2020, 4,634 people received training via the Learning Management System (LMS).



## Virtual Reality (VR) Training at Tekfen

**Construction's GAT Facility:** The "VR Training System" was first used in 2020 for testing new operator candidates to be hired at Tekfen Construction and for training operators working at height. The training includes 56 different scenarios. The operators perform the given task through these simulations, while the system warns the operator both verbally and visually about his/her mistakes. Upon the completion of the simulation, the performance of the operator is reported. This system, which works with low electrical consumption, is also effective in reducing carbon emissions resulting from the training activities.





## **Communication with Employees**

Employee loyalty is seen as one of the major factors affecting the success of a company. A correct and effective internal communication directly affects the employees' satisfaction and loyalty positively.<sup>39</sup> According to a survey, 70% of employees say they feel more connected to their work when they have open communication within the company.<sup>40</sup>

Tekfen Holding and the Group Companies adopt open communication to increase the employees' satisfaction with their jobs and provide tools for the employees to relay their opinions, suggestions, and feedback.

**Employee satisfaction and loyalty surveys:** Employee loyalty and satisfaction surveys are regularly conducted in order to comprehend the workplace experiences of the employees, to receive all kinds of feedback, and to identify areas for improvement. In this context, the Employee Effectiveness Survey is conducted to measure the employees' loyalty, and their efficiency and productivity within the framework of the opportunities provided.

Internal Customer Satisfaction Survey: The Internal Customer Satisfaction Survey has been conducted since 2018, with the aim to understand the dynamics between Tekfen Group Companies and between divisions, and to identify areas of improvement in order to increase corporate performance. Within the scope of the survey, each department is evaluated in various aspects by other employees (internal customers), and processes are designed in accordance with the improvement areas that have been identified, while the improvement observed with the evaluation outcomes is regularly followed up with annual performance targets. The 2020 survey had a participation rate of 89% and registered an average level of satisfaction within the Tekfen Group of 73% with regards to communication, efficiency, agility, and empowerment.

## Tekfen Human Resources (TİK) Mobile Application:

TİK is a platform where job postings, events held during the year, and other news are published. All recruitment processes are carried out on a single platform through TİK. The application which has reached 30,000 users so far, 9,800 of them with an active profile, also boosts communication and cooperation between the companies. Tekfen Holding and the Group Companies adopt open communication to increase the employees' satisfaction with their jobs and provide tools for the employees to relay their opinions, suggestions, and feedback.

More than 400 employees participated in the events organised online due to the pandemic. **Ethics Hotline:** Employees at the Holding and Group Companies can provide feedback through the Ethics Hotline, which was put into service in 2018.

## Communication and interaction among employees:

Tekfen attaches much importance to internal communication efforts in order to increase employees' sense of belongingness, strengthen their bond with the organisation, and increase employee motivation. One of the main tasks of internal communication is to convey all developments in the Group Companies to the employees in the fastest and most accurate way. In this context, the latest developments, applications, documents, and images within the Group are made available to all employees at a single source, thanks to "TekNokta" (Single Point), Tekfen's intranet portal. Tekfen's corporate magazine T-Bulletin, which has been published quarterly since 2008, can be accessed digitally. The 47th issue of the magazine was designed as the "COVID-19 Special Issue" and the bulletin was published on a weekly basis for nine issues to show solidarity with the employees during the curfew imposed with the first wave of the pandemic, to try and ease their mind, and to give them hope. In 2020,



<sup>39</sup> https://www.forbes.com/sites/forbescommunicationscouncil/2020/06/02/14-ways-to-build-an-effective-employee-communication-plan/?sh=73f5bc2e29ee

40 https://www.forbes.com/sites/heidilynnekurter/2020/09/10/3-effective-ways-to-improve-your-internal-communication-to-boost-employee-engagement/?sh=75f5c1de3686

when no celebrations were held in physical gatherings, messages for both national holidays and universal observances were extended to family members of Tekfen employees. These messages, prepared with the contribution of the employees themselves, had a significant impact on their motivation.

Employees from all Tekfen companies mix and mingle at a number of "extracurricular" organisations and get to know each other, which lay the foundation of closer collaboration and better synergy at work. In 2020, many such organisations were held, from activities supporting teamwork to entertainment and competition-themed games to cultural and sports activities, in order to allow employees to take a break off their work routine and keep their motivation high. Activities organised physically in the first months of the year were later turned into online organisations due to the pandemic. Over 400 people have attended these events. Tekfen's traditional guiz show Bilen Bilir, moderated by popular journalist Emin Capa, and the Bookworms' (Tekfen's book club celebrating its 50th session in 2020) gathering with well-known author Buket Uzuner are just two examples of such activities.

## **TEKFEN CONSTRUCTION**

Satisfaction surveys: Satisfaction surveys are conducted to strengthen the internal communication between employees and departments. The scores of the survey affect individual performance target cards, while actions are taken to strengthen the communication between the departments.

Site visits: Regular site visits are made to fixed facilities and projects in different locations to increase their synergy and communication with the head office.

"Ask Kopuz" platform: All questions are answered by the Managing Director Mustafa Kopuz through the "Ask Kopuz" panel, which enables the direct communication of the employees with the senior management via Tekfen Construction's internal portal.

## **TEKFEN AGRI**

Tekfen Agriculture Meetings: Everyone from Tekfen Group of Companies is welcome to attend these annual meetings, regardless of their company, title, position, or location. A series of presentations are made all day long by representatives from each department of Tekfen Agri as well as function heads on the Holding Director level.

## **Occupational Health and** Safety

The Occupational Health and Safety (OHS) principle, which has been one of the priority subjects of the International Labour Organisation since its establishment, aims to protect employees from all kinds of work-related diseases, accidents, and injuries.<sup>41</sup> Providing healthy and safe working conditions for its employees is also among the top priorities of Tekfen Group, which operates in high-risk sectors, including especially construction. The Group Companies adopt the "zero accident" target in the areas in which they operate and put great efforts in making the OHS understanding a living culture within the company.

The Group Companies follow the ISO 45001 Occupational Health and Safety Management System standard, which is the world's first international standard, in line with the "zero accident" target. Tekfen Construction, Toros Agri, and Tekfen Manufacturing have the ISO 45001 Occupational Health and Safety certificates.

Combatting the COVID-19 pandemic has been the most important topic of OHS within Tekfen Holding and all Group Companies in 2020. Crisis committees were established to ensure effective and rapid decision-making throughout the pandemic, and action plans were made and put into practice. Detailed information on the work done is given under the heading of "Sustainability During the Pandemic".

Innovation Club and "fikrim var" ("I have an idea"):

Employees can share their innovative ideas about their

Field visits: Due to the pandemic restrictions, one-toone communications were carried out by telephone

Based on the feedback received in these meetings, the

issues are resolved by contacting the relevant units.

and video calls, replacing the field visits previously

carried out by the Human Resources Department.

work via the e-mail address fikrimvar.tarim@tekfen.

com.tr and join the Innovation Club.

**NOVASYON** 

KULÜBÜ

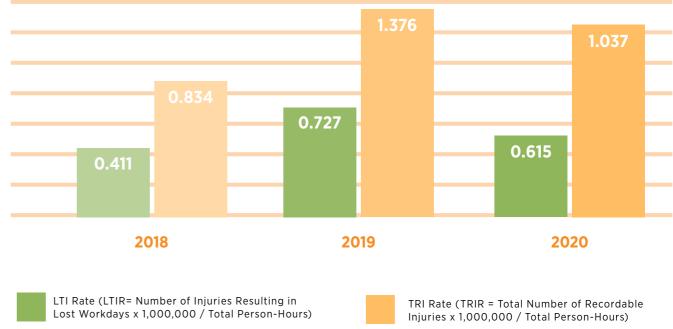
**OHS PERFORMANCE** 

The Operational Health and Safety and Environmental Management Systems at Tekfen Group Companies are managed by the Health-Safety-Environment (HSE) teams. The OHS performances of the Group Companies are constantly monitored and improved by the HSE & Quality Coordinatorship within the Holding. As of the end of 2020, a total of 561 HSE and 90 healthcare professionals work under the roof of Tekfen.42

LTI Rate<sup>43</sup> (LTIR= Number of Injuries Resulting in Lost Workdays x 1,000,000 / Total Person-Hours)

TRI Rate<sup>44</sup> (TRIR = Total Number of Recordable Injuries x 1,000,000 / Total Person-Hours)

## **Occupational Health and Safety Performance Indicators**



<sup>42</sup> HSE employees of subcontractors are also included in this figure.

45 LTIR (Lost Workday Injury Rate): Injury accident rate that occurs in 1 million working hours and results in lost workdays.

44 TRIR (Total Recordable Injury Rate): Injury accident rate that occurs in 1 million working hours and requires more than first aid response.

41 https://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/@publ/documents/publication/wcms\_093550.pdf

Daily site/field visits, weekly site/field inspections, internal audits, and third-party audits are carried out to check the compliance of the operations with the management systems, regulations, and procedures. The HSE strategy and minimum requirements for the Group Companies are determined by the Holding.

Tekfen had one fatal occupational accident in 2020 caused by a civilian vehicle hit.

2018	2019	2020
0.411	0.727	0.615
0.834	1.376	1.037

### **TEKFEN CONSTRUCTION**

**PPE Standardisation Project:** The PPE Standardisation Project, which aims to improve the quality and purchasing processes of Personal Protective Equipment (PPE) used in projects and workplaces, has been finalised in 2020. Thanks to this project, the "Tekfen Construction's Corporate PPE Guide" was published in compliance with the relevant international standards and legal requirements. Effective and advantageous purchases were made by signing long-term framework agreements with the guidance of the guide. **Digitisation of the HSE Processes:** "Digitalisation of the HSE Processes" works were carried out with the IT Department throughout the year. In this context, the Monthly HSE Performance Reporting, Accident/ Incident Reporting, and Action Tracking System were all transferred to digital platforms. The application, whose test studies are still ongoing, is planned to be put into service in 2021.

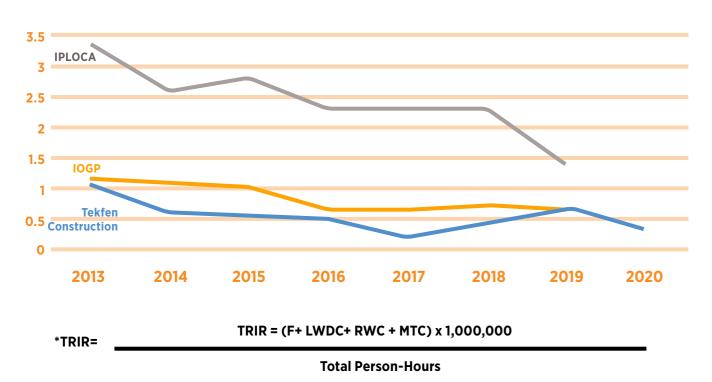


#### **Tekfen Construction Receives IPLOCA's Occupational Safety Award**

Tekfen Construction's "Applied HSE Training Area" at the Kıyıköy -TurkStream Receiving Terminal Project was awarded the grand prize of the International Pipe Line & Offshore Contractors' Association (IPLOCA) in 2020 in the Health and Safety category. The project, which aims to increase the efficiency of the employees' trainings on OHS, helps employees better learn the hazards and risks related to their work and avoid such situations and behaviours during work, thus creating a safer working environment, thanks to the "correct" and "wrong" practices shown through the models.



#### Tekfen Construction vs. IOGP and IPLOCA according to the Total Recordable Injury Rate (TRIR\*)



### **TOROS AGRI**

**Operational Risk and Process Safety Management System (PSM):** The Operational Risk and Process

Safety Management System was implemented with the aim of proactive detection of operational risks in facilities, prevention of the process accidents that have a large impact despite their rare incidence, reducing their effects, and establishing an Integrated Safety Management System (OHS and Operational Risk Management). In this context, practices regarding operational risk and process safety were reviewed and revised, mapping of the personnel working with hazardous chemicals and in hazardous processes was completed, necessary public information documents have been prepared and published, and facilitybased targets have been determined and follow-up mechanisms have been set up.

**Protect & Sustain Certificate:** Toros Agri was awarded the "Protect & Sustain" certificate of the International Fertilizer Association (IFA) for the second time in 2020, with its OHS, environment, and product safety practices.

Industry Stewardship Champion: Toros Agri was selected as the Industry Stewardship Champion (Industry Good Practice Ambassador) for the second time in 2020 by IFA owing to its high performance in OHS, environmental management, and energy efficiency.

#### **OHS TRAININGS**

In order to increase the knowledge of the employees on OHS, to make OHS a part of the work culture, and to ensure total awareness of the "zero accident" target observed, OHS trainings are given importance and priority by all Group Companies. In this context, all employees working at the sites under Tekfen's control are treated equally, the same rules are applied to Tekfen and subcontractor employees without any discrimination, performance indicators are monitored together for all employees, and the same OHS training opportunities are offered to all employees. In 2020, there has been a decrease in the number of face-toface HSE trainings in the field due to the impact of COVID-19.

HSE Trainings	2018	2019	2020
Total Training Hours (Person-Hour)	1,008,379	688,602	301,056
HSE Training Rate (HSE Training Person-Hours/Total Person-Hours) x 100	1.15%	0.89%	0.53%

In all Tekfen Group Companies, an average of 10-minute on-the-job training (Toolbox Talk) on work hazards, job-specific risks, and precautions to be taken is given to the teams by an authorised superior before starting work, in order to develop a behaviourbased safety culture. Since these trainings are delivered by the employee's immediate superior, they prove effective and make a significant contribution to the employee's OHS performance. These interactive trainings are also beneficial in terms of allowing employees to quickly obtain information on issues that come to their minds, and to experience closely the commitments of their immediate supervisors on OHS. In 2020, a total of 585,705 person-hours of on-the-job training was provided at Tekfen Group Companies.





# STAKEHOLDER PERSPECTIVE

# **On IPLOCA-Tekfen Relations**

### A TALK WITH JUAN ARZUAGA, **EXECUTIVE SECRETARY OF IPLOCA\***

In terms of IPLOCA, I must say that Tekfen is not only an active member but has always been willing to cooperate in the development of the association's needs and initiatives. It has always done this proactively and contributed in every possible way.

Health, Safety, and Environment (HSE) is a very important subject for Tekfen. At the same time, participating in professional organisations as a stakeholder is just as important. What can you tell us about Tekfen Construction's position in IPLOCA, evaluating its membership in IPLOCA from both perspectives?

I am very happy to be able to contribute to Tekfen's Sustainability Report. It is very valuable for us that you involve us in this process because this approach shows that you want to evaluate your situation from a global perspective. You say you don't want to hear only nice words from me, but I can't help but tell you this; Tekfen has always been one of the proactive companies that play a leading role for us. In terms of IPLOCA, I must say that Tekfen is not only an active member but has always been willing to cooperate in the development of the association's needs and initiatives. It has always done this proactively and contributed in every possible way. Tekfen has contributed not only to HSE but also to innovation for new technologies, corporate perspective, and bringing new people to the field. And that's something I value very much.

Moreover, when it comes to the scholarship that IPLOCA provides to the children of its member organisation employees, I can say that you always support IPLOCA through the information provided to your employees about what this scholarship programme is. And you have a great book on home safety practices that you published a few years ago ("Offthe-Job Safety"). Sharing this openly with all IPLOCA members is a great contribution from Tekfen.

#### In terms of sustainability, what do you think are the issues that the contracting industry needs to address most urgently?

Well, I would say that the biggest concern today is the way our industry is being seen with regard to sustainability. Why? Because there's a growing concern in the population about the direct and indirect impact of our activity on the environment and the people. Two points stand out here; first, the lack of enough information being given about the good things that projects bring along, and second, the issues related to the way the projects are built. There is a lack of communication and therefore lack of information on both issues. On the other hand, there are still areas that need to be improved or amended in terms of getting things done more sustainably. Therefore, one can speak of the need for improvement on the one hand, and a lack of expression of many good things done on the other.

As for the pipeline construction, which is IPLOCA's special area of interest, I must say that things are going really well in terms of HSE. The most questioned issue in this field is the issue of environmental protection. Because, as I said before, enough information is not given to the public about what is being done regarding this subject. On the other hand, I must admit that a corporate social responsibility approach, which expresses itself very well in the field, has not yet become widespread in dealing with the needs of people affected by a project built in a particular region. When you're building a power station, a dam or a bridge, you focus on a very small area. However, if you are building a highway, a pipeline, or a power line that is tens or even hundreds of kilometres long, you are in contact with a large number of people. For our clients, contractors are institutions that open the doors to many different regions. And a contractor's positive contribution to the relationship established with the community can reach surprising levels. This is something that improves the image of the company of the client as well.

# What do you see when you evaluate this issue from Tekfen's perspective?

To date, I have seen many companies that do not have a well-articulated and well-detailed programme in terms of community relations. Whereas, if I am the manager of a project, the only things I should pay attention to should not be environmental protection, quality of the project, timing, etc. I should also implement some social responsibility programmes and small-scale plans. Small maybe in cost but big in scope... That's the hard thing! Working with contractors that have this kind of approach is a huge advantage. Whoever does business with Tekfen knows that when they hand over the project to Tekfen, they are working with a company that will make these things easier. If the people around say, "They are not just causing noise and pollution. They are also doing good things!", this is something very important in my view.

#### Do you see the future of this business at risk since pipelines mostly serve traditional energy sources?

This is an issue that we often discuss. It is still out of the question for such energy sources to disappear in the short term. But the reality is that in addition to what is being done today, companies need to turn to other energy sources such as sun and wind. As IPLOCA, we are discussing the possibilities of expanding the scope of our targets by including such renewable energy sources. However, we believe that resources such as oil and natural gas will continue to be used for guite a while.

#### \* ABOUT IPLOCA

The International Pipe Line and Offshore Contractors Association (IPLOCA), one of the most respected organisations in the contracting sector in the world, counting 250 members from more than 40 countries, is an international organisation representing contracting companies that build land and sea pipelines and contractors working in the oil and gas sectors. Tekfen's co-founder the late Necati Akçağlılar (1976-1977), Murat Gigin (1995-1996), and Osman Birgili (2011-2012) are among the past presidents of IPLOCA, in which Tekfen has played an active role in its management since the first day. Tekfen Engineering Managing Director, Fatih Can, served on the Board of Directors of IPLOCA between 2016 and 2019. The Chairman of the Contracting Group, Levent Kafkaslı, is a Member of the Board of Directors since 2020.

IPLOCA has the missions of sharing information among its members and facilitating business opportunities, and also provides value to its members by supporting the highest standards in occupational health and safety, environment, innovation, quality, business ethics, and sustainability in the sector through various committees. Tekfen is an active member of the association's Health-Safety-Environment and Corporate Social Responsibility Committee. Advisor to the President of Tekfen Group Companies, Dinc Senlier, is one of the founding members of the committee and represents Tekfen at the highest level as the principal member of the committee. On the other hand, Tekfen Holding HSE&Q Coordinator and Tekfen Construction HSE Director regularly attend meetings and the annual HSE Workshop. In addition, Tekfen is generally represented by the Tekfen Engineering teams in the "Novel Construction" Group, which was initiated to develop the processes and technologies in pipeline projects through innovations.



Oil Pipeline, Oman

# **Social Investments**

Today, companies focus not only on profitability and high financial performance, but also on the aspect of social benefit. With this concept, called the "shared value" principle, companies continue to increase their competitiveness, while prioritising works that will have a positive impact on society.<sup>45</sup>

Tekfen Holding has taken an active role in social, cultural, and environmental issues since its establishment, and has been involved in activities that transform society through collaborations. In 2020, a social approach built on the basis of creating a shared value was developed and the main criteria to be observed in social investments were determined across the Group. Starting from there, social investment projects will be shaped in line with these principles.

Tekfen carries out its corporate social responsibility activities mainly through Tekfen Holding and Tekfen Foundation. The Group Companies also provide support to social projects in line with their own goals and strategies. Tekfen Group Companies have made a total donation of TRY 15,535,654 in 2020. No donation has been made to any political parties or causes in 2020.







# Tekfen's Social Investment Approach

Tekfen Holding shapes its social investment programmes in line with its vision of "Bridging Prosperity", which forms the framework of its understanding of sustainability. Community projects that will contribute to the solution of social and environmental problems are designed in a way that will benefit both Tekfen and the society, in line with the understanding of creating shared values. While deciding on social investment projects, compliance with the following principles is observed:

• CSR projects shall be developed and/or evaluated as such that they address at least one of the "Climate and Nature Conservation", "Inclusive Society" and "Innovation for Sustainability" issues, and are in line with the "Climate Crisis", "Employees and Society" and "Innovation" headings that form the pillars of the Bridging Prosperity vision.

• The projects will be expected to create a shared value. It is important that the programmes will both contribute to the company's fields of activity and its works and offer a solution to a social and environmental problem. For this reason, the selection process will be based on to what extent the main problems in the company's field of activity and value chain are addressed and local needs are taken into account. The initiatives are expected to respond to the needs of the company while offering a solution to a sectoral problem.

• Community projects shall contribute to at least one of the UN's 17 Sustainable Development Goals (SDGs).

• Since a holistic perspective is important to ensure sustainable results, societal investments are evaluated as a whole and systems thinking is taken as a basis.

• The impacts of the projects are expected to be long-term, measurable, and traceable.

• Community projects shall create a social impact. The impact of the programmes shall be measured through social impact assessments.

• Since collaborations and partnerships are of the essence in providing an effective and long-term transformation, it is intended to act jointly with expert non-governmental organisations and initiatives in order to maximise social benefit and ensure a participatory process.

### **TEKFEN FOUNDATION**

#### Education

#### Tekfen Foundation's Scholarship

Tekfen Foundation provides gratuitous educational scholarships to high school and college (undergraduate) students in order to support the education of successful students in Turkey who need financial support and the children of Tekfen employees. Tekfen Foundation, which has contributed to the graduation of nearly 3,000 students to date, awarded scholarships to 550 students in the 2019-2020 academic year. The Foundation, which also offers its scholarship recipients the opportunity to do internships at Tekfen Group Companies and "mentoring", had to temporarily suspend its internship programme in 2020 due to the pandemic. The mentoring programme, however, continued online.

The 15th of the traditional scholarship students' meetings, held every year in order for the students to get to know Tekfen and each other better, took place on 7 February 2020 at Tekfen Tower. Group Companies HR professionals as well as volunteers of all levels who think they can be helpful to host the students are welcome to attend the event. This year's surprise guest, -an indispensable part of the event which brings a different perspective to the youngsters-, was behavioural sciences researcher, screenwriter, actor, and writer Mehmet Auf.

#### Boğaziçi University FNN Tekfen Incubation Centre

Boğaziçi University's new Incubation Centre, which recently opened in the new Science and Technology Building at the university's Kandilli Campus, became the last ring in a chain of contributions to the university's academic and social life over the last 25 years by Tekfen's Founding Families, Tekfen Holding, and Tekfen Foundation. The incubation centre, which will bring the creative ideas of young people to life by hosting a number of start-ups, was named Boğaziçi University FNN (Feyyaz-Nihat-Necati) Tekfen Incubation Centre, bearing the initials of Tekfen's three founders. The name FNN also refers to the FNN Engineering and Consultancy firm that is at the nucleus of today's Tekfen. The story of three determined entrepreneurs who founded their company under difficult conditions is a real source of inspiration for young entrepreneurs.

#### Scholarship for students of Darüşşafaka Secondary School

Tekfen Foundation continued its support, which it initiated in 2018, for 24 students at Darüşşafaka Secondary School in 2020 as well. The support covers the four-year education of the students. Tekfen closely monitors the progress of the children and strengthens this bond by paying visits every semestre.

#### Education Reform Initiative's Support

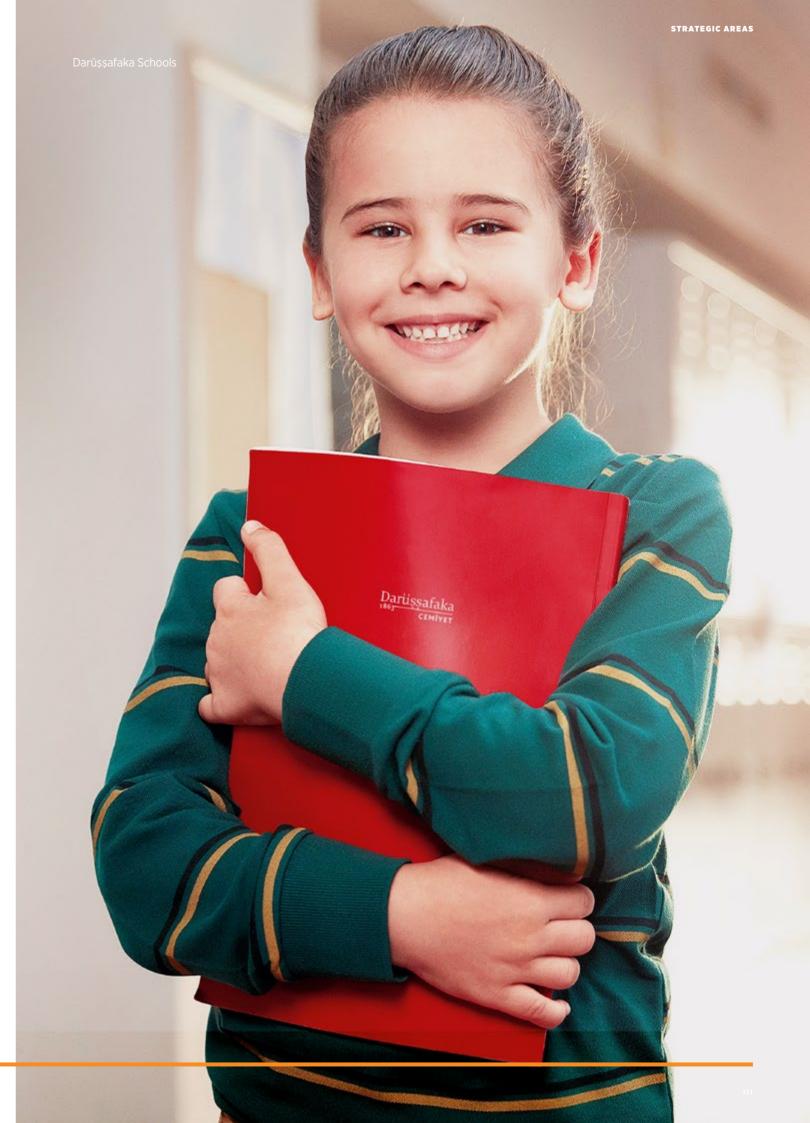
Tekfen Foundation, which became one of the institutional supporters of the Education Reform Initiative (ERG) in 2017, still continues its support. ERG, which aims to contribute to education reform policies as an independent initiative, considers data-based decision processes in education as a prerequisite and aims to create a common mind in the field of education with its works in this direction. Aiming to help successful students with limited financial means to study in better conditions, Tekfen Foundation donated sets of 75 mathematics books to 40 schools in different parts of Turkey in 2020, in order to make middle and high school students love mathematics.











#### **Arts and Culture**

#### Tekfen Philharmonic

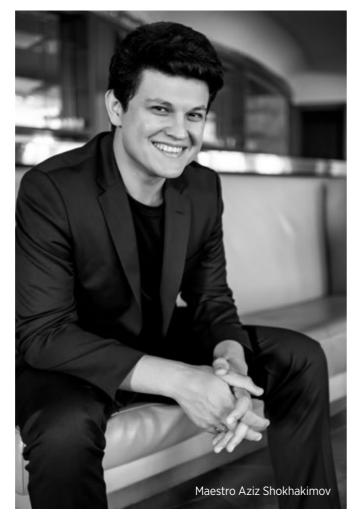
Tekfen Philharmonic, which has an important place in the cultural and artistic life of Turkey today, is the art institution of the Tekfen Foundation. The foundations of Tekfen Philharmonic, one of the few private art institutions in Turkey, were laid by Ali Nihat Gökyiğit as the Black Sea Chamber Orchestra in 1992. With time, the ensemble came to include musicians of the Caspian and Mediterranean countries and has evolved into a symphonic orchestra that flies the flags of 23 countries.

Under the direction of its permanent conductor and art director Aziz Shokhakimov, Tekfen Philharmonic made its first tour of 2020 in February in Bursa, Eskişehir, and Ankara with Anna Tifu, one of the leading Italian violinists of the young generation and the winner of many international awards. The last concert of the tour, which was planned to be held in Istanbul, was performed without an audience due to the developments in the country's agenda. The video recordings of the performance were later aired online within the programme of the 48th Istanbul Music Festival.

As the Opening Concert Orchestra of the Istanbul Music Festival between 2019 and 2022, Tekfen Philharmonic accompanied young violinist Emre Engin at the opening concert of the 48th Istanbul Music Festival, which was broadcast digitally between 18 September and 5 October due to the pandemic. The concert, which took place with only a very limited number of participants due to the pandemic measures, was recorded at Boğaziçi University's South Campus Square. The concert was viewed free of charge by more than 12 thousand music lovers at online.iksv.org and on İKSV's YouTube channel.

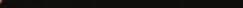
#### Tekfen Foundation Music Scholarship

The Foundation's mission with the introduction of its Music Scholarship is to help young musicians become competent professionals on an international level in orchestras in Turkey, and particularly in Tekfen Philharmonic. The scholarship enables students who choose orchestral musicianship as their career goal to continue their undergraduate education abroad. Görkem Çiçek (cello) and Seher Karabiber (flute) are the new recipients of the Tekfen Foundation Music Scholarship programme for the 2020-2021 academic year. Görkem Çiçek, who was selected from among 44 applicants, completed his education at Hochschule für Musik, Theater und Medien Hannover; while Seher Karabiber continues her education at the Hochschule für Musik und Theater Hamburg. The scholarships of earlier recipients, cellist Yunus Altıkanat and bassoonist student Seyfi Can Dağlar continued in the 2020-2021 academic year.



### Tekfen Philharmonic is the Opening Concert Orchestra of the Istanbul Music Festival between 2019 and 2022.





STRATEGIC AREAS

Tekfen Foundation Music Scholar, Seher Karabiber (flute)

#### **Social Development**

#### Medical Device Support Against the Pandemic

In order to support the fight against the COVID-19 pandemic in 2020, Tekfen Foundation has set up a TRY 3 million 750 thousand fund to meet the medical device needs of pandemic hospitals through in-kind support. During the first wave of the pandemic,

medical devices and equipment were donated to 8 health institutions, 7 of which were in Istanbul and one in Adana.



#### **Tekfen Foundation Microcredit Branch**

Following the 2014 Soma mining disaster that resulted in the death of 301 miners, Tekfen Foundation opened the Tekfen Foundation Soma Microfinance Branch as part of the Turkish Grameen Microfinance Programme to fund alternative income opportunities for women in Soma. Following this initiative, the Foundation signed a protocol with the Turkish Foundation for Waste Reduction (TİSVA) in 2017 and extended its funding to the existing Micro Finance Branch in Mersin.

To date, Tekfen Foundation has provided a total of 1,521 women with microcredit, 838 in Soma and 683 in Mersin.





### Women Farmers Loan Project

Tekfen Foundation plans to launch the "Women Farmers Loan" project in 2021, in collaboration with the Turkish Foundation for Waste Reduction (TISVA). The aim of the project, designed by Tekfen in line with its new shared value approach, is to support women farmers both financially and technically and to help them strengthen their enterprises and produce agricultural products of high-quality standards. In the first phase of the project, as a pilot region, a loan of TRY 5,000 to 15,000 will be allocated to women farmers in the Aegean Region, depending on their specific needs. Within the scope of the project, agricultural engineers from Toros Agri will also give women farmers basic agricultural and safe working trainings. Alongside these training programmes, Tekfen's experts will lend a helping hand during onsite visits to their fields and gardens.





### **TEKFEN HOLDING**

#### Education

#### Collaboration between Tekfen Holding and Boğaziçi University: Boğaziçi Chronicles, Boğaziçi Lectures and Open Lectures

Tekfen Holding and Tekfen Foundation, which have always supported science, culture, and the arts, started a new cooperation with Boğaziçi University in 2019 in order to expand the Boğaziçi Chronicles, Boğaziçi Lectures, and Open Lecture activities within the scope of BU+, a formation born from the intellectual vitality of Boğaziçi University. All three



#### MESAFEYİ KORUSAK DA BOĞAZİÇİ İLE YAKINIZ

# Tehdit Altında İnsan Zihni: Salgının Bize "Düşündürttükleri"

Doç. Dr. Adil Sarıbay 6 Haziran Cumartesi, 15.00

CANLI YAYIN 🕨 YouTube / BogaziciUniversitesi

#### Boğaziçi Lectures Feyyaz Berker Series

With the support of Tekfen Foundation, "Boğaziçi Lectures", renamed as "Boğaziçi Lectures Feyyaz Berker Series" in memory of the late Feyvaz Berker, one of Tekfen's founding partners and a graduate of Robert College, hosts thinkers and scientists from around the world under the roof of Boğaziçi University, providing insight into current social and scientific issues with the aim of contributing to the development of the discussion environment in the general public. The series hosted two world-famous names in 2020. Robert Sapolsky, Professor of Biology, Neurology and Neurosurgery at Stanford University and faculty member at the Institute of Primate Research, National Museums of Kenya, gave a seminar titled "Human Biology at Our Best and Worst" on 20 May. The second quest of the series was economist Branko Milanovic, one of the first names that come to mind when it comes to income distribution, income inequality, and poverty. Milanovic's speech on 3 December, titled "Changes in the Worldwide Income Distribution and Their Political Effects" was broadcast live on digital platforms. events, "powered by Tekfen", continued their activities on digital platforms in 2020 due to the COVID-19 outbreak.





#### Open Lecture

With the aim of spreading scientific curiosity, freethinking, and creative ideas throughout the society, the "Open Lecture" seminar series, which brings Boğaziçi University faculty members together with wide audiences on different subjects, went online after February and started to be broadcast on YouTube. In 2020, 10 events were organised in different topics. In particular, the focus of the lectures in the second half of the year was the COVID-19 virus and vaccine studies, the effects of the pandemic on human relations and psychology, health policies, and the new normal of economic policy.

#### Boğaziçi Chronicles

Supported by Tekfen Holding, "Boğaziçi Chronicles" is an international artist in residence programme designed to contribute to the cultural life of our country. Within the scope of the programme, world-renowned theorists and artists reside on the Boğaziçi University campus and deliver speeches, hold seminars, performances, and workshops. In 2020, Boğaziçi Chronicles hosted the French artist Guillaume Legros (Saype), best known for his "Beyond Walls" project which was launched in 2019 to create the world's largest human chain to symbolise unity and joint effort and invite people to mutual assistance. Saype, who visited Istanbul between 15 and 30 October as the eighth stop of his project, participated in a series of events during his stay and painted his giant size land art on the lawn of the South Campus Square.

#### Culture-Arts

#### Support for theatres and operas

Year after year, Tekfen Holding has been the sponsor of a play by a Turkish theatre company at the Istanbul Theatre Festival. At the 24th Theater Festival, MoMoAcT's first retrospective play, "Dumrul and Azrael", starring Övül and Mustafa Avkıran, was staged once again with the help of Tekfen Holding's Sponsorship. Tekfen Holding also has continued to be among the contributors of the Istanbul State Opera and Ballet in 2020.





#### Sports

#### Darüşşafaka Basketball Team Sponsorship

Having expanded its support to education and arts to sports by becoming the main sponsor of the Darüşşafaka Basketball Team, Tekfen Holding continued to support the "Black Panthers" in 2020. The team competes in the ING Turkey Basketball League and the FIBA Basketball Champions League in the 2020-2021 season.



#### Health

# Donation to the "We Are Enough for Each Other" Campaign

Tekfen Holding made TRY 5 million donation to the "We Are Enough for Each Other" solidarity campaign initiated by the government during the first wave of the COVID-19 pandemic.

### **TEKFEN CONSTRUCTION**

#### Local Development

#### Donation to Khalid Bin Waleed Student Dormitory

As a token of its gratitude, Tekfen Construction donated a set of 12 outdoor sports equipment and 30 benches to the Khalid Bin Waleed Student Dormitory affiliated with the Credit and Dormitories Institution in Diyarbakir, which hosted his employees during 13 days of quarantine upon their return from the company's construction site in Kazakhstan, evacuated due to the COVID-19 pandemic.

#### **TOROS AGRI**

#### Education

#### Toros Agri Schools

The maintenance, repair, and general needs of Toros Agri Anatolian High School and Toros Agri Primary School, built by Toros Agri in the vicinity of its Ceyhan Production Facility, continued to be met by the company in 2020, as in previous years.

#### Local Development

While raising agricultural productivity with its product range since the day it was founded, Toros Agri also stands by the Turkish farmers and aims to raise their living standards with farmer training and awarenessraising efforts on the correct use of fertilisers.

#### Toros Farmer Application

Another pioneering work developed by Toros Agri for farmers is the "Toros Farmer" application, which was put into service in 2016. Toros Farmer, a farmerfriendly application that helps farmers make the right decisions, can be downloaded free of charge to computers, smartphones or tablets. The smart application offers recommendations for farmers' activities by combining weather forecasts and soil and plant data, monitors the weather conditions for all fields, and ensures that correct production and operation decisions are made in a timely manner.

As of the end of 2020, 11,751 fields belonging to 10,674 farmers have been registered in the Toros Farmer database. With the accounts of authorised dealers being added to these numbers, a total of 11,938 members are registered in the system. In addition, in collaboration with Isbank's Imece application which was initiated in April 2020, Toros Farmer received an additional 5,582 clicks and 4,418 queries about fertilisation.

Within the scope of the project to support Women's Employment (KİDEP) initiated by Alanar Fruit, a minimum purchase equivalent to a month's salary is provided to 6 to 15 women per month.





#### **TEKFEN AGRI**

#### Local Development

#### Alanar Pesticide Application Response Vehicle

The Alanar PUMA (Vehicle for Intervention against Usage of Pesticide) project, which was launched in 2019 by Alanar Fruit, a subsidiary of Tekfen Agri, aims to prevent unconscious pesticide use by raising awareness among farmers about sustainable agriculture. The aim is to eliminate the economic losses due to unconscious use of pesticides, one of the most critical issues in global food security, and to increase the export potential of Turkey. Within the scope of the project, the Alanar PUMA, a fully equipped mobile laboratory, visits the fields in all regions of Turkey, examines the produces and provides trainings to farmers. As of 2020, a total of 18,220 km has been covered and approximately 2,850 producers have been interviewed.

#### Support for Women's Employment Project (KIDEP)

Within the scope of the project to support women's employment initiated by Alanar Fruit, a minimum purchase equivalent to a month's salary is made from those involved in the programme in order to provide income for women who try to make ends meet by making handicrafts such as cheesecloth, lace, and scrub. In the first year of the project, 120 women participated in the programme, and their handicrafts were used by the company as promotional material. Support is provided to six to 15 women per month through the project.









A STORY OF THE SOIL, **Tekfen Foundation – An Ancient Building** Material as a Gift of Earth!

The mud-brick used in the structures of Tushan (Ziyaret Tepe), one of the westernmost cities of the Assyrian Empire, whose archaeological excavations were supported by the Tekfen Foundation for many years, is experiencing its renaissance as an ancient ecological solution with the increasing prevalence of sustainable architecture.

Invented 9 thousand years ago in the Neolithic Age, mud-brick is one of the most important inventions in the history of humanity. Mud-brick is made by mixing mud or clay with water and adding straw, gravel, or broken pottery to it. This mixture is then poured into brick moulds and left to dry in the sun. Although it was replaced by fired bricks and other materials, mud-brick is a great construction material with its environmentally friendly and easily shapable structure, and its response to changes in temperature.





Asur İmparatorluğu'nun nadolu Sınırlarını Keşfederken Matney, John MacGinnis, Dirk Wicke, Kemalettin Köroğlu







# STAKEHOLDER PERSPECTIVE

# **On the Cooperation** Between Boğaziçi **University and Tekfen**

### A TALK WITH METIN GÖKSEL, CORPORATE COMMUNICATION MANAGER AT BOĞAZİÇİ UNIVERSITY

Above all, Tekfen's approach of mutual respect ensured that the works were implemented almost seamlessly. Far from an understanding of being the financial supporter of the project, the approach of being a partner made things very easy and enjoyable.

How would you describe the relationship between Boğaziçi University and Tekfen?

The nature of the relationship established between Boğazici University and Tekfen can be described as bringing to life projects by way of reasoning together for the cultural and intellectual development of the society, while demonstrating cooperation beyond the limited concept of sponsorship. From the very beginning, both Boğaziçi University and Tekfen have shown efforts to put forward ideas and produce new and original content. From this point of view, I think that we have been able to create a transparent dialogue with Tekfen, who understands us from the inside and develops ideas with a deep understanding, on the journey we set out together aiming to share Boğazici University's know-how with the public at large. Tekfen has the ability to resolve problems that may arise in such relations with subtlety and has become a very important cultural partner of Boğaziçi University. Undoubtedly, the parallelism between Tekfen's values and Boğaziçi University stands out among the reasons of such a positive working environment.

#### What are the basic principles of your collaboration?

Theme and content proposals for the

activities by Boğaziçi University are put on the table first by the University's Culture and Arts Commission. This general list is discussed and evaluated in meetings with Tekfen. Occasionally, new suggestions are made at these meetings, followed by a final list that is jointly drawn by Boğaziçi University and Tekfen and is to be submitted for decision to the Culture and Arts Commission of the school. While the operation is carried out by Boğaziçi University, the professionals of Tekfen and Boğaziçi University share information with each other at every stage during the implementation phase. Whenever a new situation emerges during the implementation phase, both Boğaziçi University and Tekfen show the necessary flexibility and as a result, the activities are executed without any interruption.

Can you give a few numbers about BU Lectures FB Series, Open Lecture, and Boğaziçi **Chronicles? How many people have attended** these events, what were their feedbacks?

We are collaborating with Tekfen Holding and Foundation for Open Lecture, Boğaziçi Chronicles, and Boğaziçi Lectures; all three organised as part of BU+. In order to contribute to the development of a university-wide debate on current issues, "Boğaziçi Lectures" hosts world-class intellectuals. The lectures have been held under the name "Boğaziçi Lectures Feyyaz Berker Series" since 2019 in memory of one of Tekfen Holding's founders and our esteemed graduate, the late Feyyaz Berker, who has made significant contributions to enriching the scientific and cultural resources of our university. Three different events have been held so far within the scope of the programme we run in cooperation with the Tekfen Foundation. A total of 1,774 people have attended these events.

With the participation of Boğaziçi University faculty members, the "Open Lecture" series of seminars, which aim to bring current developments I believe that the timely and resourceful and important topics of discussion in many fields, from psychology and physics to computer engineering and linguistics, have been able to reach people outside Istanbul for the first time since 2019 with the support of Tekfen Holding. Until that date, it was held only in Istanbul with the support of different local municipalities. Recently a series of seminars were held in Malatya, Eskişehir, and Ardahan. In 2020, due to the pandemic, the seminars were moved to the online platform. During this period, seminars discussing the pandemic, and its social and psychological place in human life were broadcast live on YouTube. There was an intense participation from all over Turkey to the Open Lecture seminars held online.

In "Boğaziçi Chronicles", we host leading artists, academicians, and cultural people at our university. These guests pour their creativity and intellectual knowledge into new productions in the inspiring cultural environment of Boğaziçi University and Istanbul. The guests are asked to keep a diary of their experiences, and these diaries are later published by us. With the support of Tekfen Holding, we hosted the world-famous land art artist Saype on our campus in October 2020. Saype, who drew a large mural on the lawn of Boğaziçi University South Campus, had the opportunity to meet with our students and Istanbulites during the talk held at the university on 27 October. On this date, only a limited audience of 80 people could attend the event due to the pandemic restrictions. The event was later broadcast through both conventional and digital media as well as social platforms, thus maximising social benefit.

How do Tekfen's corporate culture and way of doing business reflect on the execution of this cooperation?

Above all, Tekfen's approach of mutual respect ensured that the works were implemented almost seamlessly. Far from an understanding of being the financial supporter of the project,

the approach of being a partner made things very easy and enjoyable. The accord between Tekfen's point of view, which aims to contribute to future generations and cares for social development, and Boğaziçi University's fundamental values, was undoubtedly at the core of our collaboration.

#### What do you think are the areas open to improvement in the cooperation between the two institutions?

planning of events will enable both parties to make the most out of our joint efforts, even in unpredictable times as nowadays.

#### **Boğaziçi Lectures Feyyaz Berker Series**

DATE	EVENT
7 Nov 2019	The First Image of a Black Hole - Prof. Feryal Özel
20 May 2020	The Biology of Humans at our Best and Worst - Prof. Robert Sapolsky
3 Dec 2021	Recent Changes in Worldwide Income Distribution and Their Political Effects - Prof. Branko Milanovic

#### **Open Lectures**

DATE	EVENT	LOCATION	NUMBER OF ATTENDEES
26 Nov 2019	Prof. Haluk Özener – "Earthquake: What We Know, What We Don't Know"	Malatya	290
4 Dec 2019	Prof. Rana Sanyal - "What Do We Have in Fighting Cancer?"	Malatya	220
10 Dec 2019	Prof. Gökhan Özertan – "Innovative Practices in Agriculture"	Malatya	120
19 Feb 2020	Instructor Dr. Melike Acar – "Children and Morals"	Eskişehir	100
26 Feb 2020	Prof. Belma Haznedar - "Child and Language"	Eskişehir	80
2 Mar 2020	Prof. Cem Say – "The Limits of the Human Brain and Machine Brain"	Beylikdüzü - İstanbul	150
6 Mar 2020	Prof. Levent Kurnaz – "Impacts of Climate Change on the World and Turkey"	Ardahan	150
3 May 2020	Assoc. Dr. Mine Göl Güven - "Game in Times of Crisis"	YouTube Live Broadcast	311
16 May 2020	Prof. Nesrin Özören – "Development of the Vaccine Techno- logy: Evolution and Spread of New Viruses"	YouTube Live Broadcast	160
23 May 2020	Prof. Rașit Bilgin – "Did Bats Cause COVID-19?"	YouTube Live Broadcast	200
30 May 2020	Instructor Dr. Volkan Yılmaz – "Health Policies in the World and in Turkey: What Are We Learning From The Pandemic?"	YouTube Live Broadcast	140
6 Jun 2020	Assoc. Dr. Adil Sarıbay - "The Human Mind Under Threat: The Things Pandemic Makes Us Think"	YouTube Live Broadcast	170
24 Dec 2020	Prof. Ceyhun Elgin - "The New Normal of Economic Policy"	YouTube Live Broadcast	160
4 Feb 2021	Assoc. Dr. Bilgin Metin - "Cyber Security during the Pandemic 101"	YouTube Live Broadcast	80

NUMBER OF ATTENDEES
550
899
325



# Appendix



# **MATERIALITY ANALYSIS**

A Materiality Analysis was conducted in 2018 to determine Tekfen Holding's strategic priorities in terms of sustainability and to reveal the focus areas of the Sustainability Report. Through the Materiality Analysis covering the External Trend Analysis, the opinions of the Board Members, strategic goals, and the Vision Workshop, the intersection of stakeholders' priorities with Tekfen's priorities were identified. Priority issues, external trends, risks, and opportunities are reviewed annually.

### **TEKFEN'S PRIORITIES**

Three different outputs were included in the analysis to identify the priority issues for Tekfen Holding.

#### In this context:

• Outputs of the Sustainability Vision Workshop held with the managers of the Group Companies,

• Views of the Board of Directors,

• The objectives in the company's strategic plan and the outputs of the Strategy Workshop were utilised.

### **STAKEHOLDERS' PRIORITIES**

Stakeholder priorities were determined with 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, non-governmental and professional organisations, the media, international organisations, and universities were reached through surveys and their opinions regarding priorities were noted and their expectations from Tekfen regarding sustainability were investigated. The survey, which consisted of a total of 2,578 people, had a 50% response rate. The Stakeholder Analysis was conducted by an independent consulting firm with reference to the international stakeholder engagement standard AA1000SE (AccountAbility Stakeholder Engagement Standard).

• With the External Trend Analysis, global and sectoral risks and trends were also included in the analysis, and important issues for the sectors were determined.

#### **Priority Issues**

Common priorities of stakeholders and Tekfen Holding are mapped in the Materiality Matrix. Issues defined as "top priority" show the issues that need to be managed first in terms of sustainability, are of top importance, and form the basis of the "Bridging Prosperity" vision. The focus areas of the "Bridging Prosperity" vision match up with the priority issues.

While "Economic Growth", "Corporate Governance", and "Customer Loyalty" priority issues constitute Tekfen's operational roots, "Occupational Health and Safety" stands out as the top priority in relation to the sectors in which the company operates and figures among the enablers. On a company-specific basis;

• "Occupational Health and Safety" is one of the top priority issues for Tekfen Construction.

• "Climate Crisis" is a top priority for Toros Agri and Tekfen Agri.

• "Customer Loyalty" is the top priority for Tekfen Services and Tekfen Insurance.

"Digitalisation" and "R&D and Innovation", megatrends affecting the world, are among the top priority issues for Tekfen Holding in general. The subject of "Employee Development and Employee Satisfaction" stands out as another fundamental area of investment in the upcoming period. "Climate Crisis", another critical issue in Tekfen Holding's operational fields, is one of the top priority issues on the materiality map.

Climate crisis, innovation, employees and society are Tekfen's strategic drivers. While the Sustainability Report focuses on top priority issues, it also covers high priority and priority issues. From this perspective, "Risk Management" was among the issues of increasing importance in 2019, in line with the external trends observed in recent years. In 2020, with the COVID-19 pandemic, the importance of "Supply Chain Management" and, with the support of legal regulations, "Corporate Governance" issues have increased.



In 2020, the importance of "Supply Chain Management" has increased with the COVID-19 pandemic and "Corporate Governance" issues are similarly on the rise with the growing support of legal regulations.

# COMMUNICATION METHODS WITH STAKEHOLDERS

Stakeholder Group	Communication Method	Communication Frequency
Employees	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
Public Institutions	Meetings and conferences	As needed
	Corporate websites	Perpetually
	Annual reports	Quarterly
	Sustainability reports	Annually
	T-Bulletin	Quarterly
	Stakeholder analysis	At most every four years
Business and Solution Partners	One-on-one interviews	Perpetually
	Corporate websites	Perpetually
	Annual reports	Quarterly
	Sustainability reports	Annually
	T-Bulletin	Quarterly
	Stakeholder analysis	At most every four years
Suppliers	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
Associations, Universities, Media, and	Collaborations	Perpetually
NGOs	Corporate websites	Perpetually
	Participation in meetings and working	At least once a month
	groups	
	Seminars and conferences	At least once a month
	Annual reports	Quarterly
	Sustainability reports	Annually
	T-Bulletin	Quarterly
	Stakeholder analysis	At most every four years
Shareholders, Investors, and Analysts	General Assembly meetings	Annually
	Special case announcements	As needed
	One-on-one meetings and correspondence	s Perpetually
	Teleconferences	Quarterly
	Quarterly investor presentation	Quarterly
	Conferences and roadshows	At least ten times a year
	Annual reports	Quarterly
	Sustainability reports	Annually
	T-Bulletin	Quarterly
	Stakeholder analysis	At most every four years
Customers	One-on-one interviews	Perpetually
	Corporate websites	Perpetually
	Annual reports	Quarterly
	Sustainability reports	Annually
	T-Bulletin	Quarterly
	Stakeholder analysis	At most every four years



# **PERFORMANCE INDICATORS**

# **Environmental Performance Indicators**<sup>46</sup>

GREENHOUSE GAS EMISSIONS (tons of CO <sub>2</sub> e)	2018	2019	2020
Scope 1	899,828	1,015,149	1,054,641
Scope 2	38,821	41,114	32,976
Scope 3	183,930	3,847,234	3,837,682
Scope 1+ Scope 2	938,649	1,056,262	1,087,617

EMISSION INTENSITY (tons of CO <sub>2</sub> e)	2018	2019	2020
Emission Intensity (tCO <sub>2</sub> e/million USD turnover)	406.50	429.66	680.6347
Emission Intensity (tCO <sub>2</sub> e/number of employees)	48.94	61.79	58.97 <sup>48</sup>

ENERGY PRODUCTION (Mwh)	2018	2019	2020
Heat Generation	137,770	646,730	678,390
Renewable Energy Production (Waste Heat)	221,230	226,652	250,106
Renewable Energy Production (Solar Energy)	63	50	69
Diesel-Generated Electricity	32,967	115,168	212,021
Total Amount of Electricity Produced	254,260	341,870	462,196
Electricity Sold	79,036	91,744	99,756

<sup>46</sup> Environmental data for 2019 includes overseas operations, Gönen Energy, and Hishtil-Toros Nursery data.

<sup>47</sup> As a result of the significant decrease in the turnover in USD terms, the emission intensity has increased.

<sup>48</sup> The number of employees has decreased in 2020.

ENERGY CONSUMPTION (Mwh)	2018	2019	2020
Natural Gas	48,785	69,558	41,478
Coal	17	16,987	18,767
Fuel Oil	193	272	279
LPG	4,506	1,110	939
Diesel (Fixed Plants)	32,967	115,168	212,021
Diesel (Vehicle/Equipment)	83,203	508,125	529,871
Gasoline (Vehicle)	1,066	14,930	54,090
LNG	43,250	34,006	31,659
CNG		1,742	1,305
Total Fuel Consumption	213,987	761,898	890,410
Total Amount of Electricity Purchased	77,321	88,520	70,403
Renewable Energy Consumption (Waste Heat & Solar Energy)	142,257	134,958	150,419
Total Energy Consumption	433,564	985,376	1,111,233

AMOUNT OF WASTE (tonnes)	2018	2019	2020
Total amount of hazardous waste	1,561	1,529	510
Total amount of non-hazardous waste	12,379	101,397	41,470

WASTE BREAKDOWN ACCORDING TO DISPOSAL METHOD (tonnes)	2018	2019	2020
Sent to recycling/recovery	5,528	17,799	3,856
Sent to incineration	1,561	1,709	510
Sent to landfill	6,852	83,418	37,613

WATER DATA (megalitres)	2018	2019	2020
Total amount of water withdrawn	126,290	106,630	119,217
Total amount of water used	6,495	10,064	12,213
Total amount of water discharged	119,795	96,566	107,004
Amount of water reused	1,576	3,012	3,762

AMOUNT OF WATER WITHDRAWN ACCORDING TO SOURCE (megalitres)	2018	2019	2020
Surface waters (freshwater)	2,122	1,974	1,528
Surface waters (saline water)	115,386	80,317	102,476
Groundwater	4,582	18,520	9,946
Produced water	3,891	86	68
Third-party water	309	5,732	5,200

TOTAL AMOUNT OF WATER WITHDRAWN BY WATER QUALITY (megalitres)	2018	2019	2020
Freshwater <sup>49</sup>	10,903	26,312	16,741
Other Surface waters <sup>50</sup>	115,386	80,317	102,476

WASTEWATER BY DISCHARGE POINTS (megalitres)	2018	2019	2020
Surface waters (freshwater)	260	705	90
Surface waters (saline water)	119,063	94,639	104,887
Groundwater	163	773	1,615
Third-party water	309	449	412

<sup>49</sup> Freshwater: (≤1.000 mg/L Total Dissolved Solids).

<sup>50</sup> Other water: (>1.000 mg/L Total Dissolved Solids).

#### GRI 303-3, GRI 303-4, GRI 303-5, GRI 305-1, GRI 305-2, GRI 305-3, GRI 305-4

TOTAL AMOUNT OF WATER DISCHARGED ACCORDING TO THE WATER QUALITY OF THE RECEIVING ENVIRONMENT (megalitres)	2018	2019	2020
shwater	732	1,927	2,118
er water	119,063	94,639	104,887

TOTAL AMOUNT OF WATER DISCHARGED ACCORDING TO THE WATER QUALITY OF THE RECEIVING ENVIRONMENT (megalitres)	2018	2019	2020
Freshwater	732	1,927	2,118
Other water	119,063	94,639	104,887

WATER DATA OF HIGH/VERY HIGH WATER-STRESSED AREAS (megalitres)	2018	2019	2020
Total amount of water withdrawn <sup>51</sup>	126,019	21,657	12,222
Total amount of water used	6,299	7,780	8,154
Total amount of water discharged	119,720	13,877	4,068
Amount of water reused	1,573	1,021	649

DISTRIBUTION OF TOTAL AMOUNT OF WATER WITHDRAWAL IN REGIONS WITH HIGH/VERY HIGH WATER STRESS (megalitres)	2018	2019	2020
Freshwater	10,633	21,657	12,222
Other water	115,386	0	0

## **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.

#### **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.

<sup>51</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.

#### SCOPE 1

Fuel/ Emission Source	Unit	LT	CO₂ EF	CO <sub>2</sub> EF Unit	tCO₂/Unit	CH₄ EF	CH₄ EF Unit tCH₄/Unit	tCO2eq/Unit	N₂O EF	EF Unit	N <sub>2</sub> O tN <sub>2</sub> O/Unit tCO <sub>2</sub> eq/Unit	Total EF (kg CO <sub>2</sub> e/TJ)	Total EF tCO <sub>2</sub> e/Unit
Natural gas	m <sup>3</sup>	0.0000345329	56,000.00	kgCO <sub>2</sub> /TJ	0.00193383960	1.00	kgCH <sub>4</sub> /TJ 0.0000003453	-	0.10	kgN <sub>2</sub> O/TJ	0.000000035 -	56000.00	0.0019338
Coal-Lignite	ton	0.0125574000	101,000.00	kgCO <sub>2</sub> /TJ	1.26829740000	1.00	kgCH₄/TJ 0.00001255740	-	1.50	kgN <sub>2</sub> O/TJ	0.0000188361 -	101000.00	1.2682974
Diesel (Fixed Combustion)	lt	0.0000354370	74,100.00	kgCO <sub>2</sub> /TJ	0.00262588043	3.00	kgCH₄/TJ 0.00000010631	-	0.60	kgN <sub>2</sub> O/TJ	0.000000213 -	74100.00	0.0026259
LPG (Fixed Combustion)	kg	0.0000456252	63,100.00	kgCO <sub>2</sub> /TJ	0.0028789514	1.00	kgCH₄/TJ 0.00000004563	-	0.10	kgN <sub>2</sub> O/TJ	0.000000046 -	63100.00	0.00287895
Diesel (Mobile Combustion)	lt	0.0000354370	74,100.00	kgCO <sub>2</sub> /TJ	0.00262588043	3.90	kgCH <sub>4</sub> /TJ 0.00000013820	-	3.90	kgN <sub>2</sub> O/TJ	0.0000001382 -	74100.00	0.0026259
Gasoline (Mobile Combustion)	I	0.0000319963	69,300.00	kgCO <sub>2</sub> /TJ	0.0022173405	3.80	kgCH₄/TJ 0.00000012159	-	5.70	kgN <sub>2</sub> O/TJ	0.000001824 -	69300.00	0.00221734
Diesel (Off-Road, Mobile)	I	0.0000354370	74,100.00	kgCO <sub>2</sub> /TJ	0.0026258804	4.15	kgCH₄/TJ 0.00000014706	-	28.60	kgN <sub>2</sub> O/TJ	0.0000010135 -	74100.00	0.0026259
LPG (Mobile)	I				0.0015532500			0.00000113000			0.0000009900		0.00155537
Fuel Oil	I				0.0031713300			0.00000413000			0.0000077100		0.00318317
LNG	ton				2.5376800000			0.00340000000			0.0013300000		2.54241
CNG	ton				2.5282600000			0.00340000000			0.0013300000		2.53299

SCOPE 2	Unit	EF
Turkey_Electricity Grid EF	tCO <sub>2</sub> e/MWh	0.461
Qatar_Electricity Grid EF	tCO <sub>2</sub> e/MWh	0.486
S. Arabia_Electricity Grid EF	tCO <sub>2</sub> e/MWh	0.709
Kazakhstan_Electricity Grid EF	tCO <sub>2</sub> e/MWh	0.612
Azerbaijan_Electricity Grid EF	tCO <sub>2</sub> e/MWh	0.488
Iraq_Electricity Grid EF	tCO <sub>2</sub> e/MWh	0.908
Russia_Electricity Grid EF	tCO <sub>2</sub> e/MWh	0.3505

SCOPE 3	Unit	EF
Household waste	tCO <sub>2</sub> e/ton	0.4373719
Hazardous waste	tCO <sub>2</sub> e/ton	0.0213167
Recyclable	tCO <sub>2</sub> e/ton	0.0213167
Staff service	tCO <sub>2</sub> e/km	0.0002471
Management vehicles	tCO <sub>2</sub> e/km	0.00016844
Airplane-short distance	tCO <sub>2</sub> e/km	0.0002443
Airplane-middle distance	tCO <sub>2</sub> e/km	0.00015553
Airplane-long distance	tCO <sub>2</sub> e/km	0.00018181

# **Social Performance Indicators**

NUMBER OF EMPLOYEES BY GENDER AND LABOR CATEGORY	2018		20	19	2020		
	Female	Male	Female	Male	Female	Male	
Number of White-Collar Employees	641	3,388	572	2,956	550	2,597	
Number of Blue-Collar Employees	20	5,498	22	3,063	20	3,081	
Number of Employees Covered by Collective Labour Agreement	34	3,615	0	887	0	797	
Total Number of Employees (By Gender)	661	8,886	594	6019	570	5,678	
Total Number of Employees	9,5	9,547		6,613		6,248	

NUMBER OF EMPLOYEES BY GENDER AND AGE	2018		20	19	2020	
	Female	Male	Female	Male	Female	Male
Under 30	204	1,802	152	1,169	100	934
Ages 30-50	390	5,699	378	3,946	404	3,840
Over 50	67	1,385	64	904	66	904

NUMBER OF EMPLOYEES BY THE TIME WORKED	2018		2019		2020	
	Female	Male	Female	Male	Female	Male
Worked for 0-5 Years	494	6,776	415	4,420	351	3,261
Worked for 5-10 Years	65	809	86	615	92	991
Worked for 10 Years and More	102	1,301	93	984	127	1,426

NUMBER OF EMPLOYEES WITH A SENIOR MANAGEMENT TITLE BY GENDER AND AGE	2018		2019		2020	
	Female	Male	Female	Male	Female	Male
Over 50	17	131	17	145	15	116
Ages 30-50	36	245	43	264	47	236
Under 30	8	9	7	7	1	3

NUMBER OF EMPLOYEES BY GENDER WHO TOOK AND RETURNED FROM PARENTAL LEAVE	2018		2019		2020	
	Female	Male	Female	Male	Female	Male
Number of Employees Who Took Parental Leave	10	50	10	28	15	52
Number of Employees Who Returned From Parental Leave	7	50	7	28	8	52

NUMBER OF DISABLED EMPLOYEES BY GENDER	2018		2019		2020	
	Female	Male	Female	Male	Female	Male
Number of Disabled Employees	21	198	13	79	9	65

NUMBER OF NEW EMPLOYEES BY GENDER AND AGE	2018		2019		2020	
	Female	Male	Female	Male	Female	Male
Under 30	108	1,225	44	542	28	433
Ages 30-50	132	4,304	74	2,460	70	1,299
Over 50	12	638	11	170	6	288
Total Number of Employees Hired During the Year	252	6,167	129	3,172	104	2,020

NUMBER OF EMPLOYEES SUBJECT TO PERFORMANCE EVALUATION BY GENDER	2018		2019		2020	
	Female	Male	Female	Male	Female	Male
Number of Employees Subject to Performance Evaluation	254	765	375	1,011	348	928

NUMBER OF EMPLOYEES BY GENDER AND AGE WHO QUIT JOB	2018		2019		2020	
	Female	Male	Female	Male	Female	Male
Over 50	13	807	10	234	24	442
Ages 30-50	101	3,207	78	2,195	70	1,310
Under 30	59	1,357	64	928	12	354
Total Number of Employees Who Quit During the Year	173	5,371	152	3,357	106	2,106
Employee Turnover Rate	26%	60%	26%	56%	19%	37%

# **Occupational Health & Safety Indicators**<sup>52</sup>

	2018	2019	2020
Total Person-hours Worked (Including Subcontractors)	87,488,373	77,054,705	56,893,148
Fatal Accidents (F)	6	5	1
Lost Workday Case (LWDC)	30	51	34
Restricted Work Case (RWC)	14	11	8
Medical Treatment Case (MTC)	23	39	16
Occupational Illness (OCC)	6	12	0
Lost-Time Injuries (LTI = F+LWDC)	36	56	35

<sup>52</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 headings: Health, Safety and Environment (HSE).

Total Recordable Injuries (TRI = F+LWDC+RWC+MTC)	73	106	59
LTI Rate (LTIR= Lost Time Injury Rate x 1 ,000,000/Total Person-Hour)	0.411	0.727	0.615
TRI Rate ( TRIR= Total Recordable Injuries x 1 ,000,000/ Total Person-Hour)	0.834	1.376	1.037
HSE Training Rate (HSE Training Person-Hour/ Total Person-Hour) X100	1.15%	0.89%	0.53%
HSE Training (Person-Hour)	1,008,379	688,602	301,056

# **Economic Indicators**<sup>53</sup>

ECONOMIC DATA (thousand TRY)	2018	2019	2020
Total Revenue <sup>54</sup>	12,347,996	14,791,025	11,827,382
Operating Expenses⁵⁵	11,212,895	13,503,410	11,991,735
Community Investments <sup>56</sup>	9,217	15,463	28,308
Economic Value Retained <sup>57</sup>	1,125,884	1,272,152	-192,661
Investment Expenditures <sup>58</sup>	261,961	291,784	567,726

<sup>33</sup> Includes Tekfen Holding and all Group Companies.

- <sup>4</sup> Includes dividends, interest revenues, sale of assets and rental income.
- $^{5}$ Includes cost of revenue, marketing, sales and distribution expenses, general administrative expenses, research and development expenses, interest expense, tax expense.
- <sup>6</sup> Includes donations and sponsorships.
- <sup>7</sup> Economic Value Retained: Revenues (Expenses + Social Investments).
- <sup>8</sup> Investment Expenditures: Audit Report 5c is taken as a point reference.

# **AWARDS AND ACHIEVEMENTS**



# 2020

Getting in the Global "A" List of the Carbon Disclosure Project's (CDP) Climate Change Water Security Programmes	TEKFEN CONSTRUCTION'S OHS ACHIEVEMENTS
International Pipe Line & Offshore Contractors Association's (IPLOCA) grand prize in the Health and Safety category to Tekfen Construction for its "Applied HSE Training Area" project	The Qatar Northern Highway Side Roads and Supp Project - 33 million hours worked with no lost time
International Fertilizer Association's (IFA) "Protect & Sustain" certificate to Toros Agri for the second time for its OHS, environment, product safety, and safety practices	20 million hours worked with no workday loss due in the Qatar Al-Thumama Stadium Project
International Fertilizer Association's (IFA) Industry Stewardship Champion award to Toros Agri for the second time	15 million hours worked with no workday loss due in the Qatar Al-Khor Highway Project
The League of American Communication Professionals' (LACP) Gold and Technical Achievement awards for the 2019 Sustainability Report, while the report gets selected as the 50 <sup>th</sup> report among the top 100 reports	5 million hours worked with no workday loss due t Saudi Arabia Haradh Satellite Pipelines Project
The receipt of the third Board of Directors Empowered by Women Award, delivered within the scope of the Turkey Women Directors Conference	
Award in the "Cooperation" category of the 7 <sup>th</sup> Sustainable Business Awards to Tekfen Agri for its "Developing National and Domestic Bread	

Wheat Varieties Using Ancestral Seeds" project

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# **GRI CONTENT INDEX**

For the Materiality Disclosures Service, GRI Services reviewed that the GRI content index is clearly prese 102-49 align with appropriat performed on the Turkish ve



sures Service, GRI Services reviewed that the GRI esented and the references for Disclosures 102-40 to		GRI Standard	Disclosure	References	
	ons in the body of the report. The serv f the report.	vice was	General Disclosures		
				Ethics and Integrity	
				102-16	75
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				Governance	
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	102-8	178-180		Stakeholder Engagement	
2016	102-9	63		102-45	4-5
	102-10	There are no significant changes.		102-46	50-54
	102-11	72-74			
	102-12	70-71		102-47	50-54
				102-48	There are no changes.
	102-13	70-71		102-49	There are no changes.
	Strategy				
	102-14	26-33			

**GRI Standard** 

GRI 101: Foundation 2016

General Disclosures

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GRI Standard	Disclosure	References	GRI Standard	Disclosure	References
General Disclosures			GRI 300: Environmental Standard Series		
GRI 102: General Disclosures 2016	102-50	4-5	Energy		
	102-51	3	GRI 103: Management Approach 2016	103-1	96 - 99
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	102-56	No external assurance.	Water and Effluents		
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GRI 201: Economic Performance 2016	201-1	64-65, 181	GRI 303: Water and Effluents 2018	303-3	174, 175
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GRI 205: Anti-Corruption 2016	205-2	75	GRI 103: Management Approach 2016	103-2	96 - 99
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	305-1	172, 175-177
	305-2	172, 175-177
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	305-4	172, 175-177
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	103-1	106, 107
GRI 103: Management Approach 2016	103-2	106, 107
	103-3	106, 107
CDL 200, Wester 2020	306-3	173
GRI 306: Waste 2020	306-5	173
Environmental Compliance		
	103-1	96
GRI 103: Management Approach 2016	103-2	96
	103-3	96
GRI 307: Environmental Compliance 2016	307-1	Spillage material, which was temporarily kept in an open area for reuse in the production process, mixed with the open channel discharge line of the facility due to rain. A penalty of TRY 66,374 was imposed at the Samsun facility since the phosphate phosphorus and fluoride parameters in the sample were above the limits of the legislation.
GRI 400: Social Standard Series		
Employment		
	103-1	130
GRI 103: Management Approach 2016	103-2	130
	103-3	130
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GRI Standard	Disclosure	References
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Safety 2018	403-5	143
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	103-1	133-135
GRI 103: Management Approach 2016	103-2	133-135
	103-3	133-136
	404-1	135
GRI 404: Training and Education 2016	404-2	135-136
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GRI Standard	Disclosure	References
Diversity and Equal Opportunity		
	103-1	132
GRI 103: Management Approach 2016	103-2	132
	103-3	132
GRI 405: Diversity and Equal Opportunity 2016	405-1	178-180

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Consulting **S360** 

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Design Daniska Contemporary Design

Coordination **Tekfen Holding Corporate Communications and Sustainability Group Directorate**