

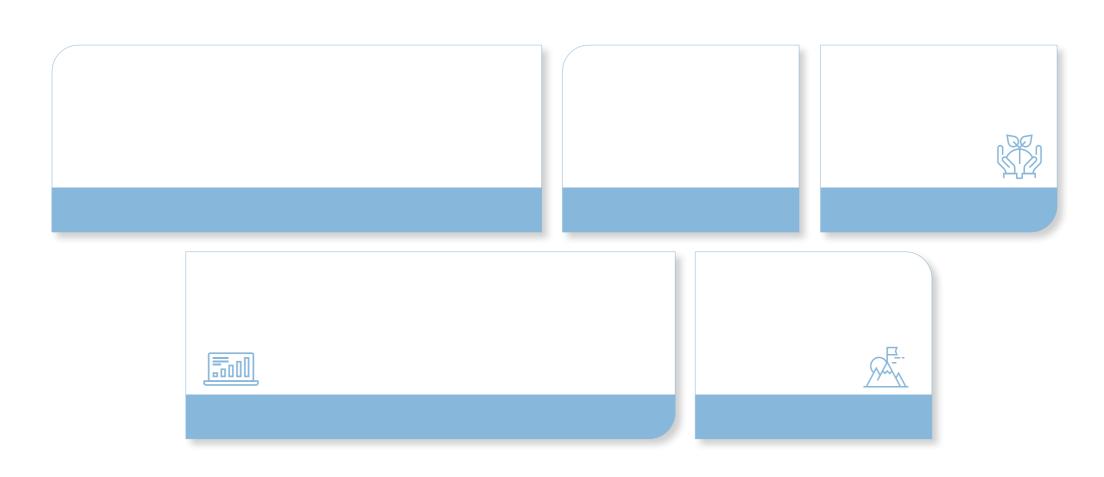


SUSTAINABILITY REPORT





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# **ABOUT THE** REPORT

We are pleased to present the eighth Sustainability report describing our economic, environmental and social performance in 2019 to all our stakeholders. Together with this report, which is one of the most important means of communication through which we have communicated our good practices for years, we offer our stakeholders the opportunity to evaluate the steps we have taken in managing our impacts as a result of our activities.

The financial, environmental, occupational health and safety performance data we include in our report covers, unless otherwise stated, January 1, 2019- December 31, 2019, all Akenerji and its affiliates included in the list of Akenerji Group Companies included in the 2019 Sustainability Report during the reporting period and our 9 electricity generation plants operating in Turkey in 2019 and our Head Office in Istanbul within the bodies of these companies.

This year we have prepared our report in accordance with the GRI Standards "Core "option. You can contact us at "info@akenerji.com.tr" regarding your questions and suggestions about our sustainability performance, applications and report.

# Akenerji Group Companies Included in 2019 Sustainability Report

Operational

## Akenerji Elektrik Üretim A.Ş.

#### **Power Plants**

- Ayyıldız WPP
- ▶ Uluabat HEPP
- Burc Bendi HEPP
- ▶ Bulam HEPP
- ▶ Himmetli HEPP
- ▶ Gökkaya HEPP
- ▶ Feke I HEPP
- ▶ Feke II HEPP
- Erzin Natural Gas Combined Cycle Power Plant (NGCCP)

## Ak-El Kemah Elektrik Üretim A.Ş.

▶ Kemah HEPP

Other

Akenerji Elektrik Enerjisi İthalat İhracat ve Toptan Tic. A.Ş.

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# **MESSAGE FROM GENERAL MANAGER**

Dear Stakeholders.

In 2020, when we celebrate the 31st anniversary of our foundation, we are happy to share our activities, economic, environmental and social performances we carried out in 2019 with you once again through our Sustainability report, which we published the eighth one this year. Together with this report, which is one of the most important means of communication through which we have communicated our good practices for years, we offer our stakeholders the opportunity to evaluate the steps we have taken in managing our impacts as a result of our activities.

Despite the difficult conditions of 2019, with more than 30 years of experience in the energy sector and our installed power of 1,224 MW, we continue to be one of the leading players in the energy sector We have pursued all the opportunities to continue our operations in a healthy financial structure and despite the uncertainties in the market, we have achieved success in operational and financial terms.

The climate change, where we are more and more likely to feel its global impact, has continued to direct all states to energy varieties, which are produced from renewable energy sources and have minimal environmental and social impact in 2019, as has been the case in recent years. With our experience in renewable energy sources and our installed power of 1,224 MW in a dynamic sector like the energy sector, we have reached the capacity to meet 3% of Turkey's energy needs, and we are closely following the innovations and developments in the areas where we operate. We are striving to adapt to changing market conditions. Within the scope of our basic strategy; while operating our existing plants in the optimum way according to the market prices, we follow all kinds of ideas and projects that will create added value to our company in the market.

In 2019, our company passed a successful year with a turnover of 1.823 million TL, earnings before interest, taxes, depreciation, and amortization of 346 million TL, and an asset size of 6.9 billion TL. Due to its proactive approach to increasing balanced production portfolio and operational profitability, our company created the highest earnings before interest, taxes, depreciation, and amortization in its history in 2019. As Akenerji, we have successfully maintained our position in the index where publiclytraded companies whose corporate sustainability performances are at a high level are included.

Available water reserves reduced due to climate change and unconscious consumption of resources continue to be one of the most important parameters that concern us for our future. For this reason, while conducting our activities in 2019, we continued our water efficiency studies with high sensitivity. As a result of these studies, our public report rating, which we presented in 2019 under CDP climate change, rose from C (Awareness) to B (Management) level and reached a performance above the European average C. Our CDP Water reporting B-level score is "Management", which is a score both on a global and European scale and on a sectoral scale. In parallel with our performance, greenhouse gas emissions of our Erzin Natural Gas Combined Cycle Power Plant for the year 2018 has been verified within the scope of ISO 14064. Within the scope of the Regulation on Monitoring of Greenhouse Gas Emissions, the greenhouse gas emissions of our Erzin Natural Gas Combined Cycle Power Plant for the year 2018 have been verified by an authorized verification body and submitted to the Ministry of Environment and Urbanization. As a result of the studies we carried out in our facilities in the fight against climate change, we reduced our energy consumption by 20% in 2019 compared to 2018. In our Erzin Natural Gas Combined Cycle Power Plant, we managed to reduce our emission values by 19% compared to 2018.

Akenerji Energy Services has continued to be the company providing the highest energy efficiency in its sector in 2019 by reaching average efficiency values of 35% in electricity and 55% in natural gas without making any additional investments in its projects since 2015. In addition to the efficiency values it creates, it has also brought the comfort standards of the enterprises to the optimum level and added value to the facilities in which it operates by reducing the operating maintenance costs and prolonging the device life.

We care about preventing and eliminating the negativities likely to occur in the local people in the focus of Occupational Health and Safety arising from our operations in all areas we operate. For this reason, in order to raise the awareness of the local people in the regions where our HEPP are located, in November and December 2019, we made HEPP Information Presentations in which 996 students, 53 teachers in Adana, 191 students and 19 teachers in Adıyaman, 70 students and 10 teachers in Bursa were informed about the operation of hydroelectric power plants and the personal security measures that students should take in their daily lives.

Since 2013, we have reached a total of 9,137 students and 543 teachers with our information presentations. We continued to work for the occupational health and safety of our most valuable stakeholders in 2019 and reduced the number of lost days in our power plants by 64% compared to 2018.

We are determined to continue our work that we have successfully carried out together with the same belief in 2020 with the projects that create value for our economy, our environment and our society. In our sustainability journey, we would like to thank all our stakeholders who have made efforts, especially our employees.



Despite the difficult conditions of 2019, we continue to be one of the leading players in the energy sector with more than 30 years of experience.

# **OUR SUSTAINABILITY JOURNEY**

After Akkök Holdina signed the Global Compact of Principles in 2007, we participated in the Global Compact Progress Notice covering the years 2008-2009, which it published for the first time.

We published our first and most comprehensive Environmental. Occupational Health and Safety Report and announced it to all our stakeholders.

2010

We participated in the Carbon Disclosure Project (CDP) Turkey report and became one of the two energy companies drawing up this reporting in Turkev.

We became the first energy company to implement EFET (European Federation of Energy Traders) general contract in Turkey.

2011

We became the first Turkish energy company to receive IIP (Investors in People) Certificate.

We participated in the İMKB (İstanbul Stock Exchange) Sustainability Index Project.

We presented our first sustainability report to our stakeholders. within the framework of the Global Reporting Initiative (GRI) Sustainability Reporting Principles for the 2012 activity year.

We started to work on the Carbon Management Project, which includes all of our plants.

2013

As a result of the 2014 evaluation, we increased our CDP report transparency score from 69 to 85, which includes our greenhouse gas emission values and climate change strategy.

With our Smart Electricity approach, we both increased our customer satisfaction and made a difference in competition by launching new products and services that can meet our customers' energy needs.

2014

As of the first year when CDP Turkey Water Program was started to be carried out, we became the first and only energy company to report.

We raised our 2015 CDP transparency rate to 88.

We became the first energy company in Turkey to use this standard with our 2014 Sustainability Report that we wrote in accordance with the G4 guide. With this report, we started to share our strategic Sustainability goals transparently with our stakeholders to our success in our goals.

After ISO 9001:2008 Quality, ISO 14001:2004 Environment and OHSAS 18001:2007 Occupational Health and Safety Systems certificates were obtained by Erzin Natural Gas Combined Cycle Power Plant, we completed these management system certificates in all our fields of activity.

We received ISO 27001 Information Security Management Systems Certificate for Head Office, Uluabat HEPP and Erzin NGCCP.

We started our supplier audits to ensure sustainable business management.

2012

2015

# 2016

With the revision of ISO 2019 9001 Quality Management Systems and ISO 14001 Environmental Management Systems standards in 2015, we received ISO 9001:2015 Quality, ISO 14001:2015 Environmental Management System documents for Akenerii -Egemer Head Office. Ayyıldız WPP, Uluabat HEPP, Burc HEPP, Bulam HEPP. Feke I HEPP. The continuity of OHSAS 18001:2007 Occupational Health and Safety and ISO 27001 Information Security Management Systems

> We increased our CDP Turkey 2016 Climate Change to "B".

We increased our score to B level in the CDP Turkey Water Program, which we continue to participate as the only energy company.

> We became the first company to make a virtual power plant tender.

We took our digital step with the "Operation Optimization" software to increase the efficiency of Egemer Natural Gas Combined Cycle Power Plant. In 2018, we participated in the index where publicly-traded companies whose corporate sustainability performances are at a high level are included.

We aligned our goals that we created in accordance with our Sustainability strategies and Sustainability priorities with the UN Sustainable Development Goals.

We received the CDP Turkey 2017 Water Leadership award by aettina an A-ratina under the CDP (Carbon Disclosure Project) Water Program.

2018

We became the first energy company in Turkey to publish a Sustainability report in accordance with the GRI "Standards" requirements.

In 2018, we participated in the index where publicly-traded companies whose corporate sustainability performances are at a high level are included.

Within the scope of ISO 14064 Greenhouse Gas Standard, 2017 greenhouse gas emissions of Erzin Natural Gas Combined Cycle Power Plant have been verified.

Within the scope of the Regulation on Monitoring of Greenhouse Gas Emissions, the greenhouse gas emissions of our Erzin Natural Gas Combined Cycle Power Plant in 2017 have been verified by an authorized verification body and submitted to the Ministry of Environment and Urban Planning.

We continued HEPP Awareness Training in village schools in the regions where hydroelectric power plants are located. With the training courses held in Adana, Adıvaman and Bursa, 1721 students and 111 teachers were reached.

Akenerji ranked first in the "energy category at "ONE AWARDS" where Turkey's most prestigious companies were awarded.

Akenerji won the "Golden Voltage" award for Corporate Social Responsibility at the 9th Energy Summit in Turkey.

2019

Within the scope of ISO 14064 Greenhouse Gas Standard, 2018 greenhouse gas emissions of Erzin Natural Gas Combined Cycle Power Plant have been verified.

Within the scope of the Regulation on Monitoring of Greenhouse Gas Emissions, the greenhouse gas emissions of our Erzin Natural Gas Combined Cycle Power Plant for the year 2018 have been verified by an authorized verification body and submitted to the Ministry of Environment and Urbanization.

Our public report rating, which we presented in 2019 under CDP climate change, rose from C (Awareness) to B (Management) level and reached a performance above the European average C.



Akenerji has succesfully maintained its position in the index traded on the Istanbul Stock Exchange, where companies with high corporate sustainability performances are included.







Our CDP Water reporting B-level score is "Management", which is a score both on a global and European scale and on a sectoral scale.

The document audits of ISO 9001:2015 Quality, ISO 14001:2015 Environmental Management System for Head Office, Ayyıldız WPP, Uluabat HEPP, Burç HEPP, Bulam HEPP and Feke I HEPP have successfully been completed and renewed. According to ISO 45001:2018 Occupational Health and Safety standard replacing OHSAS 18001:2007 Occupational Health and Safety standard, Head Office and all our plants are documented and Akenerii became one of the first companies to implement ISO 45001:2018 standard.

The continuity of ISO 27001:2013 Information Security Management Systems documents has been maintained.

Renewal application was made for Environmental Permit certificate of Erzin Natural Gas Combined Cycle Power Plant renewed every 5 years and obtained in 2015.

ISO 50001:2018 Energy Management System studies have been started in all our power plants, energy consumption has been determined and targets have been determined to reduce consumption and make improvements by evaluating performance.

In order to raise awareness among the local people in the region where HEPP are located, HEPP Information Presentations describing the operation of hydroelectric power plants and the personal safety measures that students should take in their daily lives were held in November and December 2019 with 996 students, 53 teachers, 191 students and 19 teachers in Adıvaman and 70 students and 10 teachers in Bursa. Since 2013, a total of 9,137 students and 543 teachers have been provided with our information presentations.

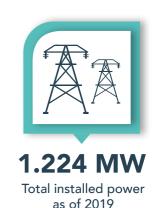
# **AKENERJI AT A GLANCE**

Akenerji continues to generate energy for Turkey in its 31st year...

1 natural gas combined cycle,
1 wind and 7 hydroelectric plants
are operated with the principle of
"high profitability and high
efficiency", it has been adding
power to our country for 31
years... We continue to lead the
industry. We diversify our
products. We have been carrying
out the pioneering projects in
energy efficiency.









% 20
Energy consumption reduction
in 2019 compared to 2018

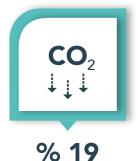


Percentage of residual waste recovery increased in 2019 compared to 2018



% 64

Decreasing number of lost days in power plants in 2019 compared to 2018



Emission reduction rate Erzin NGCCP and all other plants in 2019 compared to 2018

The Most Reputable Energy Company In the energy category of THE ONE AWARDS given to the companies that increase their reputation the most every year, it is the most reputable energy company of the year 2019 for the second time.



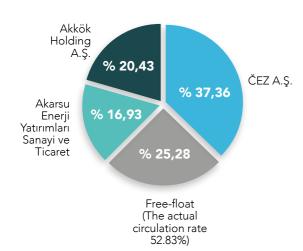
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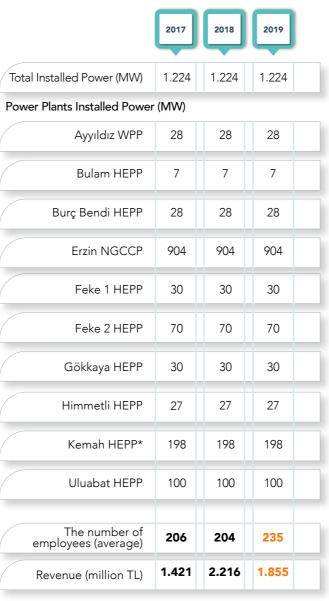
Our company started its energy activities in 1989 affiliated with Akkök Group of Companies. Akenerji, which has been operating as a free electricity production company since 2005, became one of the leading companies in Turkey's energy sector as of the end of 2019.

Akenerji, which is an example in the energy sector with more than 31 years of knowledge, with 1 natural gas combined cycle, 1 wind power plant and 7 hydroelectric power plants has created portfolio diversity in terms of source and geography. As of the end of 2019, 26% of our installed power, which is 1,224 MW, consists of renewable energy sources.

All our active plants are administratively operating under the Production Directorate under the name of Akenerji Elektrik Üretim A.Ş., depending on Operations and Maintenance. All our plants except for Erzin Power Plant carry out electricity generation activities from renewable energy sources.

# **Shareholding Structure**





<sup>\*</sup> It is in project phase.

# **Operation Map**



The first energy company in Turkey CDP Water Program

Carbon Registry'

# **Distribution of Akenerji Installed Power According to Resources**



% 2 Wind Energy % 24

Hydroelectric



Natural Gas

# **Business Units and Manufacturing Facilities**

#### Head Office

- Public Relations
- ► Strategic Planning and Risk
- Internal Audit

# Financing and Financial Affairs

- Treasury and Finance
- Budget and Control
- Accounting and Tax
- Management Purchasing

#### Trade

- Natural Gas Supply and Trade
- Electricity Trade (Front Office)
- Trade Optimization (Mid Office)
- Asset Management and Special Products
- Trade Support and Operation (Back Office)

## **Corporate Management**

- Contracts
- Law
- Corporate Communication

#### **Common Services**

- Information Systems
- Human Resources
- Administrative Affairs

#### **Production**

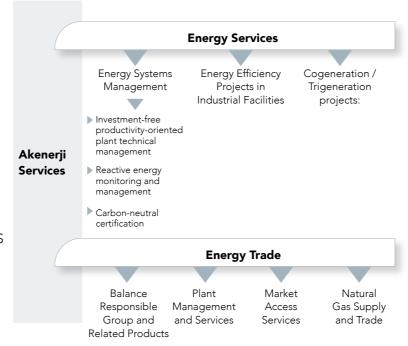
- Departions and Maintenance
  - 1 Natural Gas Combined Cycle Power Plant
- 1 Wind Power Plant
- 7 Hydroelectric Power Plants
- Project Management
- Environment, Quality and OHS
- ► Energy Services (ESCO)

# **Our Services**

#### **ELECTRIC PRODUCTION AND TRADE**

We provide services such as installing electric energy generation facilities, commissioning, leasing, generating electric energy, purchasing and selling electricity energy and/or capacity generated in wholesale markets.

As Akenerji, we adapt and add value to the changing conditions of our country and the world with our products and services through our innovative perspective other than electricity production and trade. In addition to electricity generation, we continue to make a difference in our sector with the service we offer to our customers.



#### **ENERGY SERVICES (ESCO)**

As Akenerji, we have proven our added value and awareness with our Energy Services, which we have taken as an innovative step in the energy sector as of 2015, thanks to the projects we have carried out and we have shown the guarantee to the sector that we will proceed with fast, innovative and competitive steps in this field. Together with the productivity enhancing project consultancy and turnkey application projects we offer to industrial plants, as a result of the free exploration and engineering works carried out in the facilities with the investment free and guaranteed energy efficiency services we offer to commercial buildings, we offer our working models that will provide maximum profit for both parties in accordance with the structure of the business.

- Cogeneration/trigeneration projects: projecting service turnkey construction operation & maintenance service.
- ▶ Remote Readout System: Establishment of monitoring, analysis and reporting infrastructures for all consumption items of customers such as electricity, natural gas, water etc.
- ▶ Energy Systems Management: Efficient use of energy is ensured by maintaining or improving optimum expected environment/ conditions in enterprises. Within the scope of Energy Systems Management; maintenance, management and development services are provided in areas such as lighting systems, motors, boilers, air conditioning systems, building envelope, windows, heat insulation, combustion and incineration systems, waste-heat applications, electric motors, cooling systems, etc.
- ▶ Renewable Energy Services: State-of-the-art, high-efficiency and environmentally friendly renewable asset management solutions. It serves in project, financing and operation issues related to investments such as wind power plant and solar panel where enterprises can generate the necessary energy for their activities.

Akenerji, one of Turkey's largest private energy companies, has achieved the first investment free and guaranteed energy efficiency projects in the sector in accordance with its innovative and pioneering position and has achieved record results.

Akenerji Energy Services has continued to be the company with the highest energy efficiency in its sector in 2019 with its projects carried out since 2015 with an average efficiency value of 35% in electricity energy and 55% in natural gas without any additional. In addition to the efficiency values it creates, it has also brought the comfort standards of the enterprises to the optimum level and added value to the facilities in which it operates by reducing the operating maintenance costs and prolonging the device life.

Akenerji Energy Services, which is the first and only name that proves that efficiency can be achieved without making investments and can offer guarantees in this field, prepare the service package for each plant planned to provide Energy Efficiency by providing Survey and Reporting, Analysis and Consultancy, Project Development, Finance, Maintenance, Facility Technical Operation, Verification services under one roof with integrated performance quarantee.

Akenerji Energy Services took its first steps in 2019 to carry out its activities in the public sector. Due to population growth, higher welfare levels, strengthening of the service sector and industrialization, our country's energy use is increasing faster than developed countries. Primary energy consumption was 129.7 MTEP in 2015 and showed an increase in the rate of 46% from 2005 to 2015. In this context, a new transformation process was initiated with the Law on Energy Efficiency, which entered into force in 2007. With the Energy Efficiency Strategy Document published in 2012, 2023 energy efficiency targets have been created and National Energy Efficiency Action Plan has been prepared and it has been envisaged to be implemented and monitored effectively.

Within the scope of the National Energy Efficiency Action Plan to be implemented between 2017-2023, it is aimed to reduce Turkey's primary energy consumption by 14% in 2023 with 55 actions defined in 6 categories including buildings and services, energy, transportation, industry and technology, agriculture and horizontal issues. It is envisaged to save 23.9 MTEP cumulatively until 2023 and to invest 10.9 billion USD for this saving.

In this context; Akenerji Energy Services continues its pioneering and innovative position in the sector with its services and business models, efficiency enhancing projects within the scope of Turkey Energy Efficiency Action Plan and private sector projects showing high success graph of Akenerji Energy Services in 2019 are planned to be moved to the public sector in 2020 as a result of ongoing negotiations with the Ministry of Energy.

In addition to technical business and optimization projects for commercial buildings, Akenerji Energy Services, which also conducts market requirements research, continues energy efficiency project studies in the industrial sector. In this context, it develops waste heat recovery projects with leading companies in its sector based on the "Law of Conservation of Energy" in 2019 by aiming to optimize the use of the resources of the companies.

Along with the efficiency projects and engineering services of Akenerji Energy Services, Akenerji family has proven again to be a pioneer and competent in every step of the energy sector.

#### **ENERGY TRADE**

In order to meet the needs of Turkey and its stakeholders with effective methods as Akenerji, we successfully continued Energy Trade procedures in 2019, which we started with innovative. In this context, we continue our activities regarding Virtual Power Plant Tender, Power Plant Management Services and Market Access Services at full speed.

#### **Virtual Power Plant Tender**

We have started to implement the first virtual power plant tender system in Turkey by tendering certain parts of the production capacity rights of Erzin Natural Gas Combined Cycle Power Plant for the use of consumers during the specified periods. With the Virtual Power Plant tender system, we aimed to increase the market volume by offering the option product to the participants in a period when the market volume on the counter decreased and the forecast decreased, and brought a new product to the market. Due to the product structure, we ensured the formation of the market price of peak /off-peak products that are not much processed. With the Virtual Power Plant Tender, the customer. who gained the right to use its production capacity without being affected by plant installation costs, failures, maintenance and crises during the specified periods, also leases the efficiency and flexibility of the state-of-the-art power It is sufficient for the company having the right to use to realize its production by notifying the hours required to generate electricity one day in advance. In addition, the company's risks such as "buy or pay", which are mandatory in the gas market, are eliminated. Another important advantage of the companies using this product is that the allocated

capacity is available every hour during the supply period. With the effect of the current country's energy production portfolio, in gas crises that are necessarily experienced every year, even though the plants producing with natural gas are interrupted, the allocated capacity provides services to the users of Virtual Power Plant every hour during the supply period. In addition, Virtual Power Plant users may not use the allocated capacity in periods when prices are low and benefit from low "Day-Ahead Prices" and have price forecasts by converting their high day-ahead prices to advantage.

#### **Balance Responsible Group**

With the aim of reducing imbalance costs in 2019, cooperation was achieved with one of the leading companies in the sector within the scope of balance responsible group activities. On this occasion, as Akenerji, we have increased the added value by increasing the volume and synergy of the balance responsible group we currently manage. In 2019, many new products were designed for the needs of the companies in the sector and important steps were taken in this regard. The increasing expectations, especially due to the changes in YEKDEM legislation in 2016, necessitated that electricity producers within the scope of YEKDEM whose production portfolios are not as large and diverse as Akenerji should receive support from companies with high market experience such as Akenerji. In this context, Akenerji conducted interviews with various companies based on the imbalance synergy amounts provided in the group with the activities of the Balance responsible group (DSG) in 2019 and designed and operated

new business models under the principles of financial sustainability by fixing the imbalance costs of many companies or sharing their risks.

#### **Power Plant Management Services** As Akenerji, we provide Power Plant

Management Services with our know-how, expertise, being the leading follower of the energy sector and being the first electricity production company established as an auto producer group in Turkey. We perform this service with our staff specialized in the commercial management of the power plants of the sector investors on the basis of maximum profitability, zero data input error risk, minimum imbalance cost and transparency principles. Due to its rapidly changing dynamic structure, we act with the awareness of providing high and sustainable added value for our partners and stakeholders by fulfilling the needs and requirements of the energy sector with large risks (such as insufficient collateral, incorrect data entry, legislative changes and imbalances management, reporting, reconciliation, billing errors) in the best way. Within the scope of our Power Plant Management Services, investors are provided with a wide range of services ranging from sectoral consultancy to regulatory follow-up, daily and monthly electricity market transactions (Day-Ahead Market - GÖP, Balancing Power Market -DGP, Day Market - GIP, reconciliation and billing consultancy, instruction management, etc.) to collateral management and reporting. By providing this service to the investors involved in the balancing group, we are offering better opportunities to our stakeholders with our expanding portfolio.

#### Market Access Services

With the market access service channel, it is aimed to solve the problems created by intensive internal processes, to reduce financial risk, to eliminate credit risks, to provide easy and reliable access with electricity markets, especially in foreign companies operating in the Turkish energy market, to sign contracts with other market players companies and to obtain credit approval. As Akenerji, we enable companies to access markets and trade more actively by providing market access services to our stakeholders requesting services. Market access customers can reduce counterparty risk to a single company by having Akenerji intermediary. They also have the opportunity to reduce their operational burden and provide easy access to overthecounter market prices. Thus, customers who receive this service increase the number of companies they can trade with and they can find a better response to the products they offer to the market and thus market liquidity increases.

#### **Natural Gas Supply and Trade**

As Akenerji, we offered to conclude a 6month Contract with Botas with our innovative structure and we separated positively from our competitors and realized our natural gas purchases in 2019 as follows; by providing natural gas with Botaş at an allocation rate of 70% for the first 6 months of 2019 and with private supply company at an allocation rate of 30%, a significant saving was created according to Botas tariff pricing in the first 6 months. The contribution of the semester contract is not only this benefit but also ensured that, as one of the companies that remained in the minimum Buy or Pay amount among our competitors thanks to low contract amount

and short term in 2019, which was very effective, the supply amounts were freely determined for the next 2 years.

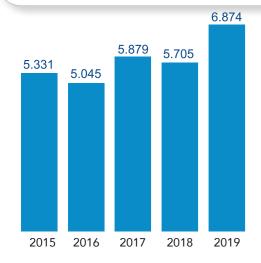
In the second 6-month period of 2019, it was decided to provide 100% natural gas supply as Akenerji for the second 6-month period considering the exchange rate increase in June and the expected formula structure and/or tariff of Botas for the second 6-month period in June.

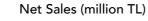
One of the developments in the natural gas market in 2019 was the establishment and development of Epiaş-STP (Organized Wholesale Natural Gas Market). The Natural Gas Market, which was put into operation for the first time in September 2018, completed the first Gas Year in 2019 and brought alternatives that would create an advantage for market users. On the other hand, in the light of our close monitoring and experience regarding the natural gas market, we have activated the Akenerii Natural Gas License for 2020 and created the 2020 edition to be more active in the Spot Market and have completed our necessary preparations. The contribution of Natural Gas License activation to Akenerii will pave the way for access to natural gas and markets where it can purchase under the most appropriate conditions by evaluating alternative priced spot natural gas opportunities from Epiaş system and/or any Importer/Wholesale Company on a daily/monthly/periodic basis. In addition to this, Akenerji will apply for Spot Import License at the beginning of the project and has started the necessary works with the vision of becoming the first company to import Spot Natural Gas and LNG (Liquefied Natural Gas) from European markets as soon as possible.

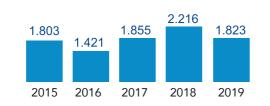
# **Our Economic Performance**

Consolidated Financial Indicators (TL million)	2015	2016	2017	2018	2019
Net Sales	1.803	1.421	1.855	2.216	1.823
Gross Profit from Sales	159	44	54	58	178
Operating Profit	140	64	-50	-45	89
Profit before Interest, Taxes, Depreciation and Amortization	296	234	128	213	346
Net Profit / (Loss)	-351	-549	-507	-1.556	-741
Total Current Assets	932	630	173	325	243
Short Term Liabilities	370	566	610	1.468	469
Working Capital	-13	-19	-96	-140	-157
Tangible and Intangible Assets	4.165	4.088	5.587	5.339	6.568
Total Financial Liabilities	3.106	3.274	3.217	4.512	5.099
Total Assets	5.331	5.045	5.879	5.705	6.874
Total Liabilities	3.696	3.944	4.011	5.244	5.913
Total Shareholders' Equity	1.635	1.100	1.868	461	961
Cash and Cash Equivalents at the End of the Period	477	434	45	19	88
Investment Expense	10	109	101	10	23
Market Capitalization at the End of the Period - BIST	693	620	664	459	795
Average Number of Employees	265	238	206	204	235

Total Assets (million TL)







2019 has been a critical year, which can be considered as a year of normalization after major fluctuations in our country and energy markets, but includes a number of important changes. Despite constraints such as the failure of high hydropower generation and public power plants to reach the expected levels due to their impact on prices, low trade volume in futures markets.

Akenerji has also significantly increased trade volumes in foreign electricity markets with a action plan framed by its expansion strategies and reached a transaction volume of 217 GWh, which is of great importance in terms of showing the direction of the trade focus, which is more than 157% increase compared to the previous year.

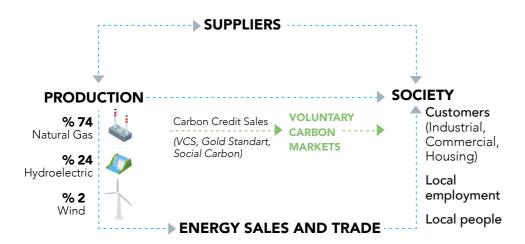
Akenerji, which expands its scope both through CEZ, the company partner, and through other service providers, increased trade volumes in the electricity markets of Greece, Bulgaria,

Serbia, Romania and Hungary Although not limited to the mentioned countries, this situation constitutes the first steps of Akenerji's long-term growth strategy and is of great importance for increasing the volumes of electricity trade between Turkey and EU countries both physically and financially. In line with this strategy, the development of the legal framework and the creation of an infrastructure that is fully suitable for the European Electricity Trade environment is another issue that Akenerji attaches importance to. For this purpose, institutional memory and culture increased by supporting with various training courses began to bear fruit with the signing of ISDA and EFET contracts.

	2019 (M/M/A/L)	2010 (MANA/L)	Change 9/
	2018 (MWh)	2019 (MWh)	Change %
GOP	4.008.047	3.300.576	-18%
SFK	851.694	954.794	12%
DGP	403.019	519.097	29%
GİP	127.941	187.258	46%
Net Production (HEPP+WPP)	870.110	1.036.099	19%
Net Production (CCGT)	3.833.394	2.759.391	-28%
Viop Volume	54.871	238.879	335%
International Transaction Volume	84.524	217.124	157%

/				
		Akenerji (MWh)	Market (MWh)	% Share
	GÖP	3.300.576	152.119.912	2%
	SFK	954.794	8.004.258	12%
	DGP	519.097	11.430.670	5%
	GİP	187.258	5.454.431	3%
	Net Production (HEPP+WPP)	1.036.099	120.231.675	1%
	Net Production (CCGT)	2.759.391	48.052.505	6%

# **Our Value Chain**



From our pre-production activities to our after-sales operations, all our stages are within the scope of our value chain. In addition to our evaluation of manufacturing, business and employee performance, we also address the work we do with our customers and suppliers as our responsibility for our chain of value.

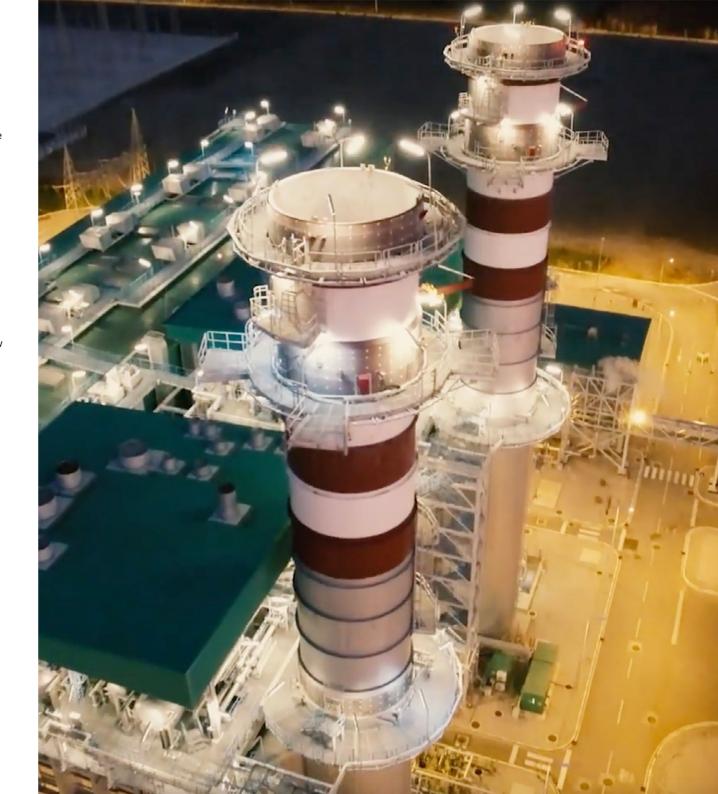
Our value Chain at Akenerji covers all the activities that add value from our production process to the energy sales phase in our Sustainability priorities. The criteria that make up our Sustainability priorities set out at the focus of our business, shareholders and society are integrated into every stage of our value chain. We collected all its processes in its value chain under the headings of Production, Society, Suppliers and Energy Trade and Sales by focusing on the principle of ethics and transparency. We have integrated these headings with sustainable development goals in the direction of our Sustainability priorities in the table on the side.



# **Our Supply Chain**

It is our priority to conduct our activities and establish a relationship with our suppliers in accordance with the law and the contracts concluded. We make supplier selections in accordance with the Supplier Selection and Evaluation Procedure that we have predetermined by observing national and international standards in our product and service purchases. When implementing this procedure, we question the existence of criteria such as compliance with Akenerji specifications and delivery time, price and form of payment, as well as their work on Quality, Environmental and OHS Management Systems. We expect our suppliers to share the vision of responsible approach to Occupational Health and Safety and Environment issues, and we prefer ISO 9001, ISO 14001 and ISO 45001 certificates among the suppliers that meet the selection criteria to the same extent. We re-evaluate our suppliers whose products and services we have completed with the criteria of quality, compliance with delivery time, payment method, price and whether they work in accordance with Akenerji, and if the evaluation is positive, we include the relevant supplier in our list of "approved suppliers". We continued to develop our Sustainability practices about our suppliers, one of the most important links in our value chain, by adding a new one every year.

- We have reviewed and started to evaluate the list of documents to be provided for each service procurement in order to document that the suppliers we have received services operate in accordance with the laws and regulations.
- We have begun to add to the contracts declarations that our suppliers are operating in accordance with the law.
- We have continued to make sure our suppliers are selected from the sites where our plants are located in our purchases of services and products.
- We have taken the service and products under control in terms of quality, environment and OHS with the general purchasing conditions created.
- We have enabled the requesting user to evaluate the service received on the system and contribute to the Supplier Performance System.
- All approved suppliers of Akenerji have been reviewed and suppliers that have never been worked after 01.01.2015 have been deactivated in the system. The current information of the company in Akenerji system has been updated by questioning the existence of quality certificates of the suppliers who continue to work.



# **Corporate Management**

# VISION

Maintaining its leading position in Turkey's energy sector and being one of the largest integrated companies guiding the sector.

# CORPORATE VALUES

Confidence Honesty Accountability Transparency Customer Satisfaction Social Responsibility



# MISSION

Providing reliable and long-term contribution to Turkey's energy needs by operating with a quality-oriented approach at every stage of the value chain.

# AKENERJİ EMPLOYEES' **ACTIVITIES**

Contact Persuading Result-oriented Collaboration Planning and Organizing Decision Making Customer Orientation

#### **CORPORATE VALUES AND PRINCIPLES**

#### Honesty, trust and equality

It is a fundamental principle to develop trust-based, stable, honest behaviour and communication with all persons and institutions involved in the business relationship. The principle of honesty and trust is essential in all external and internal relationships and processes. Our company creates a career development ground for its employees based on a healthy and safe work environment and opportunity justice. Our company does not discriminate against its employees, treats them equally and fairly. Our employees do not behave in an unsettling and harassing manner towards other employees or third parties they have relations with.

#### Responsibility

Our company takes care to fulfil its responsibilities to its customers, employees, suppliers and business partners, competitors, environment and society. Our employees keep their beliefs, worldviews and political evaluations completely separate from the working environment and the duties and responsibilities they fulfil. Our employees are responsible for protecting our company's name and reputation by strengthening it and using its resources efficiently. They avoid appearances, behaviours and actions that may harm this responsibility and put our Company in a difficult situation. Our employees act in a conscious and responsible manner for producing and saving more than they consume in the performance of their duties. We care about sharing the value created by the activities of our company with the country and society. Donations made within this framework and supported social responsibility projects are announced to the public.

## Confidentiality

Confidentiality and privacy of all commercial and personal information related to employees and customers in our company is essential. Our employees are aware of the confidentiality of non-public private information about our Company, other employees and stakeholders and must keep it. Such information is used only in accordance with the laws and regulations for the professional purposes required by the work and the task, and is shared only with the relevant authorities. Our employees may not provide or disclose any secrets, confidential information, information subject to intellectual property rights or related documents they have learned,

including or not in relation to their role, to unauthorized persons or authorities outside of the Company, including family members. This obligation will continue in the event that our employees have an end of their relationship with our Company.

#### Avoiding conflict of interest

Our employees avoid conflicts of interest and perform their duties in accordance with the principles of accountability and transparency. Situations where individual interests and the interests of the Company or related persons and institutions may conflict are observed and prevented. Our employees do not engage in any personal debt-credit relationship with parties directly or indirectly related to their duties, do not accept any benefits provided, and do not use the name of our Company for personal gain. In fulfilling their duties, our employees prioritize the self-interests of the institution and avoid all kinds of actions and behaviours that may mean benefiting themselves or their relatives by using the resources or reputation of the institution. Our employees do not bribe or take bribes when conducting their business with third parties. No entertainment, gifts, etc. will be accepted or given in excess of the intended value.

#### Compliance with laws and regulations

Our company conducts its activities in accordance with Ethics, law, legislation and regulations, with the understanding of Sustainability, respecting the environment, natural life and public health. Our employees also act in the light of these principles. Our company and its employees refrain from any conduct that is detrimental to free and fair competition. They effectively competes only in areas that are legal and ethical, and initiatives that serve fair competitive structure in business life are supported and encouraged by avoiding unfair competition.

#### Keeping of books and records

It is essential to keep the books and records of our company accurately and completely. All kinds of reports, presentations, financial statements and footnotes to be made public by our company and submitted to the competent authorities will be prepared and stored in accordance with the laws, legislation, internal regulations and Ethical Principles in a timely, complete, accurate, understandable and transparent manner.

## **OUR ETHICAL PRACTICES**

Regardless of the scope and qualification of duty for Akenerji, the Code of Ethics that every employee must comply with is published in the Document Management System that everyone can access. Considering the good examples in the world, the Ethical Principles prepared in accordance with Turkish legislation and legal order are implemented and followed up through the Ethical Principles Policy and Personnel Regulation within the company. The Staff Regulation, which are signed and distributed to all our employees, provide information about the necessity to comply with all company procedures and regulations including Ethical Principles, the rules that we have to comply with in the business environment and the sanctions in case of non-compliance with them. Our employees, who think that they see an inconsistent behaviour with our Ethical Principles, can report their complaints via etik@akenerji.com.tr e-mail address and ensure that the subject is investigated.

# **OUR ETHICAL PRINCIPLES**

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2018

Peter Jan KALAS

Independent Member of the

Board of Directors

#### THE BOARD OF DIRECTORS

The Board of Directors is the highest governing body responsible for tasks such as defining strategic objectives, determining corporate governance, identifying the people and financial resources needed, auditing the performance of the management, observing the compliance of the activities of the Company with the legislation, the Articles of Association, internal regulations and the policies created.

As of December 31, 2019, there are a total of eight members of the Board of Directors, two of whom are independent and three of whom are on the Executive Committee.

Ahmet Cemal DÖRDÜNCÜ, Chairman of the Board of Directors, Tomas PLESKAC, Vice-Chairman of the Board of Directors, Özlem ATAÜNAL, Member of the Board of Directors, Serhan GENCER, Member of the Board of Directors, Peter DOKLADAL, Member of the Board of Directors, Jaroslav MACEK, Member of the Board of Directors, Yahya Mehmet İzzet ÖZBERKİ, Independent Member of the Board of Directors and Peter Jan KALAS, Independent Member of the Board of Directors were elected to serve for 3 years in the general assembly on 17.04.2019.

The information of Akenerji Board of Directors as of 31 December 2019 is as follows:



Ahmet Cemal DÖRDÜNCÜ Chairman of the **Board of Directors** 



Tomas PLESKAC Vice Chairman of the **Board of Directors** 



Özlem ATAÜNAI \* Member of the **Board of Directors** 



0

Serhan GENCER\* Member of the Board of Directors. General Manager



Gender Distribution in the Board of Directors

Peter DOKLADAL\* Member of the Board of Directors. Deputy General Manager



Jaroslav MACEK Member of the **Board of Directors** 



Yahya Mehmet İzzet ÖZBERKİ Independent Member of the Board of Directors



**Age Distribution in the Board of Directors** 

2019

2016

50 Years and older 6

50 Years and older 7

Under 30 Years 0

Between 30-50 Years 1

Under 30 Years 0

Between 30-50 Years 2



There are members of the Executive Committee on the Board of Directors who are and are not on the Executive Committee. Members who are not assigned to the Executive Committee are selected from those who do not have any administrative duties in our Company other than the Member of the Board of Directors and who are not involved in the daily workflow and ordinary activities. 5 Members of the Board of Directors are not assigned to the Executive Committee. There are two independent members of the Board of Directors who are capable of performing their duties without any influence. In 2019, there was no situation that eliminated the independence of the said members.

In accordance with the Articles of Association of the Company, the Board of Directors meets at least four times a year when required by the Company's affairs and in any case. Each member has one vote on the Board of Directors. No Board Member voted against any resolution at the 2019 meetings.

The Members of the Board of Directors will allocate sufficient time for the business of the Company. If the member is a director or a Member of the Board of Directors in another company or provides consultancy services, it is essential that this situation does not lead to a conflict of interest and does not hinder the member's duty in Akenerji. Resumes of the members of the Board of Directors are included in the General Assembly information document and are submitted to the shareholders' information.

Although not included in the Articles of Association, the duties and powers of the

Chairman of the Board of Directors and the General Manager of the Company are clearly defined and separated in the organizational chart. While the General Manager and the Chairman of the Board of Directors are different people, the General Manager is also a Board Member.

The Board of Directors plays a role in maintaining effective communication between the Company and shareholders, eliminating and resolving disputes that may arise, and works with the Corporate Management Committee and Investor Relations Department for this purpose.

All performance indicators defined in the company are monitored and assessed. The success of the Board of Directors is assessed by the extent to which the main business objectives are achieved in line with the corporate objectives and by monitoring the success rate of the strategies. Since the performance indicators of the main business objectives are the result of the key performance indicators of all higher processes, including the Sustainability management process, the highest governance body also evaluates its own performance, especially in relation to economic, environmental and social performance.

The members of the Board of Directors, which is the highest governing body with the authority to perform transactions on behalf of the company and represent and bind the company, must be fully qualified. The selection of the members of the Board of Directors is made among professionals who have the competence and expertise to guide

Akenerji's economic, environmental and social strategies, taking into account their past experience and educational status. The Board of Directors of our Company is elected and performs their duties in accordance with the regulations related to corporate management that the Capital Market Board obliges to comply with.

#### Committees of the Board of Directors

The Board of Directors carries out its activities in a fair and responsible manner in accordance with the principles of transparency and accountability. Forming the internal control systems is one of the responsibilities of the Board of Directors by taking the opinions of the relevant committees of the Board of Directors in a way that will include the processes of risk management and information systems that can minimize the effects of risks that may affect the stakeholders of the Company, especially shareholders. In this context, the Audit Responsible Committee, the Corporate Management Committee and the Early Detection of Risk Committee affiliated to the Board of Directors have been established in accordance with the Capital Market regulations.

Detailed information about the working principles and responsibilities of the committees can be found http://www.akenerji.com.tr/en/ boardcommittees shortcut.

The information of the members of the Akenerji Board of Directors as of December 31, 2019 is as follows:

#### **Corporate Governance Committee**

Peter Jan KALAS	Chairman
Yahya Mehmet İzzet ÖZBERKİ	Member
Özge ÖZEN AKSOY	Member
Ondrej DVORAK	Member

#### **Audit Committee**

Yahya Mehmet İzzet ÖZBERKİ	Chairman
Peter Jan KALAS	Member

#### **Early Detection of Risk Committee**

Yahya Mehmet İzzet ÖZBERKİ	Chairman
Peter Jan KALAS	Member



#### Participation of Shareholders in **Company Management**

Shareholders of Akenerii can use the advice and instruction facilities to the highest governing body of our Company in the broadest sense in General Assembly meetings. "General Assembly Information Documents" prepared in a manner that will include the issues included in the Corporate Management Communiqué published by the Capital Market Board are published before the General Assembly meetings in order to ensure that this possibility can be offered for the benefit of all shareholders.

Our Shareholders may notify our Investor Relations Department in writing about the issues they want to be included in the agenda of General Assembly meetings. Members of the Board of Directors, other relevant persons, officials and auditors responsible for the preparation of financial statements are present at the General Assembly Meetings of the Company to provide the necessary information and answer the questions.

Each shareholder has the right to receive and examine any information that is not covered by trade secret and within the framework of the regulations in force. All shareholders, including minorities and foreign shareholders, are treated equally. The right to receive and review information has not been removed or limited by the Articles of Association or by a resolution of one of the Company's organs.

In addition, our website is prepared and updated in compliance with Turkish Commercial Code and Corporate Management Communiqué of Capital Market Board. In addition to this. stakeholders wishing to communicate with our Company may reach out to the relevant authorities through the e-mail address info@akenerji. com.tr e-or by filling out the Contact Form at http://www.akenerji.com.tr/en/ iletisimformu. The basic information on our website is also prepared in English for the benefit of international investors.

# CORPORATE **MANAGEMENT PRINCIPLES**

Akenerji recognizes that corporate governance quality is as important as financial performance in an environment of intense competition and change. This is because it increases the competitiveness of institutions by producing positive results such as high corporate management quality, low capital cost, additional financing opportunities and increased liquidity. Due to our corporate management approach, we take utmost care to implement the principles in the Corporate Management Principles of the Capital Market Board (CMB).

#### Relations with Shareholders and Investors

Relations with Shareholders and investors are carried out by our Investor Relations Department. This Section plays an active role in facilitating the protection and use of shareholding rights, in particular the right to information and review.

Questions forwarded to the Department are answered in writing or orally, with the exception of secret and confidential information, by consulting with the most authorized person of the relevant topic.

We organise periodic briefing meetings with all our stakeholders by creating an accessible and transparent communication platform, hold separate meetings on request, and answer questions via email. Requests from intermediary institutions, investor organizations and individual investors are answered in quarterly, periodic and intermediate periods by meeting and/or by e-mail if requested. Oral and/or written information requests of shareholders, potential shareholders, analysts evaluating Akenerji, academicians and students conducting company and sector-oriented research regarding our Company are met as soon as possible through the channels mentioned above, except for information that is not disclosed to the public, confidential and trade secret. Details related to the information contained in this report and the contact

information of our Investor Relations Department can be accessed from our website.

#### **Public Disclosure Policy**

Akenerji Information Policy includes which information will be disclosed to the public other than those determined by the legislation, how frequently and through which channels this information will be announced, how often the Board of Directors or managers will meet with the press, how frequently meetings will be held to inform the public, which method will be followed in answering the questions directed to our Company and so on.

Akenerji provides the information to be disclosed to the public in a timely, accurate, complete, understandable, interpretable and easily accessible way at low cost to help the people and organizations benefiting from this disclosure to make decisions through the following online channels:

Public Disclosure Platform



http://www.kap.org.tr

Company web site



http://www.akenerji.com.tr

Central Registry Agency E-MANAGEMENT Corporate Management and **Investor Relations Portal** 



https://www.mkk.com.tr/wps/portal/MKK/



# SUSTAINABILITY AT AKENERJI

We strongly reinforce our respect for society and energize life with the value we place on our employees who are our most important stakeholders. In doing so, we care about the development of all our stakeholders and together we create a sustainable economic value.



## Relations with stakeholders

Akenerji's stakeholders are the people, groups or organizations that are directly or indirectly, positively or negatively affected by the activities of our organization and that affect our organization. Within the scope of our sustainability strategy, we prioritize our stakeholders every year with the rigorous work of our Sustainability committee and evaluate our dialogue platforms and dialog frequency. Being aware that our stakeholders are a factor that affects our success in the first place, we have categorized our stakeholders according to the degree of interaction in order to manage our communication better. We are also constantly developing our dialogue platforms for an effective communication environment by being aware of the importance of our stakeholders' views and feedback on our activities.

As every year, our stakeholders, who were most affected by our activities and affected our corporate success in 2019, were reviewed again at the Sustainability Workshop held by our Sustainability Committee in 2019 and at the Sustainability Meeting held by our Senior Management.

Our stakeholders who are most affected by our activities and have the greatest impact on our corporate success:

**Employees, Investors,** Creditors, Suppliers, **Society, Customers** 

Stakeholders who are moderately affected by our activities and moderately affect our corporate success:

Local People, Competitors, **Private Sector, Regulatory** Institutions

Our stakeholders who are at least affected by our activities and have at least impact on our corporate success:

NGOs, Sectoral Associations, **Universities, Local** Administrations, Media



# The Communication Frequency and Dialogue Platforms with the Stakeholders

	Our Employees	5	Customers	Creditors	Local Peop Administra	ole and Local ations	Investors	Regulatory Institutions and Sector Associations	Our Suppliers	Society and Media
Stakeholder Dialog Platform	Quality, Environment and OHS Recommendation System	Individual Recommendation System	Customer Visits and promotional brochures	Annual monitoring reports	Face-to-face interviews	Informational leaflets and trainings	Meetings, informative correspondence and investor presentations	Meetings, opinion statements	Supplier assessment	Press releases and interviews
Content/ Application	Power Plant employees mainly convey ideas and improvement suggestions on technical issues by using this system.	By providing our employees with a platform to share ideas comfortably, anyone who can contribute to our company from the recommendations that come into the system is chosen and the suggestion owners are symbolically rewarded.	During the customer visits, our Akenerji Energy Services products are introduced and promotional brochures are distributed.	Our creditors are regularly provided with monitoring reports that include our environmental and social performance.	Local people and administrators are informed about the practices and developments in the cities where our plants are located.	possible hazards and protection methods that may	Responsible investors' questions about Akenerji performance and applications are answered. The Akenerj Sustainability Report is publicly published by preparing annual reports within the scope of CDP Climate Change and Water Programmes.	Studies are carried out on the development, liberalization of energy markets and the most fair and effective operation of regulations in the sector.	The availability of Quality, Environmental and OHS Management Systems in the supplier selection process is part of the assessment. Service procurement contracts are controlled by Environment, Quality, Occupational Health and Safety department and the conditions requested for environment, quality, OHS and information security are added.	Press releases containing our current practices and performance related to sustainability are published and information is provided in TV, newspaper, magazine interviews.
Interval of Dialogue	Recommendati ons are reviewed within the scope of monthly Quality- Environment- OHS Committee Meetings.	All suggestions are evaluated quarterly by the Social Committee, which we call "Akenerji".	It is performed during the customer visits.	Continuous information sharing and field visits are made.	Information is transmitted regularly and continuously.	Training is held annually for each power plant. Brochures and posters are distributed for information purposes in the schools.	Up-to-date information is constantly shared in the "Investor Relations" section of our company web page. In addition, the questions received at info@akenerji.com.tr are answered.	Dialogue is conducted with regulators such as the EPDK (Energy Market Regulatory Authority), the Ministry of Energy and the associations that are members by attending the meetings and giving opinions where necessary.	It is applied during each purchase process.	It is done when needed according to the agenda of our company and the market.

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#### 102-12, 102-13

# Memberships and Supported Initiatives

There are associations and organizations that are focused on different areas providing contribution to our sustainability approach and performance.

- (DEK-TMK)
- World Energy Council Turkish National Committee
- (EÜD)
  Electrical Producers
  Association
- (ETD)
  Energy Trade Association
- (HESİAD)
   Hydroelectric Power Plants
   Industry Businessmen
   Association
- (PETFORM)Oil Platforms Association
- (RESSİAD)
   Wind Energy and Water
   Power Plants Businessmen
   Association
- (TESAB)
   Electrical Industry
   Association of Turkey

- (PERYÖN)
   Association for Human
   Management of Turkey
- (TÜREB) Turkish Wind Energy Union
- Turkish Industry and
  Business Association
- (YASED)
  International Investors'
  Association
- The Union of Chambers and Commodity
  Exchanges of Turkey
- ► (TÜYİD) Turkish Investor Relations Society
- (iMMiB)
  Istanbul Mineral and
  Metals Exporters'
  Association

#### **BIST SUSTAINABILITY INDEX**

Since 2016, Akenerji has participated in the index where publicly-traded companies with a high level of corporate sustainability performances are included. This year, it has taken its place among the 56 companies included in the index due to the works it carries out and continues to improve in the criteria that constitute the index.

Entering the BIST Sustainability Index, which reveals how companies approach sustainability issues such as global warming, depletion of natural resources, water resources, health, security, employment, human rights, board structure, anti-bribery issues, and enables an independent research organization based in London to evaluate their activities and decisions in public, provides both prestige and competitive advantage to companies.



# CARBON DISCLOSURE PROJECT CLIMATE CHANGE AND WATER REPORTS

Akenerji is part of the Carbon Disclosure Project (CDP), a voluntary initiative worldwide. The Carbon Transparency Project is a worldwide voluntary initiative to collect and share information that will enable companies, investors and governments to take action against climate change.

As part of the project, companies explain climate change strategies and carbon emission quantities each year, thus providing a foundation for the creation of their own country report. The data compiled from the annual country reports are used to create global strategies to combat climate change worldwide. Our public report rating, which we presented in 2019 under CDP climate change, rose from C (Awareness) to B (Management) level and reached a performance above the European average C.

The CDP Water Programme aims to mobilise the private sector on water resources. In line with our vision of sustainability, we have been participating in the program since 2015, when the CDP Water Program first started to be implemented in Turkey, due to the need for the private sector to take responsibility for water management.

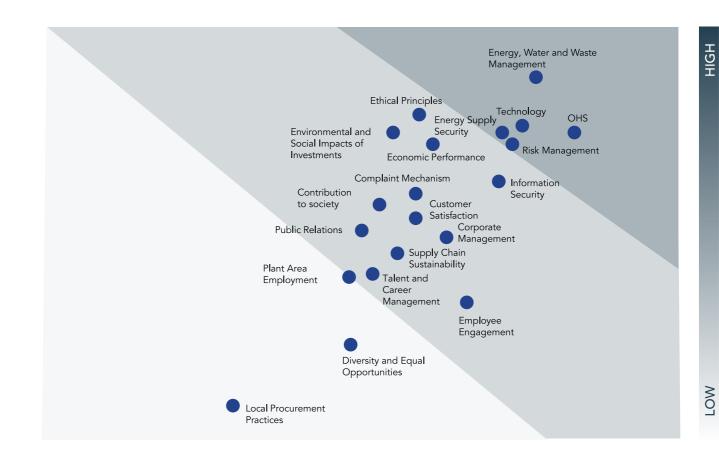
Companies participating in the project are rated in accordance with the methodology developed by CDP. Our 2019 Water Report grade is B-.

As Akenerji we take the key stakeholders' views every year to define our strategies on economic, social and environmental issues and consequently our objectives, and strive to create our future plans with our stakeholders. Under the leadership of the Sustainability Committee, our company's Sustainability priorities were updated with our primary stakeholders and employees at the beginning of 2018. A total of 204 stakeholders, including 26 external stakeholders and 178 Akenerji employees, were consulted with face-to-face interviews, workshops and surveys.

As a result of the studies conducted, our Sustainability issues are divided into 3 different categories in order to be able to use our performance more efficiently and to focus more comprehensively on the issues.

At the beginning of 2019, our priority issues were thoroughly revised in the large-attended Sustainability workshop carried out by the Sustainability Committee; each year, our update was decided to be made every two years, taking into account the frequency and nature of changes in industry and stakeholders, and approved by our senior management. In this context, it is aimed to update our priority issues at the beginning of 2020.

In the Sustainability priorities matrix on the side, you can see the priority issues for both our stakeholders and Akenerji.



LOW HIGH

Significance Degree for Akenerji

# **Our Sustainability Approach**

Sustainability for us is to create value for ourselves and our stakeholders; to minimize our social and economic impacts, especially environmental impacts, while creating this value, and at the same time to eliminate risks related to all areas where our company is affected.

Akenerii's current efforts to reduce carbon and water Akenerji has accepted as the footprints have been driven by main strategy the development of ongoing determination and investments in occupational health the development of innovative and safety, the development of a developments in the energy egalitarian approach in sector, to ensure that these employment, the promotion of women's employment in the energy improvements are in line with sector, especially Akenerji, and the the zero waste target, and the achievement of this goal by 2030 training activities for qualified has been adopted as a key policy. employment. Our Our **Environmental Employment Objectives Objectives Our Market Our Production** and Customer **Objectives Objectives** 14 LIFE BELOW WATER 17 PARTNERSHIPS FOR THE GOALS Akenerji, has aimed to Strategic decisions have been

increase the share of renewable sources in the production composition by 2030.

taken to develop studies for efficient production and consumption of energy. Akenerji has accepted as the basic policy to lead and support all kinds of developments that will enable the development of sectoral cooperation in the future period.











# **Environmental Targets**

Achieving Akenerji's environmental goals in compliance with global climate action and water conservation efforts is our core strategy. Akenerji's current efforts to reduce carbon and water footprints have been driven by ongoing determination and the development of innovative developments in the energy sector, to ensure that these improvements are in line with the zero waste target, and the achievement of this goal by 2030 has been adopted as a key policy.

- In 2019, approximately 225 trees were planted around Feke-1 HEPP, Feke II HEPP, Himmetli HEPP and Gökkaya HEPP.
- In 2019, the materials such as garbage accumulated in the Himmetli HEPP regulator lake area were cleaned at certain periods with a barge assembly established by the power plant personnel without additional costs and pollution was prevented.
- In Feke 2 HEPP, instead of taking water from the fire line using fire pumps, a direct line was drawn from the forced pipe for irrigation.
- In 2019, the central fish passage in Feke HEPP was completed and started to be used.
- 76.5 tons of waste recycling and disposal was provided as a result of waste management works in 2019.
- Sources in 2019, energy production due to natural gas consumption was reduced and all emissions were reduced by 251,011.63 CO2-e (tons).
- Within the scope of the commitment submitted to the Head Office of Nature Conservation and National Parks of the Republic of Turkey, the Ministry of Forestry and Water Affairs in order to determine the effect of Ayyıldız Wind Power Plant on the species of birds living in the region or migrating and mammals living in the area, Ornithological and Mammalian Monitoring Report studies started in the autumn of 2016 were also carried out in the spring semester of 2019. The results of the report were submitted to the official administration and then the final report was requested. The report is being prepared.







# **Production Targets**

As Akenerji, it is aimed to increase the share of renewable sources in the production composition by 2030. Balanced development of the global accessible and clean energy target with the need for economic growth targets constitutes the focal point emphasized in determining the production strategy. It is known that P&D and R&G activities will also contribute positively to increasing energy production to meet the demand and ensuring its compatibility with climate action objectives, especially water conservation. As Akenerji, it is aimed to increase the investment rate by reviewing the investment plans for these two areas in the future period. In addition to technical production, it is aimed to diversify existing developments in market activities and services.

- In Feke 1 HEPP, trees remaining in residential areas and extending close to the energy transmission lines were pruned and the possibility of starting a fire was prevented and warning signs indicating that they were dangerous were hung on their posts.
- We had a significant saving on Botas pricing in the first 6 months of 2019 by supplying 30% of the gas with Botas and 70% of the collection rates with the private procurement company.
- Due to the short term in 2019 and low contract amount, we allowed the supply quantities to be freely determined in the next 2 years as one of the companies that remains at the minimum amount of Buy or Pay among our competitors.
- In the second 6-month period of 2019, it was decided to provide 100% natural gas supply as Akenerji for the second 6-month period considering the exchange rate increase in June and the expected formula structure and/or tariff of Botas for the second 6-month period in June.
- In the light of our close monitoring and experience regarding the natural gas market, we have activated the Akenerii Natural Gas License for 2020 and created the 2020 edition to be more active in the Spot Market and have completed our necessary preparations.
- We increased the installed power of Ayyıldız Wind Power Plant from 15 MWm to 28.2 MWm with the addition of 4 turbines to 5 existing turbines.







# **Employment Targets**

The development of good practices that will contribute to the interpretation of the global decent work goal by expanding the scope of Akenerii's investments in the field of occupational health and safety has been accepted as the main strategy. In addition, it is among the institutional objectives to develop the egalitarian approach in employment and to create policies to encourage the employment of women in the energy sector, especially Akenerji. Intensifying relations with sectororiented educational institutions has also been accepted as a policy in order to secure the increasing need for qualified employment required by the developing energy sector.

- In order to adopt our Employer Value Proposition and Values for all our employees, a roadmap containing comprehensive training courses and practices to be implemented in 2020 has been created.
- In 2019, cooperation was established with many universities within the scope of Recruitment, Internship Process and Employer Value Proposition.
- "Akenerji Power Plant Operation and Management" course approved by Council of Higher Education (YÖK) was started to be given as an elective course by our Production Director at Bahçeşehir University and Akenerji activities and entire energy sector were transferred to students in academic field with the participation of 20 students for a period.
- In 2019, 'Expat Mentorship' program, which we carried out jointly with Bahçeşehir University, was realized with our Assistant General Director of Financing and Financial Affairs.
- In 2019, extensive studies on Fringe Benefits were carried out and the relevant procedures and practices were reviewed and improvements were made together with the opinions of our senior management.









# **Market and Customer Targets**

Both institutional and final consumers constitute the most important stakeholder group in the energy sector. Although it is thought that the production and supply of energy are completely dependent on consumption, that is, demand, it is understood that all kinds of improvement works in the energy sector are also dependent on increasing the awareness of the customer. For this reason, Akenerji has decided to participate more actively in the studies aimed at raising awareness of our corporate customers and final consumers in the future. As in the virtual power plant service offered to the market in 2017, strategic decisions have been taken to improve the productive production and consumption of energy in the coming period. However, market development activities to be carried out in such areas will be provided with platforms and collaborations to be established with the participation of all sectors. As Akenerji, we has accepted as the basic policy to lead and support all kinds of developments that will enable the development of sectoral cooperation in the future

- We have started to implement the first virtual power plant tender system in Turkey by tendering certain parts of the production capacity rights of Erzin Natural Gas Combined Cycle Power Plant for the use of consumers during the specified periods.
- Akenerji conducted interviews with various companies based on the imbalance synergy amounts provided in the group with the activities of the Balance responsible group (DSG) in 2019 and designed and operated new business models under the principles of financial sustainability by fixing the imbalance costs of many companies or sharing their risks.
- With the aim of reducing imbalance costs in 2019, cooperation was achieved with one of the leading companies in the sector within the scope of balance responsible group activities.

# **Our Sustainability** Management

The knowledge, awareness and leadership of the senior management of the Company are important in integrating our environmental, social and ethical responsibilities into the strategies and culture of our Company. The Board of Directors is ultimately responsible for the management of these issues affecting the reputation and profitability of our company. With the vision and leadership of senior management, an effective management model covering all our plants and in all decision-making processes has been adopted.

Responsibility of our sustainability management lies with our Sustainability Committee under the leadership of senior management. Our sustainability committee was established in 2013 in order to contribute to the management and reporting of the issues addressed within the scope of sustainability with a more holistic approach.

Our Sustainability Committee closely follows all Sustainability activities within Akenerji and ensures all coordination processes. It is working to ensure the realization of our goals and the dissemination of the Sustainability approach across our Company. The committee also aims to assess risks and opportunities, ensuring that the Sustainability Strategy and implementation tools are improved and employees are actively involved in Sustainability efforts through the training they receive. Our units, represented on the Sustainability Committee, play a key role in managing important and primary Sustainability issues within their areas of competence. While evaluating the risks and opportunities for important and primary issues in terms of sustainability, care is taken to address the environmental.

social and economic impacts of the actions to be taken in a holistic manner.

The Sustainability Committee monitors Sustainability issues throughout the year and tries to integrate performance indicators into its monitoring systems and make them part of Sustainability management. It also reports the assessments made at regular meetings and takes action to meet the needs that arise.

The Leader of the Board of Directors

# Sustainability Committee

The Units represented in this committee:

- Environment, Quality and OHS
- Trade
- Energy Services
- Legal
- Human Resources
- Corporate Communication
- Accounting and Tax Management
- Projects
- Procurement
- Strategic Planning and Risk Management
- Fuel Procurement & Trading
- Power generation (Power Plants)

Our company has adopted the mission of providing reliable and long-term contribution to Turkey's energy needs by operating with a quality-oriented approach at every stage of the value chain. Common values have been adopted in all our units and fields of activity. With the awareness that trust, honesty and stability are indispensable values for the energy sector, we take care to fully share accurate and up-to-date information with all our stakeholders with the perception of honesty, high ethical and professional value.

Environment, Quality, Occupational Health and Safety (QHSE) Directorate affiliated to Production Directorate is responsible for the management of environmental and social elements in our power plants. The units responsible for the project undertake the management of the OHS and environmental performance during the period from the project phase to the commissioning of the plants. Key environmental and social performance data in our power plants and project areas are reported to the Board of Directors. In addition to this, annual or periodic environmental and social performance monitoring reports and annual Sustainability reports we make to financial institutions arising from the contracts with which we are signatories are also reported to the Board of Directors through the Executive Committee. Processes such as recruitment, training and performance management related to our employees are managed by Human Resources Department. However, corporate management and business ethics issues are mainly the responsibility of Corporate Governance Directorate.



# **OUR QUALITY POLICY**

Akenerji and its affiliates, as one of the largest private sector electricity generation companies in Turkey, respond to national energy demand in a reliable, economic, environmentally sensitive manner and meet their increasing energy needs and expectations with the highest efficiency with its quality-oriented approach.

#### RESOURCE VARIABILITY **IN ENERGY**

We undertake to perform the following matters; being a leader in the competitive market by diversifying fuel sources according to changing world and country conditions.

#### **TECHNOLOGY SELECTION**

Increasing the performance of the company and the productivity of production by using the latest technology products in line with sectoral developments,

#### **COMPLIANCE WITH LAWS**

Closely monitoring the changing conditions in the energy sector and in our country and performing electricity generation and supply in accordance with the applicable laws,

#### **EMPLOYEE VALUE**

Supporting our employees to

become team members who can develop and renew themselves in a versatile way with the awareness that each of our employees is the biggest "energy source" for us and being an institution that sets an example in the sector with our quality labor force and everyone prefers to be a member,

#### **OUR SUBCONTRACTORS AND SUPPLIERS**

Selecting, evaluating, approving them according to the criteria we have determined, working in cooperation and supporting their continuous development,

#### **PROCESSES**

Ensuring the continuity and continuous improvement of our business processes by effectively managing the risks in line with the company objectives,

#### SUSTAINABLE DEVELOPMENT **GOALS**

Improving our processes in line with the United Nations Sustainable Development Goals,

#### **OUR STAKEHOLDERS**

Offering all our stakeholders the privilege of working with a transparent and reliable company.

# **INFORMATION SECURITY POLICY**



For the purpose of managing all kinds of risks and opportunities towards to our information assets and business continuity as Akenerji, one of the largest electricity generation companies in Turkey's energy sector; we undertake to perform the following matters;

#### **COMPLIANCE WITH THE** STANDARD TS ISO/IEC 27001

Establishing and maintaining an Information Security Management System that protects the confidentiality, integrity and accessibility of our assets in accordance with the requirements of Information Security Management System standard,

#### **COMPLIANCE WITH LAWS**

Complying with all legal regulations and contractual obligations relating to information security,

#### ASSESSMENT OF RISKS AND **OPPORTUNITIES**

Managing the risks that may arise on our information assets by evaluating them according to confidentiality, integrity, accessibility and identifying opportunities,

#### **AWARENESS**

Providing training to increase information security awareness,

#### **OUR SUBCONTRACTORS AND SUPPLIERS**

Providing appropriate awareness training on corporate policies and procedures related to its own business functions, determining the information security requirements with the supplier in order to reduce the risks related to the supplier's access to the organization's assets,

#### **CONTINUOUS IMPROVEMENT**

In line with our company objectives, managing information security risks and opportunities in an integrated manner with other management systems by creating a continuously improving and developing structure that does not allow the formation of new risks.

We carry out a significant part of our work within the scope of sustainability with the management systems listed below:

ISO 9001: 2015 Quality Management System

ISO 14001: 2015 Environmental Management System

ISO 45001: 2018 Occupational Health and Safety

**Management System** 

ISO 27001:2013 Information Security Management System

The document audits of ISO 9001:2015 Quality, ISO 14001:2015 Environmental Management System for Akenerji - Egemer Head Office, Ayyıldız WPP, Uluabat HEPP, Burç HEPP, Bulam HEPP and Feke I HEPP have successfully been completed and renewed. According to ISO 45001:2018 Occupational Health and Safety standard replacing OHSAS 18001:2007 Occupational Health and Safety standard, Head Office and all our plants are documented and Akenerji became one of the first companies to implement ISO 45001:2018 standard.

The continuity of ISO 27001:2013 Information Security Management Systems documents has been maintained.

ISO 50001:2018 Energy Management System studies have been started in all our power plants, energy consumption has been determined and targets have been determined to reduce consumption and make improvements by evaluating performance. It is envisaged that documents will be received in the first quarter of 2020.

Within the scope of our integrated management systems, the needs of the relevant parties and the parties related to the internal and external elements of our company have been determined and risk assessments are being updated in 2020.

Within the scope of management systems in 2019; our employees were provided with the internal training courses (120 person/hour) on sustainability and internal audit procedure issues and with the external training courses on Integrated Management System (ISO 9001-14001-45001) Internal Audit, ISO 50001 Energy Management System Internal Audit and ISO 50001 Energy Management System Awareness Training (983) person/hour) totalling 1103 person/hour training.



# The locations with documentation within Akenerji Elektrik Üretim A.Ş.

	ISO 9001: 2015	ISO 14001: 2015	ISO 45001:2018	ISO 27001:2013	ISO 14064-1:2016
Head Office	<b>æ</b>	<b>æ</b>	<b>æ</b>	<del></del>	
Ayyıldız Wind Power Plant	<b>æ</b>	<b>æ</b>	æ		
Uluabat Hydroelectric Power Plants	<b>æ</b>	<b>æ</b>	<b>æ</b>	<b>æ</b>	
Burç Bendi Hydroelectric Power Plants	<b>æ</b>	<b>æ</b>	<b>æ</b>		
Bulam Hydroelectric Power Plants	<b>æ</b>	<b>æ</b>	<b>æ</b>		
Feke I Hydroelectric Power Plants	<b>æ</b>	<b>æ</b>	<b>æ</b>		
Feke II Hydroelectric Power Plants	<b>æ</b>	<b>æ</b>	<b>æ</b>		
Himmetli Hydroelectric Power Plants	<b>=</b>	<b>æ</b>	<del>a</del>		
Gökkaya Hydroelectric Power Plants	<b>=</b>	<b>=</b>	<del>12</del>		
Erzin Natural Gas Combined Cycle Power Plant	<b>@</b>	<b>æ</b>	<b>a</b>	<b>@</b>	<b>æ</b>



# SUSTAINABILITY PERFORMANCE

- ► Environmental Awareness
- ▶ Occupational Health and Safety
- ► The Value We Give To People
- **▶** Social Projects



# **Environmental Awareness**

With the awareness that natural resources are limited, we are focusing on increasing the use of renewable energy sources, adapting to climate change, supporting zero waste and sustainability while working for today and the future to achieve better. We implement an effective environmental policy with maximum respect for biodiversity conservation in our areas of activity.



By being among Turkey's most established energy production companies, we prioritize solutions that minimize environmental and social risks throughout our operations and take into account issues that threaten the world. Recognizing our commitment to controlling climate change, we use our technology and technical expertise to minimize the potential risks of our activities to the environment and society. We take contemporary steps in the field of sustainable energy with our future-oriented work, proactive approaches and decisionmaking based on international standards.

As Akenerji, we pay attention to the protection of natural life and the prevention of environmental pollution in all our business processes in our facilities and we ensure that the highest amount of energy production is realized with the least possible resource use with advanced technology applications adopting the principle of efficiency in production.

Considering the feasibility production capacities of the existing renewable energy projects as electricity, it is possible to prevent approximately 1 million tons of greenhouse gas emissions per year.

This gives a benefit every year that is equivalent to clean air from around 42.2 million trees.

We will continue to increase the renewable energy capacity with the motivation given by this value we will add to the environment and maintain our leading position on Sustainability in the sector with high productivity production processes. Increasing consumer awareness and new legislation also reinforce the determination of our Company in this regard.

As Akenerji, we shape the decisions we make while producing within the framework of the philosophy of respect for nature. Thanks to the high-tech equipment we use, the investments we make in renewable energy and our cautious approach to environmental risks, we achieve harmony with the environment.

With our investments for clean and sustainable energy, we keep our sensitivity to "always carry out our activities in an environmentally friendly manner so that our tomorrow can be as bright as today" alive. Through this report, we provide you with the environmental performance and data of the Head Office located in Akhan, Istanbul with seven hydroelectric power plants, one wind power plant and one natural gas plant operating in 2019.

We were audited by ISO 14001:2015 Environmental Management System on the purpose of measuring, reducing and managing our impacts on the environment and documented it and we use reduction, removal, calculation and verification of ISO 14064: Greenhouse gas emissions standard for Erzin greenhouse gas monitoring, reporting and calculation. In order to fulfil our obligations regarding environmental legislation and regulations, we continue to work with Environmental Representatives who have internal auditor certificates of Quality, Environmental and OHS Management Systems in each of our plants and receive regular training courses in this regard. In addition, Integrated Management Systems Specialist is working in our Adana Plants and Senior Management Systems Specialist is working in our Erzin Plant. Our Environmental, Quality and OHS Directorate is responsible for each unit's regulatory activities, and all of our units are equally responsible for identifying and reducing environmental impacts that occur during these activities.





We undertake to perform the following matters; consistent continuation of current work on reducing the carbon and water footprint of Akenerji.





Following innovative developments in the energy sector, developing these improvements in accordance with the zero waste target and achieving this target by 2030.







Ensuring that all environmental targets are achieved in compliance with global climate action and water conservation efforts.

We address our water management, our impact on biodiversity, our emission and waste water discharge management within the framework of corporate risk management and review and evaluate our risks and opportunities related to these issues every year. For example, within the scope of ornithological monitoring carried out within the scope of legal legislation, insulation (between pole and jumper) was performed in the top phase of the Overhead Line in our Ayyıldız Wind Power Plant. By closing the gap between the direct and jumper, both the risk of birds entering and dying in this area was prevented and the jumps were prevented.

# **OUR ENVIRONMENTAL POLICY**



Akenerji and its affiliates aim to maintain environmentally compatible and efficient facilities for sustainable energy in a way that minimizes the environmental impacts of electricity generation activity in order to ensure that our tomorrow can be at least as bright as today.

#### RESOURCE CONSUMPTION

Using the energy and natural sources in the most efficient manner.

#### **GAS EMISSIONS**

Monitoring, reporting and verifying our greenhouse gas emissions with the Carbon Management System that we have established.

#### **WASTES**

Minimizing our wastes with the effective use of resources and disposing of the wastes collected in a systematic manner in accordance with the regulations,

#### **WASTE WATERS**

Discharging our wastewater in the most environmentallyfriendly manner that it will adapt to the environment in which it is discharged,

#### **CONTINUOUS DEVELOPMENT**

Ensuring the effective participation of all our employees with the commitment and leadership of our managers; continuously improving our processes that have an impact on the environment with the Sustainability approach by taking into account the prevention of pollution and the protection of the environment.

#### **COMPLIANCE WITH LAWS**

Fully fulfilling our legal obligations and responsibilities covering environmental aspects and other relevant requirements and working to determine new standards that will guide the future,

#### SUSTAINABLE DEVELOPMENT GOALS

Improving our processes in line with the United Nations Sustainable Development Goals,

#### **INFORMATION**

Making an effort to raise awareness of all stakeholders, especially our employees, about the sustainable environment.



# **Energy Management**

As Akenerji, the largest share of the energy we consume in our internal needs (heating, etc.) and in Erzin Natural Gas Combined Cycle Power Plant is natural gas energy.

As in the last year, we continued to evaluate our energy consumption data in two categories as non-renewable and renewable in order to make detailed analysis.



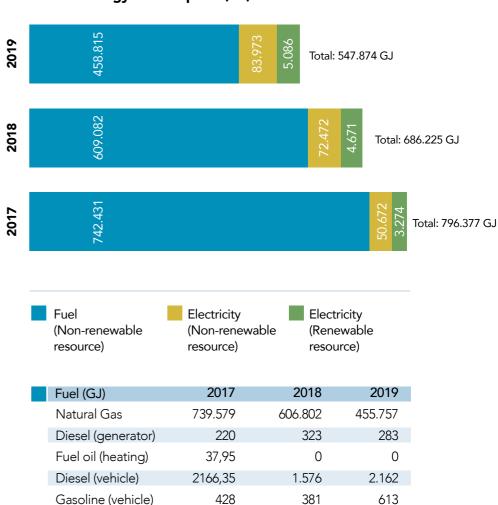
In addition to natural gas in the non-renewable energy category, we continued to include electric energy that we purchased externally and used it in our own consumption in 2019. Our renewable energy consumption includes the electricity produced in hydroelectric and wind power plants and used in our own internal consumption.

As Akenerji, we use natural gas energy in our internal needs (heating, etc.) and when producing electricity in Erzin Natural Gas Combined Cycle Power Plant. Natural gas is our source that has the largest share in the total energy we consume.

For a detailed analysis of our energy consumption data, we collected it in two categories as non-renewable and renewable source. In addition to natural gas in the nonrenewable energy category, we continued to include electric energy that we purchased externally and used it in our own consumption in 2019. Our renewable energy consumption includes the electricity produced in hydroelectric and wind power plants and used in our own internal consumption.

# **Internal Energy Consumption (GJ)**

TOTAL



742.431

609.082

458.815

# **Water Management**

According to the geographical conditions of the locations where our activities are carried out, our water needs are met from spring water, sea water or network water. Erzin NGCCP, which has the highest share in our water consumption, supplies the cooling water it needs for its operations from the sea. Water used in high-pressure steam and turbines is used in the process through high technology treatment plant by being pulled from the sea by reverse osmosis method. In our hydroelectric power plants, we use the energy of the water we receive from the surface sources to drain it back to the river or stream without any water loss in principle. We also consume water while meeting our needs such as hygiene and cleaning in the Head Office and power plants. When we look at these consumptions, the most water consumption is in Erzin NGCCP Plant.

Mansap Water Rights Reports prepared within the scope of the "Regulation on the Methods and Principles of the Signing of a Water Use Rights Agreement to Engage in Generation Activities in the Electricity Market" and approved in 2014 for hydropower plants in operation has been renewed in 2016 with the merger of Akenerji Elektrik Üretim A.Ş. and Akkur Enerji Üretim Ticaret ve Sanayi A.Ş. and Mem Enerji Elektrik Üretim San. ve Tic. A.Ş. The amounts of water specified in these reports will be complied with as long as our plants are in operation.

Water consump. (m <sup>3</sup> )	Source	2017	2018	2019
Erzin NGCCP	Seawater	2.731.448,0	2.194.201,0	2.470.081,0
Uluabat	Well	2.755	2.587	3.075
Feke I	ASKİ	437	80	296
Feke II	Spring water	234	245	249
Himmetli	ASKİ	1.162	1.563	1.301
Gökkaya	ASKİ	603	364	835
Burç	Well	220	227	270
Bulam	Spring water	88	84,7	87,5
HEPP Total		5.499	5.150,7	6.113,5
WPP Total	Well	54	71	69,6
Head Office	Sewage system	1.296	1.118	1092
Total		2.738.297	2.200.541	2.477.356

## Total Water Consumption (m<sup>3</sup> / year)

Including all power plants and headquarters



#### **Waste Management**

We continue to manage our wastes and waste waters arising as a result of our activities in order to prevent resource use and pollution according to the legal legislation and we carry out this management in our power plants and Head Office in accordance with our waste management plan. Within the scope of our Waste Management Procedure, waste records are filled in monthly by our environmental representatives assigned to the sites and within the knowledge of the Power Plant Manager/Power Plant Operation Manager, we transmit them to the Directorate of Environment, Quality and OHS in our Central Office and ensure their follow-up. We temporarily store the wastes generated as a result of our activities in our waste sites constructed in accordance with the Environment Legislation and when the wastes reach a certain amount, we continue to carry out the shipments to the waste companies licensed by the Ministry of Environment and Urbanization of the Republic of Turkey. We perform complementary studies according to the results of the audits by conducting internal audits in accordance with the legislation in order to protect the properties of our waste sites designed in accordance with the Environmental Legislation in our plants. In our temporary waste landfill sites located in our power plants, each type of waste is collected in separate compartments according to the categories determined by law, the name of the waste that can be stored in each compartment is written, there are fire extinguishers and warning signs for emergencies positioned on the reinforced concrete sealed floor. In addition, pool-shaped grills and absorbent material are kept in place for immediate intervention against leaks, spills and splashes.

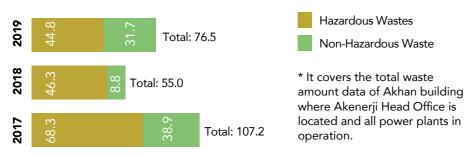
The wastes accumulated during waste management are sent to the organizations licensed by the Ministry of Environment and Urbanization under the control of the Environment Management Unit and the appropriate wastes are reused, recycled and recovered, and the inappropriate wastes are disposed of by incineration and regular storage. We declare to the relevant Turkish Environment and Urbanization Directorates the information that the wastes are shipped to the companies licensed by the Ministry of Environment and Urbanization at the times determined according to the legislation each year.

# **Waste Recovery and Disposal**

More than 76 tons of waste recycling and disposal were provided as a result of waste management works in 2019.

In 2019, we collected more than 10 tons of waste paper and packaging in Akhan and all Akenerji power plants and delivered them to the recycling company and municipality. As a result of the studies we carried out in Akhan and our plants, we sent 67.5 kg of waste batteries to Portable Battery Producers and Exporters Association (TAP) in 2019. Total paper consumption in our power plants and Head Office office was 2435 kg in 2019 and the papers stored temporarily by our employees were collected by the municipality and sent to recovery with the licensed company with which the municipality is contracted. Waste Management Plans of our Ayyıldız, Feke II, Burç, Bulam plants have been forwarded to the Provincial Directorate of Environment and Urban Planning and waste sites have been visited and examined by the Provincial Ministry of Environment and Urban Planning of the Republic of Turkey Subsequently, there were no deficiencies within the scope of the legislation and Waste Management Plans were approved.

# Total Waste Amount (ton/year)\*



# **Waste Water Management**

We discharge our wastewater in accordance with the criteria and methods specified in the regulations.

Except Erzin NGCCP, we accumulate our domestic wastewater in septic tanks in all our power plants and ensure that it is discharged with the vacuum truck of the municipalities or authorized companies. Apart from this, we transmit antifreeze wastewaters, wastewaters containing turbine washing chemicals, whose formation status varies according to the years, to the licensed recycling/ disposal facilities in accordance with the regulation.

In Erzin Natural Gas Combined Cycle Power Plant, we combine wastewater from domestic wastewater treatment plant, cooling water blowdown, industrial wastewater treatment plant, marine water reverse osmosis system in an discharge pit and discharge it so that it remains within the deep sea discharge parameter limit values. In addition, there is a remote wastewater monitoring station in our power plant and discharged water is monitored simultaneously by the Ministry of Environment and Urban Planning of the Republic of Turkey. In addition, we carry out wastewater internal monitoring by an authorized laboratory in accordance with the legislation within the scope of the Environmental Permit on Air Emission and Deep Sea Discharge and report it to the local administration. In 2016 the approval of 'Continuous Waste Water Monitoring Station' was obtained from the Republic of Turkey, the Ministry of Environment and Urbanization and cooling bluff water monitoring, which is analyzed every week, was extended to once every 3 months.

The monitoring we had carried out in this context since 2017 continued in 2019 and will continue in this way in the following years as long as there is no change in the legislation. Monitoring was carried out with divers in May 2019 in order to check whether there is a problem such as leakage, obstruction etc. in the deep sea discharge line according to the Environmental Legislation and recorded and reported with camera.

# **Waste Water Discharge**

	Source	2017	2018	2019
Waste Water	Erzin NGCCP (m³ / year)	13,059,358	9,973,806	9,937,508
Discharge				





# **Climate Change Management**

We are addressing our climate change management in an accessible, cost-effective and clean energy focus.

Accessible, cost-effective and clean energy has become the center of economic development and climate strategies.

Being aware of the importance of the energy production sector in the fight against climate change, we carry out our activities with our environment and climate change strategy. Within the scope of this strategy, as in 2018, we continued to focus on our efforts to provide carbon neutral electricity to our customers who have the goal of using modern and environmentally friendly technologies, increasing investment in renewable resources, reducing their emissions or neutralizing them. By maintaining high efficiency and low emission principles for each power plant, we aim for the highest possible operational efficiency using modern and environmentally friendly technologies and make innovations in our existing systems within the framework of our strategy.

The most prominent one of our studies with this understanding is the advanced technology incineration system we use in Erzin Natural Gas Combined Cycle Power Plant. With this system, we aim a high efficiency value of 58% in our plant which has high electrical energy generation capacity. Thanks to this system, we continue to work to reduce our greenhouse gas emission values, on the one hand, we achieve savings in natural gas consumption. In addition, together with the "Close Monitoring System" that we use in our power plants, we monitor the functioning of the operations and immediately detect and intervene the energy fluctuations that occur.

# **Carbon Certification and Emission Trading**

We also lead our industry in the field of emission trading. We carry out carbon certification processes for all our renewable power plants





Ayyıldız Wind Power Plant Bulam HEPP Voluntary Carbon Standard (VCS)

Akocak HEPP Burç HEPP Feke I, Feke II HEPP Uluabat HEPP Voluntary Carbon Standard and Social Carbon

Gökkaya HEPP Himmetli HEPP

Among these plants, Uluabat HEPP is the largest hydroelectric power plant with a dam registered according to the Voluntary Carbon Standard (VCS) as of the date of registration in Turkey. On the basis of the total production capacity of our existing renewable power plants (Ayyıldız, Akocak, Feke II and Uluabat), we aim to prevent greenhouse gas emissions up to approximately 1 million tons per year, in other words, to contribute to the fresh air provided by approximately 42.2 million trees.



# **Greenhouse Gas Management**

We represent greenhouse gas emission amounts arising from our activities in CO2-e (ton) equivalent. Almost all of the Scope 1 greenhouse gas emissions originate from the natural gas burned in Erzin NGCCP Power Plant. In addition, diesel and gasoline fuels consumed by rented vehicles for employees and natural gas used for heating purposes in buildings cause a small amount of Scope 1 emissions.

Scope 2 emissions are due to the electricity used in the Head Office in Istanbul and the electricity consumed in the power plants and purchased externally. During the supply of natural gas in Erzin Natural Gas Combined Cycle Power Plant, the amount of greenhouse gas emissions from natural gas used in boilers and burners in the gas heating unit in RMS station are reported under Scope 3.

Erzin NGCCP emissions performance, which is the only natural gas plant operating in 2019 and constitutes almost all of Scope 1 emissions, is satisfactory. Due to the increase in renewable resource energy amount, natural gas consumption reduced and there is a decrease of 251,011.63 CO2-e (ton) in the emissions of all power plants.



Emissions Per Unit Electricity Generation (tCO2-e/MWh)







# **Biodiversity Studies**

In accordance with the EIA Regulation, we monitor the legal processes by taking the necessary measures at both investment and operation stages in order to minimize the negative impact that power plants can have on the ecosystem. In addition to this, we continue to monitor the effects of power plants on the environment as well as the obligations to be provided within the scope of Environmental Legislation.

Performance, analysis and evaluation of the results of the environmental monitoring studies specified in the "Environmental Impact Assessment Report" and "International Environmental and Social Impact Assessment Report" carried out in a way to cover the pre-construction period of for Erzin NGCCP Power Plant since March 2011, as well as environmental and biological factors in this period and their effects arising from construction activities have been monitored by measuring noise, air quality and water quality. In addition, evaluation reports, management and monitoring plans have been prepared to guide the construction and operation period.

Within the scope of these monitoring processes, we monitor the air quality thanks to the air quality monitoring station as long as Erzin NGCCP is in operation and we carry out sea water quality monitoring activities in June and December every year.

In order to enrich the natural life in the regions where our power plants are located and to afforest the land, we carry out tree plantings and environmental rehabilitation activities in many of our fields. We increased the installed power of Ayyıldız Wind Power Plant from 15 MWm to 28.2 MWm with the addition of 4 turbines to 5 existing turbines.

For this reason, we submitted a commitment letter to the Head Office of Nature Conservation and National Parks of the Ministry of Forestry and Water Affairs of the Republic of Turkey for the preparation of the Ornithologic and Mammalian Monitoring Report in order to determine its effect on the bird species living in the region or migrating and mammal species living in the area. For this report, we have carried out studies covering 4 periods starting in autumn 2016 and ending in spring 2018, including the autumn and spring seasons, which are the migration seasons of birds. We prepared the 'Ornithological and Mammalian Monitoring Report' according to the data obtained as a result of the 15-day field studies conducted in the region and presented it to the relevant official authorities. At the request of the official institution, carcass monitoring study was carried out in the autumn season in 2018 and ornithological monitoring study was carried out in the spring period of 2019. The results of the report have been submitted to the Head Office of Nature Conservation and National Parks and the final report of all our monitoring works has been requested and the report will be prepared. After the report, it will be decided whether the monitoring activities will continue or not.



# **Environmental Training Courses**

As Akenerji, we provide training on environment, waste, energy and efficiency in order to increase the level of knowledge of our employees, improve their awareness and enhance their performance. In 2019, a total of 208 people/hour training was provided in power plants and central office on environmental issues. Environmental Legislation-Waste Management and Zero Waste Training Courses were carried out in order to realize a more effective waste management and to inform and raise awareness of the employees about the updated legislation in this context; Environmental awareness training courses were carried out in the Central office where environmental legislation practices and waste management in Akhan building are explained. We also informed our newly joined colleagues about the practices within the scope of environmental legislation within the orientation training. At the same time, in the Environmental training given in the power plant areas, the permits and environmental legislation obligations of each power plant were explained and the updates related to them during that year were shared with the employees. In addition to the environmental exercises conducted during the day, environmental exercises have been carried out in night shifts in each field this year unlike other years.

> 208 person.hours training courses were provided on **Environmental** issues

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# **OCCUPATIONAL HEALTH AND SAFETY POLICY**

The health and safety of our employees, which is our most important energy source, is our top priority. In our Occupational Health and Safety Policy, which we have created with this understanding, we consider each of the elements we have committed while continuing our activities.

# OCCUPATIONAL HEALTH AND SAFETY POLICY

Akenerji and its affiliates are based on occupational health and safety at all stages of electricity generation with an understanding adopting the philosophy of "Human First".

# **COMPLIANCE WITH LAWS AND TECHNOLOGY**

We undertake to perform the following matters; preventing injuries and health risks by providing a healthy and safe working environment in accordance with all legal obligations, other relevant conditions and technical developments,

## TRAINING AND AWARENESS RAISING

Raising awareness of all our stakeholders against possible risks and taking the necessary measures to protect them against these risks, organizing training courses to increase the awareness, knowledge and experience levels of our employees in order to conduct our works in a safer environment.

## **EMERGENCY**

Evaluating potential emergencies and preparing necessary action plans to ensure the safety of our stakeholders,

# SUSTAINABLE DEVELOPMENT GOALS

Improving our processes in line with the United Nations Sustainable Development Goals,

# **CONTINUOUS IMPROVEMENT**

Increasing the working conditions and the physical and mental well-being of our employees, continuously improving our occupational health and safety performance with risk assessments and achieving the sustainable goal of "Zero Occupational Accident" by ensuring the effective participation of all our employees with the commitment and leadership shown by our managers.

# **OHS Management in Supply Chain**

We show our sensitivity in the issue of Occupational Health and Safety to the employees in the companies where we receive services as much as we show our employees in our own organization. In this context, before starting the service procurement, we request the contractor companies to provide documents such as risk analysis in accordance with the provisions of the LPPD (the Law on the Protection of Personal Data), OHS training courses of the employees, occupational competencies of the employees, health reports of the employees, personal protective equipment, embezzlement reports of these equipment, safety data sheets of the chemicals they use and periodic control documents of the work machines they use. Thus, we aim to create a culture of occupational health and safety in the regional sense as well as in the institutional sense. In addition to this obligation, in order to keep the standards of subcontractors and Akenerji on OHS level, the Joint Health and Safety Unit (JHSU) services and the organization and follow-up of all OHS processes are carried out by Akenerji Environment, Quality and OHS Directorate itself, in this context, OHS services of the subcontractors, OHS training courses of their employees, accident reports, organization and followup of their professional training courses are carried out by us again. OHS Field Visits On the purpose of monitoring, evaluating, improving the works carried out within the scope of OHS and integrating them into the business plan, Our Directorate of Environment, Quality and OHS Directorate makes OHS audit visits in the power plants both in operation and in the project phase with or without notice. All findings detected in the field inspections carried out within the scope of OHS have been resolved and closed as of the end of 2019.

# **Occupational Health and Safety Training Courses**

We organize educational and informative training courses in order to protect the health and

safety of both our employees, suppliers and the people living in the area of influence of the power plants.

# **Training Courses for Employees**

As Akenerji, we provide various training courses (safe driving techniques, orientation training courses, employee representative training courses, first aid training courses) to our employees to improve performance beyond legal boundaries. In addition, we aim to provide training on OHS to our power plants and facility employees in particular and to ensure that they have the competence to prevent the risks that may occur at their source. In line with this goal, in addition to Basic OHS training, training courses such as work-specific work at height, hygiene, basic first aid and emergency team training courses are organized. In addition to general OHS trainings, we carry out special trainings for managers and senior managers in the plant; they also participate in the basic OHS trainings of senior management, and we inform our newly-recruited employees about OHS during the orientation. In addition, we are working for managers in our plants to develop competencies that will reflect the sensitivity of Akenerji on OHS to the field administratively. Since the energy sector is open to various crises due to its nature, our senior management attaches importance to OHS-oriented crisis management and communication and continuous improvement of its skills in this field.

> Total OHS training provided to employees in 2019: **6124** person.hour

	2017	2018	2019					
Total Training Hours	2,994	2,856	6,124					
Annual Average Training Hours per Person	15.5	16.2	30.3					
OHS Training Courses Provided to Subcontractors (person.hour)	1,799	1,581	2,161					

# **OHS Training Courses in Supply Chain**

First of all, we check that the contractors and sub-employers who will work in our fields of activity have received the necessary OHS trainings and inform our employees with a training video in which the field rules are provided, in Turkish and English, for approximately 15 minutes.

Training Hours (Subcontractor)

2161 person.hour

# **Awareness Raising Studies for Local People**

Awareness raising training courses are organized in the areas where the power plants are located, brochures and posters are prepared and distributed and we also publish these materials on our website in order to raise awareness of the local people about the methods of protection against possible dangers arising from HEPP in the areas where we operate. Within the scope of these training processes, we have reached a total of 1,257 students and 82 teachers by visiting the schools around our power plants in Adana, Adıyaman and Bursa in 2019. We have informed about the operation of Burç and Bulam HEPP operating in Adıyaman, Uluabat HEPP operating in Bursa and Feke I, Feke II, Himmetli and Gökkaya HEPP operating in Adana and the personal security measures to be taken by the public regarding hydropower plants in general and about renewable energy and electricity production. With our awareness raising training courses performed as of 2013, we have reached a total of 9,137 students and 543 teachers.

# **Our Occupational Health and Safety Performance**

Occupational health and safety, which is one of our sustainability priorities, has become a culture and has been adopted by all our employees and our performance in this field has been continuously increased and we have set the highest standards as our primary goal. We regularly monitor our indicators such as lost days, work accidents, traffic accidents and OHS performance during planned maintenance periods and implement the necessary measures to improve our OHS performance by integrating them into our business plans.

# **Occupational Accidents**

We record the frequency and weight rates of all occupational accidents experienced in our power plants. In 2019, a total of 3 time loss occupational accidents involving Head Office and Power Plant employees from Akenerji and its affiliates occurred. As a result of the accident investigations conducted following these accidents, actions have been determined and implemented to take the necessary measures. Occupational accident frequency and weight rates of the last five years are given in the following table:

# **Occupational Accident Frequency and Weight Rates**

	2017	2018	2019
Occupational Accident Frequency Rate	2.29	8.82	11.35
Occupational Accident Weight Rate	38.87	156.56	52.95

Number of accidents with day loss Occupational Accident X 1.000.000 Frequency Rate Total Working Hours Number of days lost due to occupational accident Accident X 1,000,000 Weight Rate Total Hours Worked

# **Vehicle Accidents**

In case of driving in difficult terrain conditions due to the nature of the work, the number and rates of vehicle accidents for hydroelectric power plant employees constitute a risk factor required to be monitored. There have been 4 car accidents in the past 2018 and for 2019, the total number of vehicle accidents including the data of our Head Office office is 3 and vehicle accident rate is 6.32.

# **Lost Day and Absence Rates**

Lost days and absence rates of our employees who have not been able to come to work due to health problems in the last 3 years are shown in the following graphs. Absence rate includes maternity leave and is calculated with the following formula.



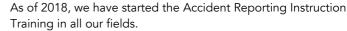
# **Performance Data for Planned Maintenance**

Planned maintenance is also carried out in our plants at varying regular intervals in order to ensure the quality of our work and the continuity of our activities. By performing periodic control and maintenance of major and critical equipment, we identify possible problem sources and take corrective and protective actions to prevent equipment and performance loss. During these works, as the contractor and the subcontractor carry out works at the site at the same time, the number of employees in the power plants can increase up to 10 times. Planned and comprehensive maintenance may involve more specific hazards and higher risk due to time pressure and non-routine work by nature. In 2019, as in previous years, our employees in Akenerji mainly took part in the planned maintenance of Akenerji plants.

Including the subcontractor and contractor personnel working hours, a total of 24,156 hours have been worked and our Akenerji employees have experienced 3 occupational accidents during the maintenance period.

# **Performance Data for Planned Maintenance**

	2017	2018	2019
Total Time Worked (person.hour)	23,692	25,742	24,156
Number of Occupational Accidents (Akenerji)	0	0	3
Number of Occupational Accidents (Contractor)	1	0	0



We have provided awareness of our employees with these training courses with the aim of increasing the awareness of Occupational Accident in the field and completing the Occupational Accident Notifications in full.

As a result of these training courses, the number of Near-Miss from our sites is as follows.

	2018	2019
ARES	0	3
BLM	1	5
BRC	0	0
ERZ	8	11
FK I	2	7
FK II	15	26
GKK	5	11
НММ	6	6
ULB	5	23

In addition, with the completed training, we have provided accurate data flow related to Occupational Accidents from the sites. Moreover, as a result of the increase in occupational accident feedback, we have reached more realistic data in our occupational accident frequency rate.



# The Value We Give To People



# **OUR HUMAN RESOURCES POLICY**

With our Human Resources Policy, which we have created with our understanding of doing business in which we focus people, we continuously improve our relations with our employees. We believe that providing our employees with an egalitarian, objective, fair, safe and sincere working environment is the most important factor in our success.

Akenerji Human Resources policy is based on the objective of making our employees, who have a direct impact on the Company's performance and the efficiency of all other resources, an innovative, creative, dynamic, able to manage changes, generate added value and be environmentally sensitive team.

Our modern Human Resources Policy, based on equal opportunities and respecting human rights, continued invariably in 2019.

We give everyone an equal opportunity.

We match the right job with the right employee.

We pay fair wages as a result of business evaluation.

We evaluate success with measured performance and competencies displayed.

We increase productivity by creating motivation and commitment.

We recognize and appreciate each other's successes in a timely manner.

We work in cooperation by ensuring the continuity of business peace.

We provide timely, accurate, clear and versatile information.

# **Competencies of Akenerji Employees**



## Communication:

Akenerji employee, who attaches importance to sharing information and ideas, makes use of various written and/or verbal tools for this purpose. Ensures a clear understanding of the information he/she transfers to individuals and/or groups and monitors developments related to the subject



# Persuading:

Akenerji employee carries out works within the framework of corporate culture in order for his/ her ideas and plans to be accepted, which he/she believes to be correct. Demonstrates appropriate attitudes and behaviours across different people, situations and tasks, through communication skills.



## **Result-oriented:**

A continuously development-oriented Akenerji employee works diligently to achieve and exceed the high goals he sets for both himself and his team. Develops new strategies by regularly measuring its progress towards achieving the goal.



# **Creating Collaboration:**

An Akenerji employee effectively achieves business objectives through solid collaborations between his/her work area and other work areas, teams, departments and units.



# Planning and Organizing:

An Akenerji employee creates action plans for both himself and his team so that the work can be completed in the best way in terms of quality and efficiency.



# **Decision Making:**

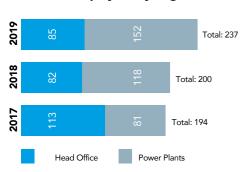
In the face of a situation, initial action of an Akenerji employee is to identify and understand problems and opportunities. Evaluates data from different sources. Identifies and acts on the approach that will lead to the most appropriate solution, taking into account the said data, constraints and possible consequences.



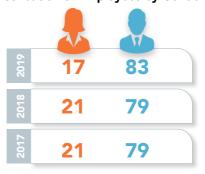
# **Customer Orientation:**

Acknowledging the needs and expectations of customers as the focus of all business processes, an Akenerji employee pays attention to the efficiency and development of customer relations for this purpose.

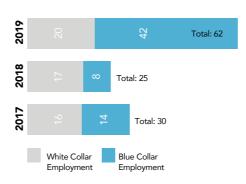
# **Number of Employees by Regions**



# Distribution of Employees by Gender (%)



# **Number of Newly-Recruited Employees**



# Number of Employees within the scope of External Service Procurement



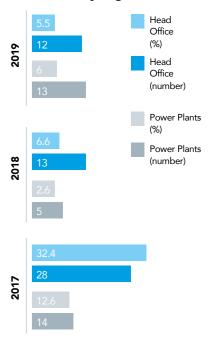
Gender	2017				2018				2019			
Distribution by Staff					W				1			
	% N	lumber	% Nu	ımber	% Nu	mber	% Nu	mber	% N	umber	% Nu	ımber
Senior Management	80	4	20	1	67	4	33	2	71	5	29	2
Medium Management	62	8	38	5	56	9	44	7	59	10	41	7
Nonmanagerial Wh.Collar	57	45	43	34	60	47	40	31	61	49	39	31
Operational Level	99	96	1	1	99	99	1	1	99	132	1	1
Total	79	153	21	41	80	159	20	41	83	196	17	41

	2017			2018				2019				
Seniority Distribution by Staff (%)	0 - 3 years (including year 3)	3 - 5 years (including year 5)	5-10 years (including year 10)	More than 10 years	0 - 3 years (including year 3)	3 - 5 years (including year 5)	5-10 years (including year 10)	More than 10 years	0 - 3 years (including year 3)	3 - 5 years (including year 5)	5-10 years (including year 10)	More than 10 years
Senior Management	20	20	60	0	33	17	50	0	33	17	50	0
Medium Management	7.7	7.7	53.8	30.8	6	0	63	31	6	0	63	31
Nonmanagerial Wh.Collar	39.2	16.5	31.6	12.7	35	19	35	12	35	19	35	12
Operational Level	33	11.3	38.1	17.5	27	16	39	18	27	16	39	18
Average	25	13.9	45.9	15.2	29	16	40	16	29	16	40	16

Number of Employees Hired (Excluding Temporary and Subcontractor)	% Nu	20 umber	<b>17</b>	umber	% Nu	20 Imber		mber	% N	20 umber		umber
Under 30 Years	46.7	14	10	3	48	12	16	4	27	17	6	4
Between 30-50 Years	33.3	10	6.7	2	28	7	8	2	63	39	3	2
50 Years and older	3.3	1	0	0	0	0	0	0	0	0	0	0

		20	)17			201	8			2019	7	
Labour Turnover Rate by Seniority (%)	0 - 3 years (including year 3)	3 - 5 years (including year 5)	5-10 years (including year 10)	More than 10 years	0 - 3 years (including year 3)	3 - 5 years (including year 5)	5-10 years (including year 10)	More than 10 years	0 - 3 years (including year 3)	3 - 5 years (including year 5)	5-10 years (including year 10)	More than 10 years
Head Office	41.5	29.6	31.7	20	7.50	3.80	1.30	3.80	4.85	3.64	4.85	1.21
Power Plants	2.9	33.3	10.4	11.1	1.70	0.90	1.70	0.00	5.19	0.74	2.96	0.74
Average	22.2	31.5	21.1	15.6	4.60	2.30	1.50	1.90	5.02	2.19	3.91	0.98

# Labour Turnover Rate and Number by Region



Number of **Employees Hired** 2019 (Excluding Temporary and Subcontractor) % Number % Number Head Office 15 9 10 6 Ankara Office 0 0 0 0 Erzin Power Plant 0 0 Burak 1 Power Plant 55 34 0 Burç Power Plant 2 0 0 **Bulam Power Plant** 0 0 Ayyıldız Power Plant 0 0 **Uluabat Power Plant** 0 0 0 Feke 1 Power Plant 5 0 0 Feke 2 Power Plant 3 0 0 Gökkaya Power Plant 2 0 0 Himmetli Power Plant 0 0 0 0

<sup>\*</sup> The information contained on this page as of 31.12.2019 and excluding BOD.

Performance Management Akenerji Performance Management System is one of our most important processes aiming at adopting of corporate goals by employees and strengthening our common corporate culture. The outputs of this process are taken into account in wage and premium studies, training and development planning, career and talent management processes. In 2019, the process and system changes made in the Goal Setting and Performance Evaluation processes were shared with all employees, the most important part of this process, feedback issue was emphasized and training courses were organized to the managers and employees before the performance interviews in 2019.

Wages and Fringe Benefits Akenerji's Wages and Benefits systems are compared annually with all markets and relevant groups and a competitive wage policy is aimed with regular reviews. In 2019, extensive studies on Fringe Benefits were carried out and the relevant procedures and practices were reviewed and improvements were made together with the opinions of our senior management. E-Payroll system has been established and personalized information has been provided in order to provide easy and fast access to our employees' payrolls.

# **Human Resources Management System**With continuously developing technology,

it has been decided to change the Human Resources Online Management System currently used. In this context, we have

come together with many companies operating in the software sector along with our group companies and have worked to select the most suitable platform for our company. Works have been started for the selected platform and it is planned to be put into operation in 2020 and brought together with the employees.

# **Recruitment Applications**

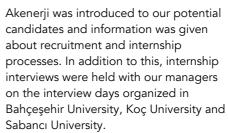
It is aimed to select candidates who are suitable for corporate culture and values during recruitment and placement, who have the knowledge, skills, experience and competencies required by the job and position, who will carry the company forward and thus serve strategies and objectives. In the recruitment and placement processes, modern evaluation systems are applied with an equal and fair approach for all candidates and the principle of selecting the right employee is followed. Interviews are conducted in collaboration with Human Resources and related department managers to evaluate basic and technical competencies together. In addition, the technical information of the candidates is measured with different evaluation methods specific to the position.

# **Employer Value Proposition Studies**

Due to changing world conditions, rapidly developing technology and updating our priorities, our vision, mission and values that guide us in our company have been re-studied by producing common sense in Search Conference with the participation of our employees and new suggestions have been created. Based on this suggestions, in order for all our

employees to adopt our Employer Value Proposition and Values, a roadmap containing comprehensive training courses and practices to be implemented in 2020 has been created.

In 2019, cooperation was established with many universities within the scope of Recruitment, Internship Process and Employer Value Proposition. "Akenerji Power Plant Operation and Management" course approved by Council of Higher Education (YÖK) was started to be given as an elective course by our Production Director at Bahçeşehir University and Akenerji activities and entire energy sector were transferred to students in academic field with the participation of 20 students for a period. Yıldız Technical University, Istanbul Technical University and Istanbul University participated in career days,





Istanbul Technical University Energy Summit was attended and a case study was carried out with the students. Throughout the year, our managers participated in ITU Electrical Machinery and ITU Productivity courses and shared their information about energy activities in the real sector.

It became the first energy company to participate in "Anlatsın Kariyer" Platform where companies from many different sectors shared its internal processes and potential candidates were informed about Akenerji by our employees.





# **Training and Development Programs**

With competency assessment, talent management and performance evaluation processes carried out by Akenerji Human Resources, each employee was offered opportunities for personal and professional development. When planning development for our employees, our goal is to support continuous learning-development and ensure that the skills gained are reflected in the business results.

In 2019, our managers participated in the Multidimensional Leadership training program, which is the first level executive development program, the Executive Development program for middle level managers and the Leadership Development program organized in cooperation with Sabancı University and the Market Oriented training, which is the prerequisite of this program. In addition to these training courses, a financially weighted simulation program called Managing Today's Operation has been carried out. YBL Professional Training was carried out with a New Leader Association, the aim of which is to identify young professionals between the ages of 25 and 35 who continue their careers in the leading institutions in Turkey, to meet each other and to support them to rise faster within their institutions. Our employees who started the Academic Program, which is the first step of the training, will continue their training with Mentoring, Coaching and Business World Meetings in 2020. Our Philharmonic Mentoring Program was implemented in 2015 to support our employees with high potential and performance to improve themselves, was also implemented in

2019. Once the mentors and selected mentees, all of which consist of senior managers, have been identified, they have received the necessary training on the functioning and roles of the program. Mentees continue to gain new information about business life and add value to our company by holding regular meetings with mentors they are paired with.

In 2019, our senior managers mentored talents in different sectors within the scope of the Mentoring program we carried out jointly with a New Leader Association. With a New Leader Association, the external mentoring process is planned to continue in 2020. In 2019, 'Expat Mentorship' program, which we carried out jointly with Bahçeşehir University, was realized with our Assistant General Director of Financing and Financial Affairs.



In addition to the leadership and mentoring practices, programs investing in the personal development of our employees were also carried out in 2019.

Following the changes in the Financing and Financial Affairs organization and business processes, the Together We are Strong training program was organized to help managers and team members in order for them get to know themselves and each other better.

A training course has been designed for the development of Image Management and Influence competencies in Professional Life.

Daily short videos from the Learn Every Day Online Training platform, which provides online content on different topics, and content aiming to raise awareness were brought together with our employees. In addition to personal development and management development training courses, our employees have been supported by domestic and international technical trainings / seminars and MS Office Applications training courses organized for the needs requested by themselves and their managers.

30 of our employees participated in the English training course, which was designed as a mixed education model in 2019, and the training program will continue in 2020.

Our company, which continues its activities with the aim of continuous and common improvement, started a project in 2018 called 'Conversations on Business and Life' and provided our employees with the opportunity to be together with very important names that made a difference with their work in their fields of expertise.



Mehmet Auf, a behavioural science researcher, screenwriter, actor and author, shared his experiences from both academic and working life in the Conversations on Business and Life held in 2019. Kaan Sekban, who is a comedian and the writer of the book "Tebrikler Kovuldunuz" elected as the best HR, management and leadership book of the year, inspired our employees with his extraordinary career journey. Özge Ersu, an author, travel expert and radio documentary producer, contributed to our cultural development by giving information about Istanbul's historical places to our employees with his presentation accompanied by a Bosphorus tour.

In 2019, a two-day orientation program was applied to our interns who carried out their internship during the summer period with the "Intern Orientation Program" targeted not only for the

development of our employees but also for the development of our interns. After carrying out the orientations where all the information about our departments was given in the central office on the first day, our interns completed the orientation by learning the whole company, not only the department where they interned.

Akenerji Social Committee, which was formed with the participation of Human Resources and our volunteer employees, continued its activities in 2019 in order to increase our employee loyalty and to strengthen our employees' communication with each other and senior management. Internal social meetings and employee meals, different concept birthday organizations that change every month, special day celebrations such as Mothers Day, Fathers Day, Women's Day, Teachers Day, museums and exhibition tours were held.

# **Corporate Social Responsibility Projects**

Our long-standing projects that we have maintained for many years as Akenerji continued in 2019, as environmental and new and industryleading social responsibility projects.



# **Highest Energy Corporate Team!**

As Akenerji Human Resources, the activities carried out with the awareness of Social Responsibility that we have maintained for many years continued in 2019. Akenerji, which always supports social responsibility projects especially in the field of education and children, participated in the Istanbul Marathon with the motto "Söz Konusu Eğitimse Yardıma Koşarız" with Darüşşafaka Society and collected donations for the students of Darüşşafaka. With this participation, he received the "Highest Energy Corporate Team" award as one of the 10 awarded institutions at the Medal Ceremony held by Darüşşafaka.



# We Listened to the Silence of Our Hearing-Impaired Children!

Together with the Association for Child Education established in 2019 to ensure that individuals with hearing impairment receive quality education within the scope of World Disability Day, "Listen to My Silence" training was held for our employees in our awareness and sign language workshop about hearing impaired individuals. With the Wish Tree Project carried out with the Association for Child Education, the New Year wishes of 81 hearing-impaired children came true by Akenerji employees and presents were given to the children during the association visit with our volunteer colleagues. In addition, we support our children in need of education on behalf of our employees by donating to the Association for Child Education for our personalized birthday gifts that we carry out every year in order to celebrate the birthdays of our employees.



# Akenerji continues to support students.

With the support of Akenerji employees, we have brought hundreds of children together with sports equipment with the cooperation of District Governorship in Feke district of Adana where FEKE-1 and FEKE-2 plants are located. Materials enabling students to meet sports were made available to children in Feke schools.



# Akenerji is Premium Sponsor at Turkey Energy Summit

The summit held in Antalya under of the Ministry of Energy and Natural Resources, the Republic of Turkey, brought together the leading names of the renewable energy, electricity and natural gas sector. General Manager Serhan Gençer gave a speech at the opening of the summit.



# Our energy is in the sky!

Children in Saimbeyli District of Adana, where Akenerji's Himmetli and Gökkaya power plants are located, met again this year at Kite Festival. Children of all ages waved kites in the sky as a gift from Akenerji.





# Their happiness is our happiness!

In the regions where Akenerji's Himmetli and Gökkaya power plants are located, materials such as winter sets, sports equipment, toys and books have been provided to primary and secondary school students with various activities carried out in cooperation with Saimbeyli District Governorship and Security Chief Office.





# "Premium Sponsor" at ISTRADE

Akenerji was one of the sponsors of ISTRADE, which continued for two days in Istanbul in 2019. 4. **Energy Supply Summit** ISTRADE was held on April 29-30, 2019 under the Ministry of Energy and Natural Resources with the support of the EPDK and brought together all the actors of the energy supply chain.

# "Energy Sponsor" of **AYD Shopping Economics Summit**

The summit held on March 5, 2019 at the Swiss Hotel brought together mall investors, retailers and companies supporting the industry. Akenerji's Production Director Can Gülcan made a presentation titled "Investment-free energy efficiency applications in shopping centers" at the summit.

# **Projects Implemented with the Consciousness of Living** with Local People

In regions where our hydropower plants are installed with careful, sensitive and trust-based management, our practices to raise awareness and protect the area from potential hazards remain at the disposal.







Accordingly, brochures and posters on possible hazards and protection methods related to HEPP were prepared and distributed in 2019 in public areas such as headquarters and schools around hydropower plants in Adıyaman, Bursa and Adana. Akenerji plans to increase the number of provinces where awareness-raising activities will be carried out and the number of materials to be distributed in the coming years.

Hydroelectric Power Plants Awareness Training was performed again by Akenerji in 2019 in village schools in Adana, Adıyaman and Bursa where hydroelectric power plants are located and 1257 students and 82 teachers were provided with the training courses. A total of 9137 students and 543 teachers have been provided with awareness-raising training courses since 2013.



# STRATEGIC SUSTAINABILITY OBJECTIVES

The objectives set for the evaluation of our 2019 goals and for 2020, which are set out in line with our policies, are listed in the table on the following pages.

Target Area	Our Targets for 2019	Realization Status in 2019	2019 Status Evaluation	Our Targets for 2020
Sustainability	Preparing our 2018 activity period Sustainability report according to GRI Standards principles, taking into account the United Nations Sustainable Development Goals.	TU	Our 2018 activity period Sustainability report has been prepared according to GRI Standards principles, taking into account the United Nations Sustainable Development Goals.	Preparing our 2019 activity period Sustainability report according to GRI Standards principles, taking into account the United Nations Sustainable Development Goals.
Management	Preparing our reports for the 2018 activity period under the Carbon Transparency Project (CDP) Climate Change and Water Program.	TU	Our reports for the 2018 activity period under the Carbon Transparency Project (CDP) Climate Change and Water Program have been published.	Preparing our reports for the 2019 activity period under the Carbon Transparency Project (CDP) Climate Change and Water Program.
	The closing percentage of Corrective Action Requests (DFTs) opened in Quality, Environment and OHS internal audits will be at least 75% at the end of the year.	TU	The year-end closing percentage of Corrective Action Requests (DFTs) opened in internal audit was realized as 95%.	The closing percentage of Corrective Action Requests (DFTs) opened in Quality, Environment and OHS internal audits will be at least 75% at the end of the year.
	The closing percentage of Corrective Action Requests (DFTs) opened in environmental internal audits will be at least 75% at the end of the year.	TU	The closing percentage of Corrective Action Requests (DFTs) opened in environmental internal audits was realized as 100% at the end of the year.	The closing percentage of Corrective Action Requests (DFTs) opened in environmental internal audits will be at least 75% at the end of the year.
Management Systems	The closing percentage of Corrective Action Requests (DFTs) opened during OHS site visits will be at least 75% at the end of the year.	TU	The closing percentage of Corrective Action Requests (DFT) opened during OHS field visits was realized as 91.5% at the end of the year.	The closing percentage of Corrective Action Requests (DFTs) opened during OHS site visits will be at least 75% at the end of the year.
	Providing the requirements of ISO 45001:2018 standard instead of OHSAS 18001:2007 which was repealed in all power plants and obtaining the certificate.	TU	ISO 45001:2018 certificate was obtained instead of OHSAS 18001:2007 which was repealed in all power plants.	Obtaining ISO 50001:2018 Energy Management System certificate in all power plants.
	Reporting and verification of 2018 greenhouse gas emissions under ISO 14064.	TU	Reporting and verification of 2018 greenhouse gas emissions under ISO 14064 were completed in 25.03.2019.	Reporting and verification of 2019 greenhouse gas emissions under ISO 14064.

TU: Target fully reached KU: Target partially reached HU: Target not reached

Target Area	Our Targets for 2019	Realization Status in 2019	2019 Status Evaluation	Our Targets for 2020
	Quality (person.hour/year)20Head Office20Ayyıldız WPP5Uluabat HEPP10Bulam HEPP5Burç HEPP7Feke I HEPP6Feke II HEPP7Himmetli HEPP10Gökkaya HEPP6Erzin NGCCP10	TU	Quality(person.hour/year)Head Office24,5Ayyıldız WPP6Uluabat HEPP22,5Bulam HEPP5Burç HEPP9Feke I HEPP9Feke II HEPP10,5Himmetli HEPP9Gökkaya HEPP10,5Erzin NGCCP15	Quality (person.hour/year)20Head Office20Ayyıldız WPP5Uluabat HEPP12Bulam HEPP5Burç HEPP7Feke I HEPP6Feke II HEPP7Himmetli HEPP10Gökkaya HEPP6Erzin NGCCP12
Quality, Environment and OHS Training	Environment (person.hour/year) Head Office 13 Ayyıldız HEPP 12 Uluabat HEPP 25 Bulam HEPP 10 Burç HEPP 14 Feke I HEPP 12 Feke II HEPP 12 Himmetli HEPP 12 Gökkaya HEPP 12 Erzin NGCCP 15	TU	Environment (person.hour/year) Head Office 26 Ayyıldız WPP 15 Uluabat HEPP 35 Bulam HEPP 13 Burç HEPP 23 Feke I HEPP 15 Feke II HEPP 13 Himmetli HEPP 18 Gökkaya HEPP 13 Erzin NGCCP 38	Environment (person.hour/year) Head Office 13 Ayyıldız WPP 12 Uluabat HEPP 25 Bulam HEPP 10 Burç HEPP 14 Feke I HEPP 12 Feke II HEPP 12 Himmetli HEPP 12 Gökkaya HEPP 12 Erzin NGCCP 15
	OHS (person/man) Head office and Ankara 2 Office Power Plants 12  Performing safety tool box meetings of 60% of the number of annual maintenance days planned by the team managers among our plant employees during the annual scheduled maintenance.	TU	OHS (person/man) Head office and Ankara 2,9 Office Power Plants 14  During the annual scheduled maintenance, a safety tool box meeting was held with an average of 93% of the planned number of annual maintenance days.  ARES - 70% FK II - 100% BLM - 70% GKK - 92% BRC - 100% HMM - 100% FK I - 94% ERZ - 100% ULB - 100%	OHS (person/man) Power Plants 13  Performing safety tool box meetings of 70% of the number of annual maintenance days planned by the team managers among our plant employees during the annual scheduled maintenance.

TU: Target fully reached KU: Target partially reached HU: Target not reached

Target Area	Our Targets for 2019	Realization Status in 2019	2019 Status Evaluation	Our Targets for 2020
Awareness Raising Training	Organizing 7 seminars in total in each HEP in order to raise the awareness of students and teachers about the possible dangers and warnings related to HEPP.	TU	At least 7 seminars were held in total in each HEPP in order to raise the awareness of students and teachers about the possible dangers related to HEPP and the warnings related to them	Organizing 7 seminars in total in each HEP in order to raise the awareness of students and teachers about the possible dangers and warnings related to HEPP.
	Conducting 1 Local People Awareness Seminar in Adana, Adıyaman and Bursa within the scope of DSI (State Hydraulic Works) Environmental Protection and Security Measures.	TU	Within the scope of DSI Environmental Protection and Security Measures, 1 Local People Awareness Seminar was held in Adana, Adıyaman and Bursa.	Conducting 1 Local People Awareness Seminar in Adana, Adıyaman and Bursa within the scope of DSI (State Hydraulic Works) Environmental Protection and Security Measures.

TU: Target fully reached KU: Target partially reached HU: Target not reached



# **AKENERJİ SUSTAINABILITY REPORT 2019**

GRI STANDARDS CONTENT INDEX-CORE



GRI ST	ANDART	TOPICS	ANSWERS AND PAGE NUMBERS
	FOUNDATION 2016 GENERAL DISCLOSURE 2016		
Corpora	te Profile		
102-1	Name of the organization	Akenerji Elektrik Üretim A.Ş.	3
102-2	Activities, brands, products, and services	About Us	9
102-3	Location of headquarters	Miralay Şefik Bey Sok. Akhan No:15 Gümüşsuyu Mah. Beyoğlu	-
102-4	Location of operations	Turkey	9
102-5	Ownership and legal form	About Us	9
102-6	Markets served	About Us	9
102-7	Scale of the organization	About Us	9
102-8	Information on employees and other workers	The Value We Give to People	43-44
102-9	Supply Chain	Our Supply Chain	15
102-10	Significant changes to the organization and its supply chain	About Us	9
102-11	Precautionary Principle or approach	Sustainability in Akenerji	30
102-12	External initiatives	Sustainability in Akenerji	24
102-13	Membership of associations	Sustainability in Akenerji	24
Strategy			
102-14	Statement from senior decision maker	Message From Our General Manager	4
Ethics ar	d Integrity		
102-16	Values, principles, standards, and norms of behavior	Corporate Values and Principles, Our Ethical Practices	16-17

GRI ST	TANDART	TOPICS	ANSWERS AND PAGE NUMBERS
Govern	ance		
102-18	Governance structure	Corporate Management, The Board of Directors	16-18
Stakeho	der Engagement		
102-40	List of stakeholder groups	Our relations with stakeholders	23
102-41	Collective bargaining agreements	The Value We Give to People	43
102-42	Identifying and selecting stakeholders	Our relations with stakeholders	22
102-43	Approach to stakeholder engagement	Our relations with stakeholders	22-23
102-44	Key topics and concerns raised	Our Sustainability Priorities	25
Reportin	g Practice		
102-45	Entities included in the consolidated financial statements	About The Report	3
102-46	Defining report content and topic Boundaries	About The Reports, Our Sustainability Priorities	3, 25
102-47	List of material topics	Our Sustainability Priorities	25
102-48	Restatements of information	About The Report	3
102-49	Changes in reporting	About The Report	3
102-50	Reporting period	About The Report	3
102-51	Date of most recent report	Akenerji Sustainability Report 2018	3
102-52	Reporting cycle	Annually	
102-53	Contact point for questions regarding the report	About The Report	3
102-54	Claims of reporting in accordance with the GRI Standards	About The Report	3
102-55	GRI Standards Index	GRI Standards Content Index	53
102-56	External assurance	About The Report	3

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

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Waste Water Management

GRI STANI	DART		TOPICS	ANSWERS AND PAGE NUMBERS
		MATERIAL TOPICS		
GRI 200 ECC	ОМОМІС	STANDARD SERIES 2016		
GRI 201 Eco	nomic Pe	erformance 2016		
RI 103 ANAGEMENT	103-1	Explanation of the material topic and its boundary	Our Sustainability Priorities	25
PPROACH	103-2	The management approach and its components	Our Sustainability Approach	26
016	103-3	Evaluation of the management approach	Our Sustainability Management	28
	201-1	Direct economic value generated and distributed	Our Economic Performance	13
	201-2	Financial implications and other risks and opportunities due to climate change	Environmental Awareness	33
GRI 203 Indi	irect Eco	nomic Impacts 2016		
RI 103 IANAGEMENT PPROACH	103-1	Explanation of the material topic and its boundary	Our Sustainability Priorities	25
	103-2	The management approach and its components	Our Sustainability Approach	26
16	103-3	Evaluation of the management approach	Our Sustainability Management	28
	203-1	Infrastructure investments and services supported	The Value We Give to People	43
	203-2	Significant indirect economic impacts	Our Value Chain, The Value We Give to People	14, 43
GRI 204 Pro	curemen	t Practices 2016		
RI 103	103-1	Explanation of the material topic and its boundary	Our Sustainability Priorities	25
NAGEMENT PROACH	103-2	The management approach and its components	Our Sustainability Approach	26
l6	103-3	Evaluation of the management approach	Our Sustainability Management	14, 28
	203-1	Infrastructure investments and services supported	The Value We Give to People	•
	204-1	Significant indirect economic impacts	Our Value Chain, The Value We Give to People	13, 14
GRI 205 Ant	i-corrupt	tion 2016		
રા 103	103-1	Explanation of the material topic and its boundary	Our Sustainability Priorities	25
ANAGEMENT PROACH	103-2	The management approach and its components	Our Sustainability Approach	26
16	103-3	Evaluation of the management approach	Our Ethical Practices, Our Sustainability Management	17, 28
	205-2	Communication and training about anti corruption policies and procedures	Our Ethical Practices	17

GRI STANDART	TOPICS	ANSWERS AND PAGE NUMBERS
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GRI 300 EN	VIRONN	MENTAL STANDARDS SERIES 2016		
GRI 302 Ene	ergy 201	6		
GRI 103	103-1	Explanation of the material topic and its boundary	Our Sustainability Priorities	25
MANAGEMENT APPROACH 2016	103-2	The management approach and its components	Our Sustainability Approach	26
	103-3	Evaluation of the management approach	Our Sustainability Management, Environmental Awareness	28, 33, 35
	302-1	Energy consumption within the organization	Energy Management	35
	302-2	Energy consumption outside of the organization	Energy Management	35
	302-4	Reduction of energy consumption	Akenerji at A Glance	7
GRI 303 Wa	ter 2016	3		
GRI 103	103-1	Explanation of the material topic and its boundary	Our Sustainability Priorities	25
MANAGEMENT APPROACH	103-2	The management approach and its components	Our Sustainability Approach	26
2016	103-3	Evaluation of the management approach	Our Sustainability Management, Environmental Awareness	28, 33, 36
	303-1	Water withdrawal by source	Water Management	36
	303-2	Water sources significantly affected by withdrawal of water	Water Management	36

### **GRI 304 Biodiversity 2016** 103-1 Explanation of the material topic and its boundary Our Sustainability Priorities 25 **GRI 103** 103-2 The management approach and its components 26 Our Sustainability Approach MANAGEMENT APPROACH 2016 103-3 Evaluation of the management approach 28, 33, 39 Our Sustainability Management, Environmental Awareness, **Biodiversity Studies** 304-1 Operational sites owned, leased, managed in, **Biodiversity Studies** 39 or adjacent to, protected areas and areas of high biodiversity value outside protected areas

303-3 Water recycled and reused

**ANSWERS** 

GRI STANI	DART		TOPICS	ANSWERS AND PAG NUMBERS
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GRI 103	103-1	Explanation of the material topic and its boundary	Our Sustainability Priorities	25
MANAGEMENT	103-2	The management approach and its components	Our Sustainability Approach	26
APPROACH 2016	103-3	Evaluation of the management approach	Our Sustainability Management, Environmental Awareness	28, 33, 38
	305-1	Direct (Scope 1) GHG emissions	Climate Change Management	38
	305-2	Energy indirect (Scope 2) GHG emissions	Climate Change Management	38
		Reduction of GHG emissions	Akenerji at A Glance, Climate Change Management	7, 38
GRI 306 Effi	uents a	nd Waste 2016		
GRI 103 MANAGEMENT	103-1	Explanation of the material topic and its boundary	Our Sustainability Priorities	25
		The management approach and its components	Our Sustainability Approach	26
APPROACH 2016	103-3	Evaluation of the management approach	Our Sustainability Management, Environmental Awareness	28, 33, 37
	306-1	Water discharge by quality and destination	Waste Water Management	37
	306-2	Waste by type and disposal method	Waste Recovery and Disposal	37
GRI 307 Env	vironmei	ntal Compliance 2016		
GRI 103	103-1	Explanation of the material topic and its boundary	Our Sustainability Priorities	25
MANAGEMENT APPROACH		The management approach and its components	Our Sustainability Approach	26
2016		Evaluation of the management approach	Our Sustainability Management, Environmental Awareness	28, 33-34
	307-1	Non-compliance with environmental laws and regulations	Environmental Awareness	33-34
GRI 308 Sup	plier En	ovironmental Assessment 2016		
GRI 103	103-1	Explanation of the material topic and its boundary	Our Sustainability Priorities	25
MANAGEMENT		The management approach and its components	Our Sustainability Approach Our	26
APPROACH 2016		Evaluation of the management approach	Value Chain, Our Supply Chain, Our Sustainability Management	14, 15, 28
	308-1	New suppliers that were screened using environmental criteria	Our Supply Chain, Our Sustainability Management	15, 28

GRI STANI	DART		TOPICS	AND PAG NUMBER
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GRI 401 Em	ploymer	nt 2016		
GRI 103	103-1	Explanation of the material topic and its boundary	Our Sustainability Priorities	25
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	103-3	Evaluation of the management approach	Our Sustainability Management, Occupational Health and Safety	28, 43
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	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Occupational Health and Safety	45
GRI 403 Occ	cupation	nal Health and Safety 2016		
GRI 103	103-1	Explanation of the material topic and its boundary	Our Sustainability Priorities	25
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APPROACH 2016	103-3	Evaluation of the management approach	Our Sustainability Management,	28, 40
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		Workers representation in formal joint management-worker health and safety committees	Occupational Health and Safety	40
	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	Occupational Health and Safety	41
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GRI 103	103-1	Explanation of the material topic and its boundary	Our Sustainability Priorities	25
MANAGEMENT	103-2	The management approach and its components	Our Sustainability Approach	26-27
APPROACH 2016	103-3	Evaluation of the management approach	Environmental Awareness, Occupational Health and Safety, The Value We Give to People	34, 40, 43
	404-1	Average hours of training per year per employee	Environmental Awareness, Occupational Health and Safety,	39, 40, 46
-	404-2	Programs for upgrading employee skills and transition assistance programs	The Value We Give to People  The Value We Give to People	46
-	404-3	Percentage of employees receiving regular performance and career development reviews	The Value We Give to People	45

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GRI 103	103-1 Explanation of the material topic and its boundary	Our Sustainability Priorities	25
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GRI 103 MANAGEMENT APPROACH	103-1 Explanation of the material to	pic and its boundary	Our Sustainability Priorities	25
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GRI 103	103-1	Explanation of the material topic and its boundary	Our Sustainability Priorities	25
MANAGEMENT APPROACH	103-2	The management approach and its components	Our Sustainability Approach	26-27
2016	103-3	Evaluation of the management approach	Our Sustainability Management, The Value We Give to People	28, 43
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GRI STANI	DART nan Rights Assessment 2016	TOPICS	ANSWERS AND PAGE NUMBERS
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GRI 103 MANAGEMENT APPROACH	103-1 Explanation of the material topic and its boundary	Our Sustainability Priorities	25
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	103-3	Evaluation of the management approach	Our Value Chain, Our Sustainability  Management	14, 28
	414-1	New suppliers that were screened using social criteria	Our Value Chain, Our Supply Chain	14, 15





Akenerji Elektrik Üretim A.Ş.

Miralay Şefik Bey Sokak Akhan No: 15 Gümüşsuyu 34437 İstanbul/Turkey P +90(212) 249 82 82 F +90(212) 249 73 55

> www.akenerji.com.tr info@akenerji.com.tr

For information on Akenerji Sustainability Report;

Sevgi ULUGÖL

Manager

Directorate of Environment, Quality, Occupational Health and Safety
sulugol@akenerji.com.tr

Hanife Hülya OLĞUN Executive Directorate of Environment, Quality, Occupational Health and Safety hanife.olgun@akenerji.com.tr

Reporting Consultant
SU Sustainability and Corporate Social Responsibility Consulting
www.sucsr.com
info@sucsr.com

**Design** www.markapala.com

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