

AKENERJI  
SUSTAINABILITY  
REPORT

2012





# About the Report

**In order to meet demands in the light of the market and global trends, we, as Akenerji, continuously improve our company to invest in the bright future of Turkey.**

As one of Turkey's well-established energy companies, in our production practices we give priority to solutions that minimize environmental and social risks. We take contemporary steps in the site of sustainable energy thanks to our future-oriented practices, proactive approaches, and decision mechanisms based upon international standards. In order to meet demands in the light of the market and global trends, we, as Akenerji, continuously improve our company to invest in the bright future of Turkey.

This is the first comprehensive sustainability report we issued as Akenerji, where we tried to respond to the expectations of mainly our employees, customers and creditors. While developing the contents of the Report, we enhanced and broadened the scope of our "Akenerji Environment, Occupational Health and Safety (OHS)" report of the last two operational years in a way that also provides additional information and data on corporate governance, ethics, and economic and financial issues. The contents of the Report is developed based on the Sustainability Reporting Principles of the Global Reporting Initiative (GRI), which is the globally most preferred guideline in sustainability reporting.

The Report contains information and data on our environmental, social, ethical, and economic practices and performance in the period between January 1st, 2012 and December 31st, 2012. With the aim of presenting the trend, we tried to use the figures of the last two or three years when possible. The information and data in the Report have been gathered by the related department of Akenerji within the framework of the requirements of the C application level of the GRI Guidelines. Figures regarding the environmental and occupational health and safety performance have been extracted from the management systems of Akenerji Integrated Management System. These systems and related figures are regularly audited by independent accredited institutions.

Unless mentioned otherwise, the environmental and occupational health and safety performance data cover 12 Akenerji power plants operating in Turkey during the reporting period as well as the Headquarters in İstanbul. Qualitative information on power plants that are still in investment phase is disclosed in the "Product and Service Responsibility" section of this Report. Out of the 12 power plants, five of them were put into operation in 2010 and three of them started operating in 2012. Therefore, between the years performance figures show significant differences.

The words "Akenerji", "we", "us", "the Company", and "our Company" means "Akenerji Elektrik Üretim A.Ş" and the Subsidiaries (Akenerji Group) listed in the "Approach to Sustainability" section of this Report.

With this first sustainability report that includes all of our practices implemented in line with our corporate priorities as well as our understanding of sustainability, we aim to create a brand-new communication platform with our stakeholders. Our goal is to issue a Sustainability Report every year. We will improve the contents of the Report every year and continue to reshape the contents to cover issues that are of relevance and importance to our stakeholders and to our Company.

## Contents

- 02 Message from the General Manager
- 04 Company Profile
- 17 Approach to Sustainability
- 23 Corporate Governance and Risk Management
- 29 Product and Service Responsibility
- 36 Occupational Health and Safety
- 43 Employees
- 51 Environment
- 61 Contribution to Society
- 63 GRI Index

**Please contact us for all suggestions, comments and questions regarding the contents of our Report and our sustainability performance and practices.**

**E-mail: [info@akenerji.com.tr](mailto:info@akenerji.com.tr)**

# Message from the General Manager

Dear Stakeholders,

We, as Akenerji, hereby proudly present you our first Sustainability Report. We prepared this Report by broadening the content and scope of the Environmental and Occupational Health and Safety reports that we issued in the last two years as a part of our environmental and social responsibility. Based upon the expectations of our stakeholders and the globally accepted GRI Sustainability Reporting Guidelines, this Report's content has been enriched with information on our corporate management structure as well as our ethical, economic and financial practices. We disclosed our performance data on material issues such as environment and occupational health and safety (OHS) within the framework of standard indicators used by thousands of other companies around the world. We established a Sustainability Committee within our Company in order to develop the contents of this Report and to monitor and improve our sustainability performance in the light of new indicators in the coming years.

2012 has been a highly productive year in which Akenerji successfully realized its current projects and continued profitable investments. As one of the largest private sector electricity generation companies in Turkey in terms of installed capacity, we increased our total installed capacity to 745 MW and the share of renewable energy within the total capacity to 52 % with three hydroelectric power plants put into operation in 2012.

Maintaining our strong position in the energy trade with our electricity generation portfolio, we expanded our commercial portfolio to cover approximately 350 clients and 15,000 subscribers. Construction works of the Erzin Natural Gas Combined Cycle Power Plant to be launched in 2014 continued incessantly in 2012. When this 900 MW-capacity power plant starts operating, it will have the potential to provide approximately 2.6 % of the total electricity demand in Turkey on its own.

**As one of the largest private sector electricity generation companies in Turkey in terms of installed capacity, we increased our total installed capacity to 745 MW and the share of renewable energy within the total capacity to 52 % with three hydroelectric power plants put into operation in 2012.**

We, as Akenerji, show maximum effort to achieve compliance with not only Turkish legislations but also international environmental and social performance criteria both in our existing power plants as well as in new projects. In addition, while retaining the integrated management certifications of power plants established before 2012, we also conduct certification procedures for quality, environmental and OHS processes and performances of our three new power plants.

We support low-carbon economy through our renewable energy portfolio and our new thermal plant investment that uses state-of-the-art gas turbines with low emission values. We, as Akenerji, also abide by our current policy to combat carbon emissions and climate change. We shared these efforts with international investors after being included in the 2011 Carbon Disclosure Project (CDP) Turkey reporting process. We continued to report our emission figures within this project in 2012.

Among the key factors of Akenerji's reputation as a reliable brand are market experience exceeding 20 years and operations in energy generation and trade; however, another important factor is the qualified human resources that we have. Continuing innovative investments in human resources, Akenerji became the first Turkish energy company to receive Investment in People (IIP) certificate in 2012. During IIP certification process that aims to build a human-centered culture in companies, we reviewed our existing processes and improved them within the framework of the recent developments in human resources.

Trusting that this Report transparently reveals our environmental, social, economic, and ethical policies, practices and performance, we aim to advance the content of the Report every year and to share it with all of our stakeholders on a regular basis.

Sincerely,

**Ahmet Ümit Danışman**

General Manager



# Company Profile



**While increasing the total capacity to 745 MW, the share of the renewables portfolio in Akenerji's total generation capacity rose to 52 %. This increase provided us with the largest renewable energy share in terms of installed power among the private power generation companies with an installed capacity of over 500 MW.**

## About Akenerji

With 23 years of experience in electricity generation, Akenerji is one of the leading and well-established companies in the Turkish electricity generation industry. As a member of the Akkök Group of Companies, Akenerji started its operations in the industry in 1989 as an auto producer group. Akenerji underwent a status change in 2005 and started to operate under the name Akenerji Elektrik Üretim A.Ş. The Company became one of the largest private sector power generation companies in the country today through its investments. The Company reached a total generation capacity of 745 MW of electricity with the activation of three hydroelectric power plants successively in 2012.

The basic characteristics that differentiate Akenerji in the industry are its production-oriented nature, result-oriented approach and its adherence to international standards in its business processes. Thanks to these qualities, Akenerji has been on the list of "Turkey's 500 Largest Industrial Establishments" released by the Istanbul Chamber of Industry (ICI) uninterruptedly since 1993.

Akenerji's recent investments are a reflection of our visionary strategy. We demonstrate

a superior performance with the prudent investment decisions made through careful examination of the changes in the energy sector and market risks. Our initial aim was to create the country's largest energy trading platform and today we are proud to have one of the industry's largest customer portfolios. We successfully perform the sale and management of energy amounting to much more than our existing capacity and closely monitor international trade opportunities.

In addition to natural gas-based power generation, we make major investments in renewable energy. This approach helps us not only to diversify our fuel portfolio, but also to successfully manage fuel supply risks.

"AkÇEZ", a consortium created to bid for electricity distribution tenders by the Akkök Sanayi ve Yatırım Geliştirme A.Ş. and the Czech power company ČEZ, won the Sakarya Elektrik Dağıtım A.Ş. (Sakarya Electricity Distribution Company, SEDAŞ) privatization tender with a bid of USD 600 million. Thus, as of February 2009, we undertook the electricity distribution of Sakarya, Kocaeli, Bolu and Düzce - a region that forms the heart of the Turkish industry.

The partnership, which was established between Akkök and the Czech power company ČEZ during the SEDAŞ tender, evolved into a strategic joint venture with an agreement signed in October 2008. The first step of the joint venture, which continues its investment plans without being affected by the fluctuations in the global economy, is the Egemer Natural Gas Combined Cycle Power Plant project in Erzin, Hatay. With the activation of Egemer Natural Gas Combined Cycle Power Plant, which has a capacity of approximately 900 MW, the strength of the partnership will further increase.

With the principle that every step taken is an investment in the future, Akenerji is committed to continue its investments in renewable energy sources. As a reflection of this approach, in 2010 we purchased İçkale

Enerji Elektrik Üretim ve Tic. A.Ş. that owns the license of Kemah Dam and Hydroelectric Power Plant (HEPP), which has an installed capacity of 160 MW. The Kemah Dam and HEPP Project are important in terms of being the largest HEPP project in our portfolio. In 2011, the application to increase the installed capacity of Kemah Hydroelectric Power Plant Project from 160 MW to 198 MW was approved by the Energy Market Regulatory Authority (EMRA) and the related license modification will take place in 2013.

In the future, by taking decisions in all of our business processes in accordance with responsibility towards the environment and society, we will continue to pioneer the Turkish energy sector by implementing contemporary projects.

By carefully evaluating and implementing the terms of global competition through our dynamic and flexible structure, we continuously reinforce our position as a “leading energy company”.

### Akenerji in Figures

Akenerji's investments are a reflection of the its visionary strategy.

#### GENERATION CAPACITY

745 MW (Electricity)

417 tons (Steam)

#### OPERATIONS

- Electricity Generation and Sale
- Electricity Import-Export and Wholesale
- Electricity Retail Sale and Distribution
- Steam Generation and Sale
- Natural Gas Import-Export and Wholesale

#### NUMBER OF EMPLOYEES

296

#### 2012 TURNOVER

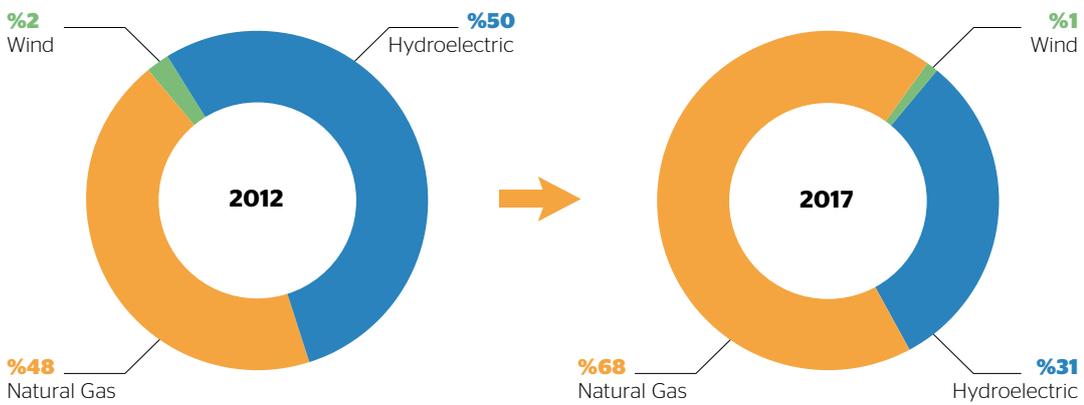
TL 802 million



## Operations Map



## Breakdown of Installed Capacity by Source



Installed Capacity

POWER PLANTS IN OPERATION	YEAR OF BECOMING OPERATIONAL	
Bozüyük NGPP	1997	 132 MW
Çerkezköy NGPP *	1996	 98 MW
Kemalpaşa NGPP	2005	 127 MW
Ayyıldız WPP	2009	 15 MW
Akocak HEPP	2010	 81 MW
Bulam HEPP	2010	 7 MW
Burç Bendi HEPP	2010	 28 MW
Feke I HEPP	2012	 30 MW
Feke II HEPP	2010	 70 MW
Gökkaya HEPP	2012	 30 MW
Himmetli HEPP	2012	 27 MW
Uluabat HEPP	2010	 100 MW

POWER PLANTS IN INVESTMENT PHASE	YEAR OF BECOMING OPERATIONAL	
Erzin NGPP**	2014	 900 MW
Kemah HEPP***	2017	 160 MW

(\*) Closed down as of the end of 2012.

(\*\*) Investment in construction phase.

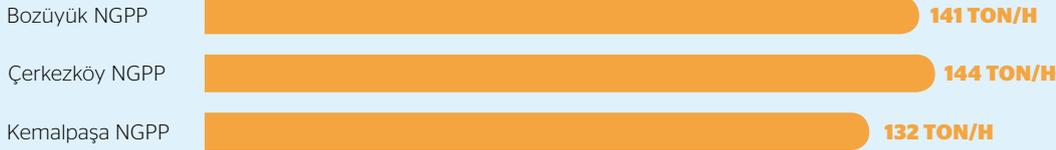
(\*\*\*) Investment in project phase. Feasibility studies were completed as of the end of 2012.

2012 was a significant year for Akenerji in terms of investments in renewable energy sources. As a result of simultaneous efforts since 2006, we started to operate 8 hydroelectric plants and 1 wind power plant with a total installed capacity of 388 MW by the end of 2012.

Construction of the 900 MW-capacity Egemer Project, which is one of Turkey's largest natural gas power plant investment, still continues. When the plant starts operations in 2014, we expect an electricity generation of 6.7 billion kWh and thus a 2-fold increase in our generation capacity.

## COMPANY PROFILE

### Steam Generation Capacity



### Current Installed Capacity

745 MW

(Natural Gas, Hydroelectric and Wind)

### Investments in Construction Phase

900 MW

(Natural Gas)

### Investments in Project Phase

160 MW

(Hydroelectric)

## Financial and Operational Indicators

The positive influence of our investments on our financial performance have become noticeable. Our consolidated financial indicators of the last 5 years are presented in the table below.

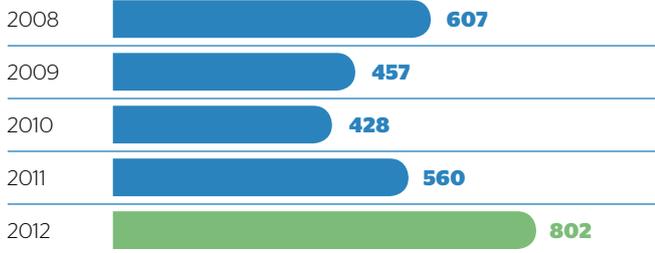
### CONSOLIDATED FINANCIAL INDICATORS (TL MILLION)

	2008	2009	2010	2011	2012
Net Sales	607	457	428	560	802
Gross Profit from Sales	100	65	43	110	139
Operating Profit	67	24	8	59	79
Profit before Interest, Taxes, Depreciation and Amortization	89	50	36	106	133
Net Profit / (Loss)	90	24	(26)	(213)	81
Total Current Assets	238	353	187	220	526
Short-term liabilities	116	426	471	612	485
Working Capital	46	38	9	(3)	10
Tangible and Intangible Assets	537	852	1,353	1,539	1,720
Total Financial Liabilities	297	708	926	1,419	1,459
Total Assets	863	1,506	1,911	2,229	2,824
Total Liabilities	386	791	1,146	1,705	1,879
Total Shareholders' Equity	478	715	765	524	941
Cash and Cash Equivalents at the End of the Period	101	188	40	85	174
Capital Expenditures	130	364	465	267	239
Market Capitalization at the End of the Period - ISE	399	915	1,357	691	1,196
Average Number of Employees	217	235	289	315	314

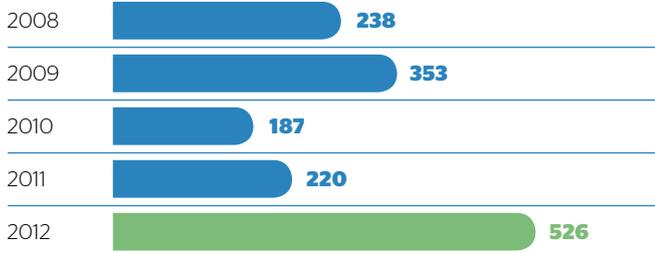
Note: The transfer of Yalova power plants that have a total 70 MW installed capacity to Aksa Akriik Kimya San. A.Ş. on April 30th, 2009 resulted in a decrease in sales.

CONSOLIDATED FINANCIAL INDICATORS (TL MILLION)

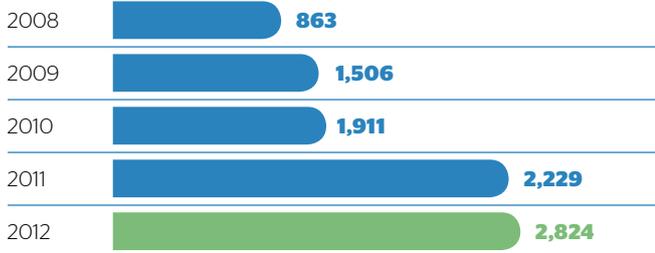
NET SALES (TL MILLION)



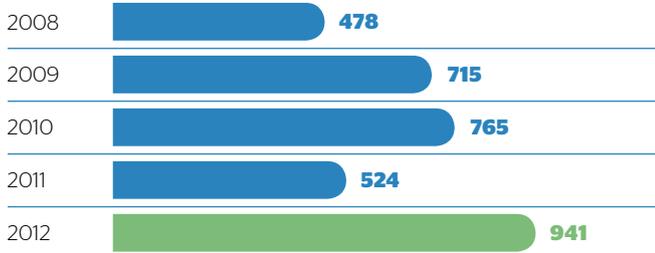
TOTAL CURRENT ASSETS (TL MILLION)



TOTAL ASSETS (TL MILLION)

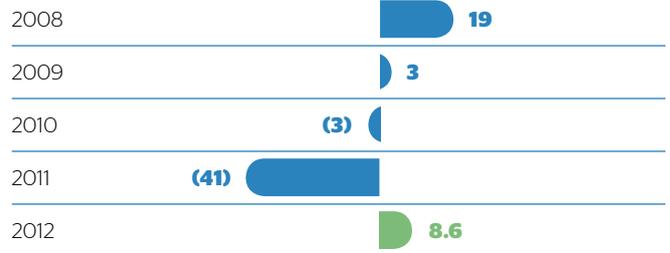


TOTAL SHAREHOLDERS' EQUITY (TL MILLION)



FINANCIAL RATIOS

RETURN ON EQUITY (%)



CURRENT RATIO



TOTAL LIABILITIES / TOTAL EQUITY

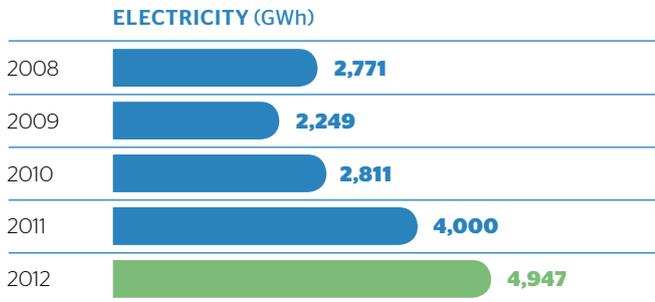


TOTAL LIABILITIES / TOTAL ASSETS

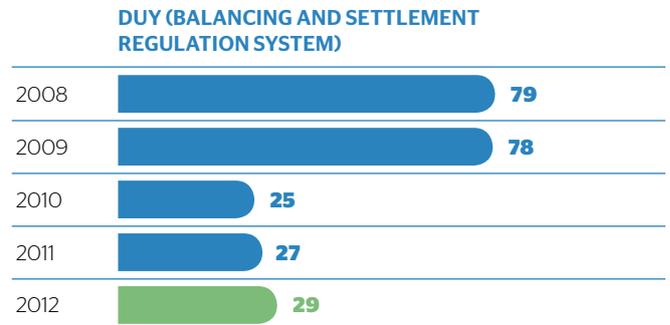
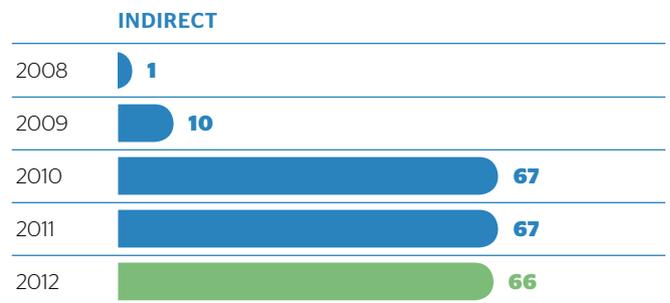
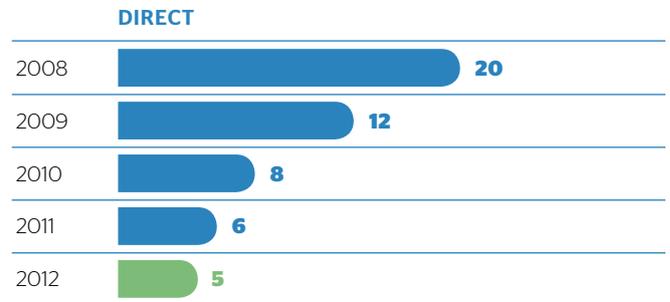


## COMPANY PROFILE

### SALES



### DISTRIBUTION OF ELECTRICITY SALES (%)



## Contribution to Economy

We, as Akenerji, not only generate economic value for our stakeholders, but also contribute to the Turkish economy through our corporate operations. Some of the indicators of this contribution are presented in the following pages.

### Economic Value Generated and Distributed

The distribution of the economic value we generated as a result of our operations in 2012 are summarized in the table below. Our operating costs amount to 89% of the total economic value distributed and the remnant is distributed to stakeholders.

ECONOMIC VALUE GENERATED	TL MILLION
<b>Direct Economic Value Generated</b>	
a) Revenues	802.0
<b>Economic Value Distributed</b>	
b) Operating costs	652.4
c) Employee wages and other benefits	11.0
d) Payments to providers of capital	0
e) Payments to the government	69.6
f) Community investment	0.5
<b>Economic Value Retained</b>	<b>68.5</b>

Note: The figures are as of the end of the financial year, i.e. December 31<sup>st</sup>, 2012.

## Energy Sector in Turkey

The electricity demand per capita in Turkey has been growing with an average annual rate of 5 % for the last 10 years. The fact that the electricity consumption per capita in the country is still below the average of OECD countries despite this high growth in demand reveals the potential of the electricity sector in Turkey. In 2012, the Turkish economy grew by 2.2 % compared to 2011. Yet the demand for electricity increased by 5 % -an increase well above the economic growth- and reached 242,000 GWh.

In 2012, investments in the Turkish energy sector continued without slowing down. Total installed capacity increased 8% compared to 2011 and reached 57,058 MW as of the end of 2012. Public sector share in electricity generation decreased from 40 % in 2011 to 38 % in 2012. Although the prominence of natural gas in electricity generation continued in terms of sources, its share in total production fell from 45 % to 43 %. In the list of production rates, coal comes second with 27 % and hydroelectric energy is third with a share of 24 %.

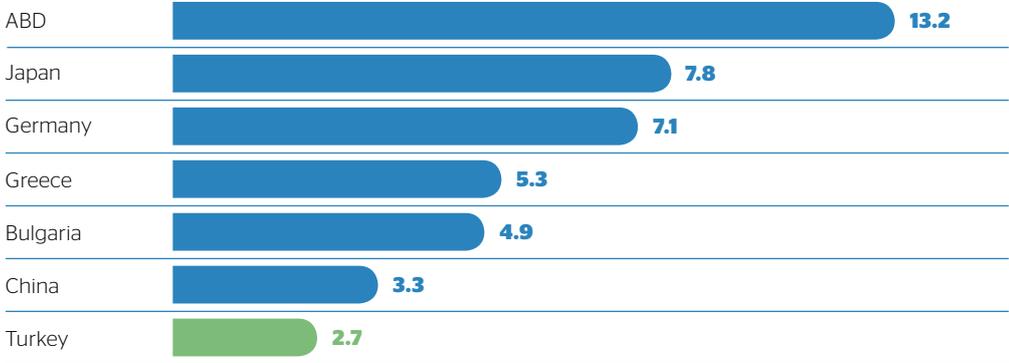
2012 was a year of accelerated privatization activities in the electricity sector. Tenders for the Akdeniz, Bedař and Gediz distribution regions were finalized and tenders for generation assets continued. On the other hand, privatization of the coal sites belonging to the General Directorate of Turkish Coal Enterprises and the thermal and hydroelectric plants of the Electricity Generation Corporation are in still in process.

In terms of electricity trade, an implementation plan was developed for the Turkish Energy Exchange and steps were taken to establish a healthy energy trade market. Related articles were included in the New Electricity Market Law.

Our operating costs amount to 89% of the total economic value distributed and the remnant is distributed to stakeholders.

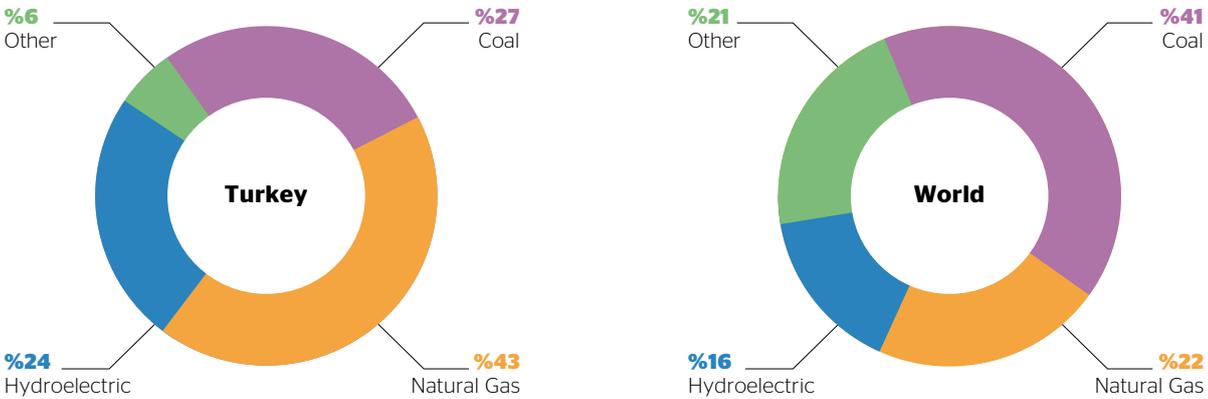
**COMPANY PROFILE**

**AVERAGE ELECTRICITY CONSUMPTION PER CAPITA IN SELECTED COUNTRIES (MWH)**



Considered to be the most material issue in the Turkish economy, the current account deficit amounted to USD 47.8 billion in 2012. Energy imports, totaling USD 60 billion, continued to maintain its share in the current account deficit. In this context, benefiting from renewable and local sources such as hydroelectric and wind power and reducing the dependency on imported energy has gained much importance.

**Electricity Generation by Source in Turkey and in the World**





## Corporate Structure of Akenerji

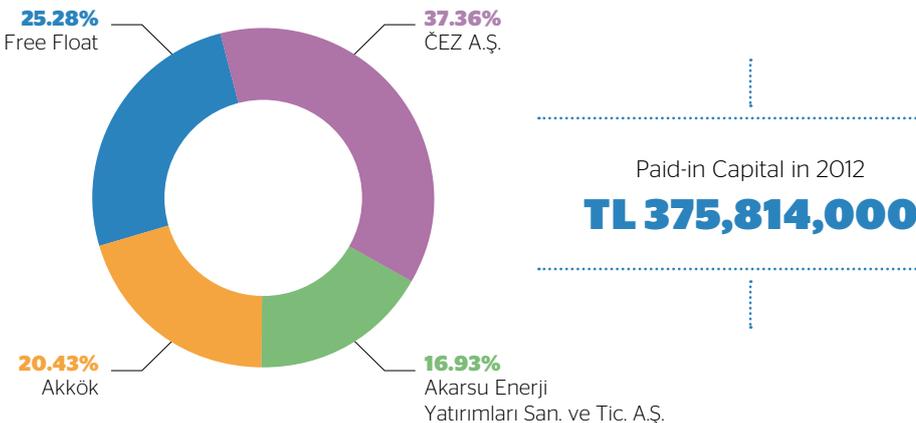
### Subsidiaries and Partnerships

Akenerji Elektrik Enerjisi İthalat-İhracat ve Toptan Tic. A.Ş.  
 Akkur Enerji Üretim Tic. ve San. A.Ş.  
 Mem Enerji Elektrik Üretim San. ve Tic. A.Ş.  
 Egemer Elektrik Üretim A.Ş.  
 Ak-EI Kemah Elektrik Üretim A.Ş.  
 AkÇEZ Enerji Yatırımları Sanayi ve Ticaret A.Ş.  
 Ak-EI Yalova Elektrik Üretim A.Ş.  
 Aken BV  
 Akka Elektrik Üretim A.Ş. (In liquidation as of November 6th, 2012)  
 Akenerji Doğalgaz İthalat İhracat ve Toptan Tic. A.Ş.  
 Sakarya Elektrik Dağıtım A.Ş.(\*)

(\*) Acquired by AkÇEZ Enerji Yatırımları Sanayi ve Ticaret A.Ş. on February 11th, 2009, Sakarya Elektrik Dağıtım A.Ş. is an indirect subsidiary of Akenerji Elektrik Üretim A.Ş. and is included in consolidated financial statements within the framework of shareholders equity method.

### Shareholder Structure

Shares of main investors in Akenerji, namely Akkök Group of Companies and ÇEZ A.Ş., are given in the chart below.





### **Akkök Group of Companies**

Founded in 1952 by the late Mr. Raif Dinçök, Akkök Group of Companies currently operates in the chemical, energy and real estate sectors with 17 commerce and industrial companies, including one located overseas, and 18 manufacturing facilities.

Transparency and accountability are the basic principles that Akkök Group abides by in its relations with all stakeholders, particularly employees, customers, suppliers and shareholders. All companies within the Group, in addition to fulfilling their financial obligations in their operations, act in a socially, environmentally and economically responsible manner, as is expected from a good corporate citizen. In this context, Akkök Group of Companies signed the United Nations Global Compact in 2007.

With over 3,300 employees, Akkök Group of Companies reported combined turnover of USD 3.1 billion in 2012. USD 393 million of this amount is earned from exports to over 50 countries. The Group closely monitors global competition conditions and economic developments in all the sectors it operates.

### **ČEZ A.Ş.**

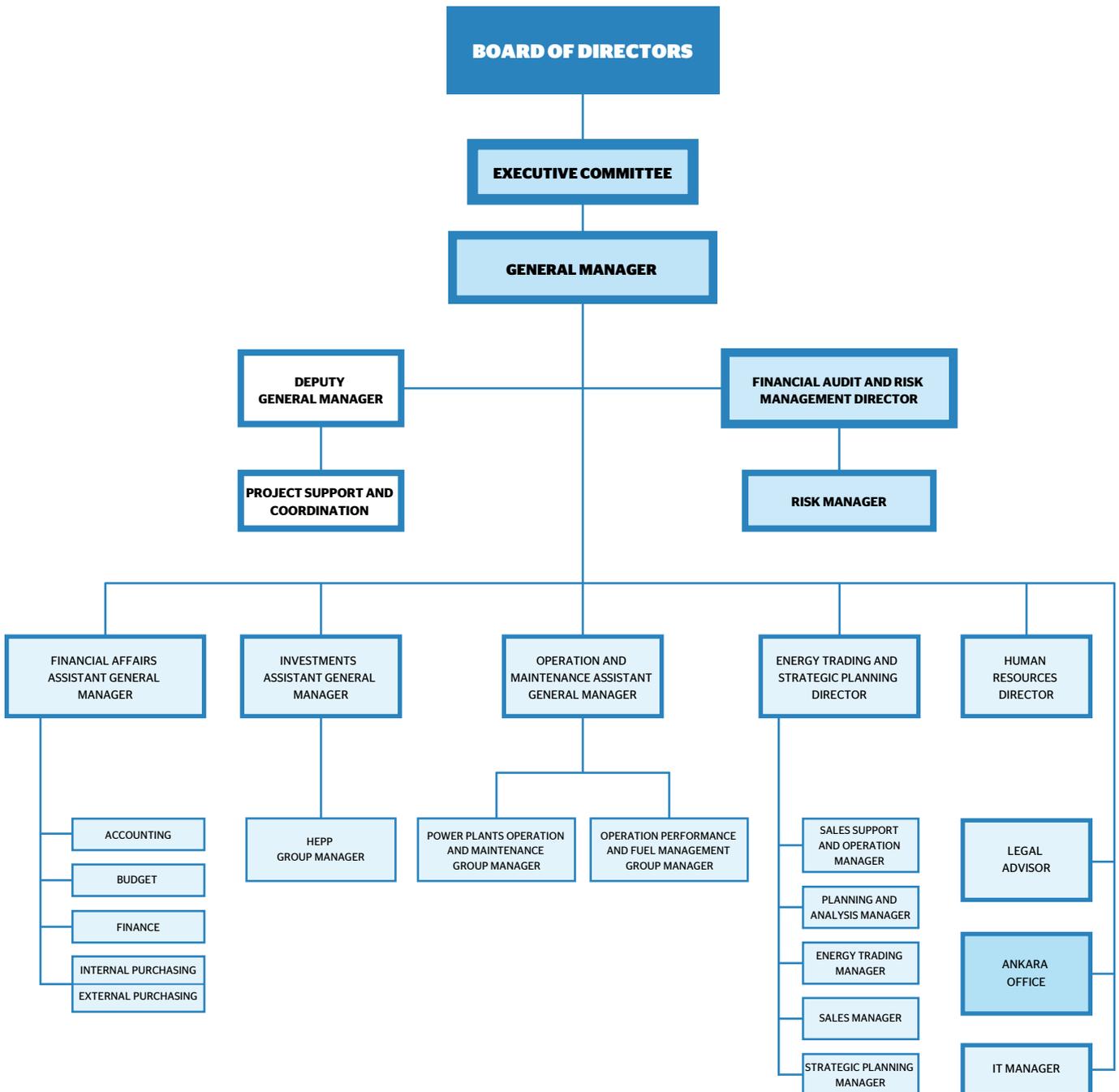
As a dynamic and integrated energy company in the Czech Republic, ČEZ A.Ş. operates mainly in energy and heat generation, distribution and sales, as well as coal mining, natural gas sales and carbon trading. 70% of the shares of ČEZ A.Ş. are owned by the Czech Republic, which makes the state the major shareholder of ČEZ A.Ş.

As of 2011, ČEZ A.Ş. has affiliate companies that operate in Poland, Bulgaria, Romania, the Netherlands, Germany, Hungary, Serbia, Turkey, Albania, and Slovakia as well as in the Czech Republic. Strong ethical standards that shape the activities of ČEZ A.Ş. include acting responsibly towards the society and the environment. In line with its policy of sustainable growth, ČEZ A.Ş. systematically reduces the burden of its activities on the environment, also placing special emphasis on education and health. ČEZ A.Ş. is a major supporter of a number of non-profit organizations and various public benefit projects.

As a part of its operations, the ČEZ Group supports sustainable development principles and energy efficiency, implements new technologies, works to systematically reduce environmental effects of its operations, and supports developments in vital issues including health, childcare and education. Although the corporate culture is focused on performance, operations of the ČEZ Group are managed through robust and rigid ethical standards.

## Organization Chart

The organizational structure of Akenerji as of the end of 2012 is presented in the chart below:



## Mission, Vision and Values

### Mission

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

### Vision

To maintain its leading position in the Turkish energy sector and become one of the largest integrated companies that shape the industry.

### Corporate Values

- Reliability
- Integrity
- Accountability
- Transparency
- Customer Satisfaction
- Social Responsibility



## Awards

### The Cleanest Industrial Plant Award

Akenerji Bozüyük Natural Gas Power Plant took part in "The Cleanest Industrial Plant Awards" contest organized by Bilecik Directorate of Environment and Urbanization to celebrate the World Environment Day on June 5th. The Plant was selected The Cleanest Industrial Plant of 2012 and was rewarded with an Environmental Certificate.

We perform a variety of activities in all of our power plants with the aim of developing, adopting, and implementing environment-friendly technologies. As a result of our successful operations within the framework of our Quality, Environment and OHS policies, our Çerkezköy Power Plant had also received The Cleanest Industrial Plant award in 2008. With the Environmental Certificate given to the Bozüyük Natural Gas Power Plant, our corporate environmental awareness has again been rewarded.

### Energy Oscars

In 2010, by starting operations in the 5 HEPPs that we invested approximately USD 500 million, we continued our contributions to the development of our country and meeting the energy deficit. This effort earned us the Energy Oscar, given for the first time in 2011 at the 17th International Energy and Environment Fair and Conference (ICCI).

Akenerji won the award in the category of "Best Leading Investor of the Year" for establishing the first cogeneration plant in Turkey.

# Approach to Sustainability



Within the framework of our corporate values, namely reliability, integrity, accountability, transparency, customer satisfaction, and social responsibility, we operate in full awareness of our financial liabilities as well as our environmental, social and economic responsibilities.

## Our Approach

Within the framework of our corporate values, namely reliability, integrity, accountability, transparency, customer satisfaction, and social responsibility, we operate in full awareness of our financial liabilities as well as our environmental, social and economic responsibilities.

While the basis of our approach to sustainability is our quality, environment and occupational health and safety policies, the concepts of risk management, ethics and corporate governance also play a defining role. Major components of our business strategy are compliance, high level of customer satisfaction, operational efficiency, protection of natural capital, minimizing environmental and social risks, and making more environment-friendly production.

Among the material sustainability issues for Akenerji are contributing to the reduction in greenhouse gas emissions that cause global climate change by providing energy through renewable sources, monitoring and continuous improvement of our environmental and occupational health and safety performance at our plants and projects, and achieving high performance.

## Our Policies

**Quality Policy:** We work to provide our customers with reliable, economical and environment-friendly energy while meeting the increasing demand with our quality-focused approach.

**Environmental Policy:** To create a future as bright as today, we always aim to operate with an environmentally sensitive approach.

**Occupational Health and Safety Policy:** Based upon our “Human Comes First” philosophy, occupational health and safety is our primary concern in all operations.

### Companies included in the 2012 Akenerji Sustainability Report

#### Companies in Operation:

Akenerji Elektrik Üretim A.Ş. (Power plants: Çerkezköy NGPP, Kemalpaşa NGPP, Bozüyük NGPP, Ayyıldız WEP, Uluabat HEPP, Akocak HEPP)

Akkur Enerji Üretim Tic. ve San. A.Ş. (Power plants: Burç Bendi HEPP, Feke II HEPP, Feke I HEPP)

Mem Enerji Elektrik Üretim San. ve Tic. A.Ş. (Power plants: Bulam HEPP, Himmetli HEPP, , Gökkaya HEPP)

#### Investments:

Egemer Elektrik Üretim A.Ş. (Erzin NGPP)

Ak-EI Kemah Elektrik Üretim A.Ş. (Kemah HEPP)

#### Other:

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

In 2012 Akenerji became the first Turkish energy company that obtained an IIP (Investors in People) certification.

## Milestones in Sustainability

Akenerji has been paying great attention to sustainability since the day of its establishment and implementing a variety of pioneering practices. Some of the milestones in the last three years of sustainability efforts are:

### 2012

- Akocak, Uluabat, Burç Bendi, Bulam, and Feke II HEPPs were included in the ISO 9001:2008 Quality, ISO 14001:2004 Environment and OHSAS 18001:2007 Occupational Health and Safety Management Systems certifications.
- Bozüyük Natural Gas Power Plant was selected the "The Cleanest Industrial Plant" and awarded with an "Environmental Certificate" within the scope of June 5th, World Environment Day.
- Akenerji became the first Turkish energy company with IIP (Investors in People) certification.
- Kemalpaşa Natural Gas Power Plant obtained Environmental License.

### 2011

- Akenerji became the first energy company in Turkey that received the IIP (Investing in People) Certificate of Commitment.
- Akenerji became the first energy company in Turkey to implement the EFET (European Federation of Energy Traders) agreement.

- Akenerji was awarded with the Energy Oscar, given for the first time in 2011 at the 17th International Energy and Environment Fair and Conference (ICCI). The Company won the award in the category of "Best Leading Investor of the Year" for establishing the first cogeneration plant in Turkey.
- Ayyıldız Wind Power Plant obtained ISO 9001:2008 Quality, ISO 14001:2004 Environment and OHSAS 18001:2007 Occupational Health and Safety Management Systems certifications.
- Akenerji joined the Carbon Disclosure Project (CDP) Turkey as one of the two Turkish energy companies that publish a CDP report.

### 2010

- The Headquarters and Çerkezköy, Bozüyük, and Kemalpaşa Power Plants obtained ISO 9001:2008 Quality, ISO 14001:2004 Environment and OHSAS 18001:2007 Occupational Health and Safety Management systems certifications.
- Akenerji's first and most comprehensive Environmental Report and Occupational Health and Safety Annual Report was published and disclosed to all stakeholders.
- After Akkök Holding signed the United Nations Global Compact (UNGC) in 2007, Akenerji was included in the Holding's first UNGC Communication of Progress covering the years 2008 and 2009.

**Sustainability Management**

The knowledge, awareness and leadership of the Company’s senior management is vital for the integration of our environmental, social and ethical responsibilities into the corporate culture. In Akenerji, the function of the Office of the Operation and Maintenance Assistant General Manager includes the Directorates of Environment and Quality Management Systems, Technical Safety, Occupational Health and Safety, Operations Performance, and Fuel Management. All practices regarding the employees are managed by the Directorate of Human Resources. Process Development Manager and Personnel and Administrative Affairs Manager report directly to the Human Resources Director. Office of the Investments Assistant General Manager is responsible for the OHS and environmental performance throughout the process starting with project phase until the full operation of plants.

The Sustainability Committee established primarily for sustainability reporting is composed not only of the representatives from the aforementioned departments, but also of representatives from the Energy Trading and Strategic Planning, Investments, Financial Affairs, Domestic Purchase, Risk

Management, Accounting, Corporate Communications & Marketing, and Legal Department.

**Stakeholder Engagement**

Stakeholders are groups that are affected by our activities or that affect our activities. We consider our employees, customers, creditors/investors and regulatory bodies as our most important stakeholders and we engage with them on a regular basis. We also consider our suppliers, local communities, local governments, society, media and university students as our important stakeholders. We benefit from a variety of dialogue platforms to learn about the sustainability expectations of our stakeholders. These two-way platforms include meetings, workshops and surveys. We also use mass communications means such as our website, annual report, annual environmental and OHS report, press releases, and brochures to share information.

In this report we covered issues that we consider most material to our Company as well as to our stakeholders. We plan to further develop our process to identify and prioritize our material sustainability issues.

The table below summarizes the platforms that we use to engage with our stakeholders.

**While the basis of our approach to sustainability is our quality, environment and occupational health and safety policies, the concepts of risk management, ethics and corporate governance also play a defining role.**

<b>STAKEHOLDERS</b>	<b>STAKEHOLDER ENGAGEMENT PLATFORM</b>	<b>CONTENT/PRACTICE</b>
Employees	Quality, Environment and OHS suggestion system	It is a platform in which power plant employees share their opinions.
	"We Are the Energy" Employee Suggestion System	We offer employees a platform to freely share their ideas. Suggestions that have the potential to contribute to the Company are selected and suggestion owners are awarded symbolically.
Customers	Customer satisfaction surveys	We hold annual surveys to evaluate expectations and satisfaction of Akenerji customers.
	Brochures	Akenerji Corporate Brochure
Creditors, investors	Annual reports	We regularly present Annual Environmental and Social Performance Monitoring Reports to creditors such as the International Finance Corporation (IFC) and Industrial Development Bank of Turkey (TSKB).
	Meetings and informative messages	We reply inquiries of responsible investors on the performance and practices of Akenerji.
Regulatory bodies	Meetings	We take part in efforts to establish a Turkish Energy Exchange and to ensure that regulations for the sector are implemented in the most impartial and efficient way.

## APPROACH TO SUSTAINABILITY

STAKEHOLDERS	STAKEHOLDER ENGAGEMENT PLATFORM	CONTENT/PRACTICE
Local communities and local authorities	Face-to-face conversation and trainings	We exchange information with the local communities and authorities in cities where our power plants operate and we give information on developments. We prepare brochures to explain potential dangers and protection ways for local communities.
Suppliers	Supplier assessment	While selecting a supplier, Quality, Environment and OHS Management Systems are a part of the assessment procedure.
Society and the media	Press releases	We issue press releases and give interviews on our recent sustainability practices and performance.
University students	University and sector cooperation, internship, career days	We attend career days to introduce Akenerji to university students.

The graphic below summarizes the platforms that we use to inform our stakeholders on sustainability issues.



## Initiatives Signed and Memberships

We consider sustainability and the global problem of climate change to be serious issues and we take part in a variety of initiatives to become a part of the solution by integrating these issues into our corporate strategy. Examples of such initiatives include the following:

- Within the framework of the global initiative of **Carbon Disclosure Project (CDP)**, we have been reporting our climate strategy and carbon emission performance for the last three years on a voluntary basis.
- We, as Akenerji, have been the first company to register to the **National Carbon Registry**.
- We play an active role in Environment and Energy Working Groups of the **Turkish Industry and Business Association (TÜSİAD)** and we support sectoral growth by combating climate change.
- In 2012, we participated in the **Istanbul Stock Exchange (ISE) Sustainability Index Project** aimed to ensure that major Turkish companies compete successfully in global markets. We participate in the preparatory work of the index and closely monitor the related developments.

**Memberships to Associations and Committees**

Akenerji is a member of a variety of associations and institutions working on sustainability. Major examples are:

- Foreign Economic Relations Board (DEİK) – Energy Committee
- Endeavor Association
- Hydroelectric Power Plants Industry and Business Association (HESIAD)
- World Energy Council Turkish National Committee (DEK-TMK)
- Association of Electricity Distribution Services (ELDER)
- Energy Traders Association (ETD)
- Electricity Producers Association (EÜD)
- Corporate Risk Management Association
- International Investors Association (YASED)
- Windpower and Hydropower Plants Businessmen’s Association (RESSIAD)
- Hydro Energy Association (HESIAD)
- Turkish Association of Human Resources Management (PERYÖN)
- Association of Turkish Electricity Industry (TESAB)
- Turkish Wind Energy Association (TÜREB)

**Integrated Management System: Quality, Environment, OHS**

Since 2008, our power plants and the Headquarters is subject to integrated management systems. Akenerji Integrated Management Systems comprises ISO 9001 Quality Management, ISO 14001 Environmental Management and OHSAS 18001 Occupational Health and Safety Management Systems. As of the end of 2012, 10 Akenerji locations (Headquarters and Çerkezköy, Bozüyük, Kemalpaşa, Ayyıldız, Uluabat, Akocak, Burç, Bulam, and Feke 2 Plants) have Integrated Management Systems certifications. Integrated Management Systems are established at Feke 1, Himmetli and Gökkaya plants that started operations in late 2012 and the certification audit will be performed in 2014.

Quality, Environment and OHS performance of Akenerji is managed by three departments within the Office of the Operation and Maintenance Assistant General Manager. Integrated Management System is within the responsibility of the Quality Project Team led by the Directorate of Environment and Quality Management Systems. The Quality Project Team consists of Headquarters and power plant employees bearing internal audit certificates.

Quality, Environment and OHS performance of Akenerji is managed by three departments within the Office of the Operation and Maintenance Assistant General Manager.



Integrated Management System is executed through an annual review of all processes. In accordance with the internal audit plan issued, employees bearing internal audit certificates perform this review. While the number of internal auditors was 27 in 2011, following the increase in demand due to new HEPPs, the number increased to 41 in 2012. Outcomes of the mentioned audits are evaluated by the Company executives and are shared with all employees.

In our power plants, a Quality, Environment and OHS Suggestion System that encourages employees to share their opinions is implemented. In 2012, 125 power plant employee made 184 suggestions through this platform which is a part of the Integrated Management System. After a careful review, 142 of these suggestions were approved to be executed and 88 were put into effect in 2012.

## APPROACH TO SUSTAINABILITY

### Our Goals

Evaluation of 2012 goals and the goals set for 2013 in parallel with our Quality, Environmental, Occupational Health and Safety Policies and within the framework of the Integrated Management System are presented in the table below.

GOAL	EVALUATION OF 2012	COMMITMENTS FOR 2013
<b>Management Systems</b>	Uluabat, Burç, Bulam, Akocak, and Feke II HEPPs obtained ISO 9001, ISO 14001 ve OHSAS 18001 as of the end of 2012. Continuity of the certification of Çerkezköy, Bozüyük, Kemalpaşa, and Ayyıldız Wind Power Plant is achieved.	ISO 9001, ISO 14001 and OHSAS 18001 certification of Bozüyük, Kemalpaşa, Ayyıldız, Uluabat, Burç, Bulam, Akocak, and Feke II plants in 2013. Continuing efforts to establish management systems in our Feke I, Himmetli and Gökkaya HEPPs.
<b>Availability Ratios</b>	Availability ratios at our power plants in 2012: 94.50% at natural gas power plants, 96.37% at hydroelectric and wind power plants.	Maintaining the following availability ratios at our power plants: 95.24% at natural gas power plants, 90.70% at hydroelectric and wind power plants.
<b>Workplace Accidents</b>	Frequency rate and severity rate of workplace accidents in all of our power plants were zero.	Ensuring that frequency and pace of workplace accidents in each of our operating power plants are zero. Regarding the workplace accidents by contractors and subcontractors of operating power plants, keeping the frequency rate below 6.9 and severity rate below 48.2.
<b>Gas Zoning Mapping</b>	By the end of 2012 we completed detailed re-classification and re-marking of hazardous areas (i.e. zones) for each of our CCGTs according to the BS EN 60079-10-1:2009 standard.	Completing the works of mapping and detailed marking of zones identified in 2012 within the plant area according to the BS EN 60079-10-1:2009 standard by the end of 2013. Proving that the ex-proof equipment have proper equipment protection level as per the related zones and listing such equipment.
<b>Quality, Environmental, OHS Trainings</b>	Completed training hours: Power plant employees: 25.38 hours/man/year Headquarters employees: 1.51 hours/man/year.	Training goals: Power plant employees: 16 hours/man/year Headquarters employees: 3 hours/man/year
<b>Actions for Environmental Dimension</b>	In evaluating the environmental dimensions of each power plant, we took actions for at least one environmental dimension.	In evaluating the environmental dimensions of each power plant, taking actions for at least one environmental dimension and reducing the severity level.
<b>Near-Miss Form</b>	In 2012, we made sure that employees at each power plant filled at least 1 "near-miss form" and at least 1 "quality, environmental, OHS" suggestion form.	Making sure that employees at each operating power plant fill at least 1 "near-miss form" and at least 1 "quality, environmental, OHS" suggestion form.
<b>Vehicle Accident Rate</b>	Total Vehicle Accident Rate (TVAR) was 15.9 in 2011 and 16.1 in 2012.	Maintaining TVAR below 14.5 at each operating power plant.
<b>Sustainability Management</b>	-	Implementing sustainability reporting and carbon management projects.
<b>Training for Awareness-raising</b>	We issued a brochure regarding potential dangers at HEPPs and protection methods in the environment pages of our website.	Distributing the brochure on potential dangers at HEPPs to local communities. During the operation period of HEPPs, taking actions to rise awareness in local communities in relation to safety around the HEPPs.
<b>Risk Assessment Practices</b>	We completed routine review of existing risk assessment practices.	Renewing risk assessment at Bozüyük, Kemalpaşa, Ayyıldız, Uluabat, Burç, Bulam, Akocak, and Feke II. Completing the risk assessment practice at Feke I, Himmetli and Gökkaya HEPP.
<b>Emergency Management Plan</b>	We held emergency drills at power plants and the Headquarters.	Adapting the emergency plan for each power plant and issuing these plans as procedures.

# Corporate Governance and Risk Management



Our approach to corporate governance is shaped by our target of continuously generating value for our customers, employees and shareholders. We are fully aware that in a time when competition and change is accelerated, the quality of corporate governance practices and financial performance are of equal importance.

## Our Approach

Our approach to corporate governance is shaped by our target of continuously generating value for our customers, employees and shareholders. We are fully aware that in a time when competition and change is accelerated, the quality of corporate governance practices and financial performance are of equal importance. Corporate governance of a high standard improves the competitive capacity of corporations by enabling low cost of capital, additional funding opportunities and higher liquidity. Therefore, we, as Akenerji, pay utmost attention to implement the principles stipulated by the Capital Markets Board (CMB) in its Corporate Governance Principles.

## Corporate Management Shareholder and Investor Relations

Relations of Akenerji with shareholders and investors are managed by the Shareholder Relations Department. The Department plays an active role in facilitating the exercise and protection of shareholders' rights, primarily the right to obtain and analyze information. All inquiries submitted to the Department, with the exception of information classified as confidential or a trade secret, are replied

either verbally or in writing after consulting to the most senior officer related to the topic at hand.

We, as Akenerji, have established an available and transparent communication platform that encompasses all of our stakeholders and within this platform we organize periodical informative meetings, hold issue-focused meetings upon demand, and answer relevant questions via email. The demands of financial intermediaries, corporate investors and individual investors are met by email and/or meetings organized periodically -quarterly- or on an ad hoc basis, upon request. All written or verbal information requests of shareholders, potential shareholders, analysts evaluating the Company, or academics and students conducting company or sector-focused research are replied as soon as possible, using the means mentioned above, with the exception of any information not disclosed to the public or else classified as confidential and trade secrets.

Information on Investor Relations described in this Report and contact information regarding the Shareholder Relations Department can be obtained from our website: <http://www.akenerji.com.tr/ENG/KurumsalYonetim>

**Public Disclosure Policy**

Akenerji Disclosure Policy contains information on issues including the data to be shared with the public in addition to those identifies by regulations; the method, frequency and means of disclosure; the meeting frequency of the Board of Directors or executives with the press; the frequency of public disclosure meetings; methods to be used in replying questions posed to the Company, etc.

Akenerji uses the Public Disclosure Platform ([www.kap.gov.tr](http://www.kap.gov.tr)) and the Company website (<http://www.akenerji.com.tr/Eng>) to disclose information to the public in a timely, complete, clear, interpretable, and cost-efficiently available manner that helps related people and institutions to make decisions.

“e-GOVERNANCE: Corporate Governance and Investor Relations Portal” of the Central Securities Depository Institution is also used to inform shareholders directly and efficiently ([www.mkk.com.tr/wps/portal/MKKEN](http://www.mkk.com.tr/wps/portal/MKKEN))

Prospective information, assumptions and reference data of these are disclosed in a way that avoids groundless and misleading information and exaggerated projections.

In addition, assumptions are made in compliance with the Company’s financial situation and operational results.

If projections and references stated in disclosed information fail to or considered to fail to come true, such information is updated. Disclosure policy of Akenerji is issued in the Company website: [www.akenerji.com.tr/TR/Yatirimcilliskileri/Politikalarimiz.aspx](http://www.akenerji.com.tr/TR/Yatirimcilliskileri/Politikalarimiz.aspx) (available only in Turkish).

**Akenerji Board of Directors**

In Akenerji, the most senior governance body responsible for defining the strategic goals of the Company, determining the corporate governance, identifying the human and financial resources needed, auditing performance of the management, and ensuring compliance of operations with the regulations, Articles of Association, internal regulations and policies is The Board of Directors.

The Board of Directors consists of a total of 10 members, two of whom are independent members. As of 2012, Akenerji Board of Directors is composed of the following members

**In Akenerji, the most senior governance body responsible for defining the strategic goals of the Company, determining the corporate governance, identifying the human and financial resources needed, auditing performance of the management, and ensuring compliance of operations with the regulations, Articles of Association, internal regulations and policies is The Board of Directors.**

NAME	TITLE	EXECUTIVE/NON-EXECUTIVE	DATE OF APPOINTMENT	TERM
Mehmet Ali BERKMAN	Chairman of the Board	Non-executive	05.09.2012	3 years
Tomas PLESKAC	Vice Chairman of the Board	Non-executive	05.09.2012	3 years
Ömer DİNÇKÖK	Board Member	Non-executive	05.09.2012	3 years
Petr STULC	Board Member	Non-executive	05.09.2012	3 years
Hamdi Yaman AKAR	Board Member	Non-executive	05.09.2012	3 years
Peter BODNAR	Board Member	Non-executive	05.09.2012	3 years
Raif Ali DİNÇKÖK	Board Member	Non-executive	05.09.2012	3 years
Martin PACOVSKY	Board Member	Non-executive	05.09.2012	3 years
Hakan AKBAŞ	Independent Board Member	Non-executive	05.09.2012	3 years
Jiri SCHWARZ	Independent Board Member	Non-executive	05.09.2012	3 years

The members of the Board of Directors were elected among individuals who have no administrative duty in our Company other than the membership to the Board of Directors and are not involved in daily work flow and ordinary activities of the Company. All members of the Board of Directors are non-executive. Within the Board, there are two independent members who have the capacity to perform their duties without being under any influence. Term of office for independent members of the Board of Directors is up to three years and they can be nominated and elected again. Any situation which terminates independency of these members did not occur in 2012. In the General Assembly of the Company, no female member was nominated among the candidates for the membership to the Board of Directors by the Company shareholders.

In accordance with the Articles of Association of the Company, the Board of Directors convenes when the company business requires and at least four times a year in any case. The Chairman of the Board determines the agenda of the Board of Directors meetings by conferring with other Board members and the General Manager. The other members can also make suggestions for changes in the meeting agenda. The members pay attention to attending and giving opinions in all meetings by examining information and documents in respect of the subjects in the agenda and getting prepared accordingly.

Each member of the Board has right to cast one vote and the provisions of the Turkish Commercial Code are applied in quorums for meeting and decisions, as stated in the Articles of Association. Regarding the structure of Board meetings, the Articles of Association and provisions of the relevant regulations are implemented. The subjects included in the agenda of the Board of Directors meetings are discussed clearly in all aspects. The Chairman shows maximum effort to ensure effective participation of the non-executive members in the Board meetings. None of the members of the Board of Directors has casted a vote against any decision in the meetings in 2012.

Members of the Board of Directors allocate sufficient time for Company business. In case a member is an executive or a member of the Board of Directors in another company

or provides consultancy service to another company, it is a fundamental responsibility of the member to avoid any conflict of interest and negligence of duties in the Company. Within this scope, taking office/offices other than the Company has not become subject to any rules or been limited. Resumes of the Board members are included in the General Assembly information document and submitted for the shareholders' information. In 2012, weighted voting right or negative veto right were not bestowed upon the members of the Board of Directors.

Although not included in the Articles of Association, the powers of the Chairman of the Board of Directors and of the General Manager are clearly identified and separated. The General Manager and Chairman of the Board of Directors are separate persons and their duties and powers are defined by the Company Organizational Chart. The Board of Directors plays a role in maintaining effective communication between the Company and shareholders and in settling and resolving potential disputes. In pursuit of these tasks, it cooperates with the Corporate Governance Committee and Shareholder Relations Department. The Board administrates and represents the Company by keeping the risk, growth and return balance of the Company at the most appropriate level with strategic decisions and by protecting the long-term interests of the Company primarily with a rational and prudent risk management approach.

#### **Committees Reporting to the Board of Directors**

The Board of Directors carries out its operations in a transparent, accountable, fair and responsible manner. The distribution of roles was made by assigning a Chairman and Deputy Chairman among the members of the Board of Directors. The Board establishes internal control systems, including the risk management and information systems and processes that can minimize the impacts of risks that may affect the stakeholders, particularly the shareholders, by taking the opinions of relevant Board of Directors Committees into consideration as well. Within this scope, an Audit Committee was established and Early Risk Detection Committee, Nomination Committee and Remuneration Committee were formed within the Corporate Governance Committee.

**The members of the Board of Directors were elected among individuals who have no administrative duty in our Company other than the membership to the Board of Directors and are not involved in daily work flow and ordinary activities of the Company.**

The areas of activity, operating principles and members of the committees were determined by the Board of Directors and disclosed to the public via the Public Disclosure Platform and the Company website. All members of the Audit Committee and Chairman of the Corporate Governance Committee were elected among the independent members of the Board. The General Manager does not assume any roles in any committees.

Participation of a Board member in more than one committees is avoided as much as possible; however, the Audit Committee consists of two independent members of which one is Chairman and the other is member and the member of the Audit Committee is also Chairman of the Corporate Governance Committee. Any kind of support and resources required for the committees to perform their duties are provided by the Board of Directors. If deemed necessary, the committees can invite any Company executives and independent specialists to their meetings and benefit from their opinions. All committee activities are recorded in writing. Committees convene in a frequency deemed necessary for effectiveness of their activities and set forth in the operating principles. They submit reports containing information on their activities and meeting outcomes to the Board of Directors.

Committee Members reporting directly to the Akenerji Board of Directors are:

**Corporate Governance Committee**

Name	Title
Jiri SCHWARZ	Chairman
Hamdi Yaman AKAR	Member

**Audit Committee**

Name	Title
Hakan AKBAŞ	Chairman
Jiri SCHWARZ	Member

**Corporate Governance Committee**

The Corporate Governance Committee is established to monitor compliance of the Company with the Corporate Governance Principles, to carry out related improvements and to submit suggestions to the Board of Directors. The Committee has two members, both of whom are non-executive members of the Board of Directors. The Corporate Governance Committee of Akenerji performs

duties and responsibilities of the Nomination Committee, Early Risk Detection Committee and Remuneration Committee as well as its duties stated in the regulations.

Akenerji authorized the Corporate Governance Committee to perform the duties of the Remuneration Committee as stipulated by the regulations. Within the scope of these regulations, remuneration of independent members of the Board of Directors, stock options or payment plans based on the Company's performance are not used. Wages of the independent Board members are set during the General Assembly by making sure that they are at a decent level that ensure the members' independence.

The Board of Directors is responsible from ensuring that the Company achieves its operational and financial performance objectives as identified and disclosed to the public. Remuneration principles for Board members and senior executives are recorded in writing and submitted to shareholders as an individual article at the General Assembly, thus giving shareholders the opportunity to express their opinions. The remuneration policy prepared for this purpose is issued in our website. Wages and all other benefits given to members of the Board of Directors and senior executives are disclosed to the public entirely through the annual report and footnotes in financial statements. Akenerji does not extend loans or credits to any Board members or senior executives and does not give assurances such as pledges in favor of them.

**Audit Committee**

The current internal control system -particularly in terms of improving effectiveness and efficiency of Akenerji operations, ensuring reliability in financial reporting and compliance with laws and regulations- is audited by the Audit Group within Akkök Sanayi ve Yatırım Geliştirme A.Ş. within the framework of the annual internal audit plan and the results are reported to the Audit Committee. In the aforementioned annual internal audit plan, primary risks within the framework of corporate risk management are prioritized. The effectiveness of the internal audit activities are reviewed by the Audit Committee at four meetings held in a year. At these meetings, when required, the opinions of the internal auditor, independent auditor or other Company executives are taken.

The Board of Directors carries out its operations in a transparent, accountable, fair and responsible manner.

The Board of Directors reviews the effectiveness of risk management and internal control systems at least once a year. Information regarding the existence, functioning and effectiveness of internal controls and internal audit is presented in the annual report.

The Board of Directors made a decision on obtaining ISO 9001:2008 Quality Management System, ISO 14001:2004 Environmental Management System and OHSAS 18001:2007 Occupational Health and Safety (OHS) Management System certifications in all Akenerji power plants and thus a Quality Project Team was established within the Company. The Team cooperates with all departments in order to make the necessary preparations and to establish audit and reporting standards required to receive the relevant certifications. By means of this study, which plays an important role in internal communication, suggestions of employees are evaluated by the Team and submitted to the management for approval. Within the scope of Quality, Environmental and OHS Management Systems, internal audits are performed by our own certified personnel for all of our processes at least once a year.

### **Employee Involvement in Company Management**

At Akenerji, the involvement of employees in management is achieved through annual goal setting and performance evaluation meetings, suggestion systems and various meetings in the Company. With the Human Resources Policy issued in 2011, the "Open Door Policy" has been adopted. With this policy, each employee can easily communicate with the General Manager and other senior executives for issues about his/her job and Akenerji.

The Employee Suggestion System Procedure adopted in 2011 announced that all employees can share their requests, expectations and suggestions with a committee composed of Senior Executives. In this way, employees have the opportunity to inform senior executives on suggestions for a variety of issues by following the methods stated in the procedure.

Since 2011, Akenerji Human Resources Department organizes informative meetings with both the departments in the

headquarters and power plant construction and operation sites. At these meetings, policies and procedures directly related to employees (such as employee relations and fundamental human rights) are explained, requests and suggestions of employees are collected and significant issues are taken to the senior management.

### **Shareholder Involvement in Company Management**

Our shareholders benefit from the opportunity to make suggestions and give instructions to the highest governance body of Akenerji in the most extensive way. In order to ensure that this opportunity is provided for all shareholders, "General Assembly Briefing Documents" drawn up to include aspects stated in Article 1.3.2 of the Communiqué regarding Determination and Implementation of CMB Corporate Governance Principles are issued prior to General Assembly meetings.

Our shareholders have the opportunity to inform the Shareholder Relations Department in writing, on issues requested to be handled at General Assembly meetings. For material issues of the agenda, related members of the Board of Directors, other related people, executives responsible for the preparation of financial statements and auditors are present at General Assembly meetings with the aim of informing shareholders and answering related inquiries.

All shareholders have the right to obtain and review any kind of information that is not classified as a trade secret, within the framework of the regulations in effect. All shareholders, including minority and foreign shareholders, are treated equally. The right to obtain and review information has neither been removed nor restricted by the Articles of Association or by a decision of any corporate body.

In addition to General Assembly meetings, our website is designed and updated in compliance with the Article 2.2.2 of the Communiqué regarding Determination and Implementation of CMB Corporate Governance Principles. Stakeholders can contact related officials through the Company email address ([info@akenerji.com.tr](mailto:info@akenerji.com.tr)). All basic information in our Turkish website is also presented in English to enable foreign investors.

**At Akenerji, the involvement of employees in management is achieved through annual goal setting and performance evaluation meetings, suggestion systems and various meetings in the Company.**

## **Ethical Principles of Akenerji**

Akenerji considers adherence to the Ethical Principles as a prerequisite in all operations and a cornerstone in the corporate culture. The Ethical Principles of Akenerji are integrity, reliability and fairness, responsibility, conflict of interests, confidentiality, adherence to laws and regulations, keeping books and records. These Principles are planned to be shared with all employees in early 2013. While working, all employees are expected to abide by Akenerji Ethical Principles in their relations with other employees, partners, suppliers, customers, dealers, other stakeholders, and the public.

## **Risk Management**

Akenerji Corporate Risk Management Department was established in 2012 with the aim of establishing the required organization, taking actions and monitoring the process in order to identify and assess the risks and opportunities that may affect the Company's goals and to manage such risks and opportunities in line with the policies set by the Board of Directors and by observing the Company's risk appetite. With the Corporate Risk Management (CRM) Project initiated in 2012, we started to create a risk inventory across the Company, identify the roles and responsibilities during the CRM process and establish risk management policies. With the Project expected to be put into practice at the end of 2013, the risk management philosophy will become a part of the processes and goals of all departments in Akenerji. Being updated in line with the sectoral and corporate developments, this philosophy has become an integral part of the Company's practices.

Akenerji implements "The Committee of Sponsoring Organizations of the Treadway Commission (COSO)" and ISO 31000 standards in corporate Risk Management process. The Company's risk inventory is prepared once in a year in full coordination with business units -covering all power plants and business units- and includes all process risks.

Since 2012, every other month Risk Management reports are submitted to the Board through the Risk Committee. With the CRM project to be completed in June 2013 and creation of the Company's risk inventory,

risks deemed to be material by the Executive Board will be assessed and action plans will be monitored every two months.

In addition to periodic reports, the Risk Management Department is responsible for adding value to Akenerji through incident-based risk analyses and for providing all kinds of support to every business unit and power plant for sustainable operations. All related responsibilities are defined clearly in related procedures.

Internal Audit operations are within the responsibility of the Financial Audits and Risk Management Director and are performed by the Audit Group within Akkök Sanayi ve Yatırım Geliştirme A.Ş., a major shareholder of Akenerji. Internal audits based upon international standards ensure an effective corporate management; evaluate effectiveness of risk management, control and corporate management processes that will improve operations and help the Company reach its goals; and offers independent, unbiased reliability and consultancy.

**The Ethical Principles of Akenerji are integrity, reliability and fairness, responsibility, conflict of interests, confidentiality, adherence to laws and regulations, keeping books and records.**

# Product and Service Responsibility



**We, as Akenerji, evaluate our responsibilities arising from our operations in an extensive manner - from companies in our supply chain to our own investment projects and customer satisfaction.**

## Our Approach

We, as Akenerji, evaluate our responsibilities arising from our operations in an extensive manner - from companies in our supply chain to our own investment projects and customer satisfaction. We pay attention to minimizing social and environmental effects of the products and services we offer to the market.

Within the scope of our product and service responsibility arising from energy generation and distribution, the two major issues are impact of electricity on climate change based upon the sources of generation and supply safety in meeting the energy demand in Turkey. Including climate change into the list of our strategic priorities, we especially focus on renewable energy generation. Based upon the fact that Turkey needs to both ensure supply safety in meeting the increasing energy demand and increase the use of alternative energy sources to reduce current deficit, we continue the pace of our investments in alternative and clean energy technologies.

## Quality Policy

We work to provide our customers with reliable, economical and environment-friendly energy while meeting the increasing demand with our quality-focused approach.

In accordance with our Quality Policy, we, as Akenerji, are committed to:

- Becoming the leading company in the competitive market by diversifying fuel resources in line with changing global and domestic conditions,
- Improving our efficiency by integrating state-of-the-art technologies into our processes in line with sectoral developments,
- Generating and supplying energy in compliance with applicable laws by closely monitoring the changing conditions of the energy sector and our country,
- In full awareness that each employee is our greatest “source of energy”, supporting them in becoming team members who are able to improve and refresh themselves in multiple aspects and creating a quality workforce that will attract top talents and set an example for the sector,
- Operating and continuously improving our business processes in line with our corporate goals,
- Offering all of our stakeholders the privilege to work with a transparent and reliable company.

## Responsible Practices in Investments

As of the end of 2012, our Company operates 8 Hydroelectric Power Plants (HEPP), 1 Wind Energy Power Plant (WPP) and 3 Natural Gas Power Plants (NGPP). Sustainability performance and practices of these operating plants are presented in the related sections of this Report. In addition, sustainability practices in Erzin Power Plant that is still in construction phase (the largest natural gas combined cycle plant in our portfolio) and in Kemah HEPP that is still in Project phase (the largest hydroelectric plant in our portfolio) are given in this section of the Report.

In construction phases of our projects, we always pay attention to Akenerji quality standards and environmental concerns. Therefore we expect full compliance from all contractors to national laws and regulations on quality, environment, and occupational health and safety as well as by standards set by local authorities and the related standards of Akenerji. In agreements signed with contractors and subcontractors working in project areas, "Measures Taken by Employer for Occupational Health and Safety" file is an integral part. We run weekly and monthly reports that contain data on compliance at construction sites and our related performance.

Minimum issues to be covered within the scope of "Records, Audits and Documents regarding Environment and Occupational Health and Safety" part in monthly project reports include: a. Waste records b. Workplace accident, environmental accident and near-miss records c. Measurements (noise, dust, waste water, etc.) d. Routine controls e. Audits by public authorities f. Permits (on environment and OHS) g. State of Environmental Impact Assessment (EIA) commitments h. Trainings (on environment and OHS). A copy of the environment and OHS section of the monthly report run by Project Managers are sent to Akenerji Environmental and Quality Management Systems Directorate by the Investments Department every month. Related contractors are informed on identified incompliance and corrective and/or regulatory-preventive measures are implemented.

For each power plant investment in project phase we hold social/cultural impact assessments separately. We share the outcomes of these impact assessments performed by independent institutions with our stakeholders via our website under the name of "Total Impact Assessment Report". General information on investments and their expected benefits is given in these impact assessment reports. In addition to these, we evaluate the effect of the investment on local communities and announce the actions we may take or have already taken while drawing the plans to improve the life quality of the region.

### Investment in Construction Phase: Erzin Natural Gas Combined Cycle Power Plant

As one of the most important projects of the Akkök-ÇEZ strategic partnership, Erzin Natural Gas Combined Cycle Power Plant is the largest investment made by Akenerji to date. With the ongoing construction in the town of Erzin in Hatay, we aim to generate environment-friendly energy in a high-efficiency plant that uses new and clean Technologies. The construction of the Erzin Natural Gas Combined Cycle Power Plant that obtained Environmental Impact Assessment (EIA) certificate started in November 2011. With an approximate capacity of 900 MW, Erzin Natural Gas Combined Cycle Power Plant is expected to generate 6.7 billion kWh of electricity per year once it becomes operational in 2014. With this production capacity, Erzin will generate an amount corresponding to almost 2.6% of Turkey's total electricity demand. With the activation of Erzin, we, as Akenerji, aim to increase our installed capacity to 1,645 MW.

Electricity generation in Erzin Natural Gas Combined Cycle Power Plant will be realized with the natural gas combined cycle method; therefore the level of flue gas emissions is planned to meet the values given in the European Union Environmental Legislation. In addition to measures proactively taken against potential environmental risks, we continue to work to ensure compliance with all of the environmental criteria as required by applicable regulations.

In construction phases of our projects, we always pay attention to Akenerji quality standards and environmental concerns. Therefore we expect full compliance from all contractors to national laws and regulations on quality, environment, and occupational health and safety as well as by standards set by local authorities and the related standards of Akenerji.

Wastewater treatment and discharge, disposal of waste materials, prevention of noise pollution and protection of groundwater resources are among the issues that we give utmost importance to. Since the plant will use seawater in the cooling process, groundwater resources will not be utilized for any purpose. In addition, the monitoring of groundwater levels and quality parameters, which began before the construction phase, is ongoing.

In order to identify the project site and impact area of Erzin Power Plant, pre-construction monitoring was performed by an expert service provider as of March 2011. While studying ground and surface water, soil quality, flora and fauna, we also monitored the population of sea turtles and other species considered to be of importance for the region. In addition to these pre-construction studies, noise, air and water qualities were measured and monitored to observe impacts of construction activities on the environment. As an extension of these studies, evaluation reports, operating and monitoring plans were prepared to guide us throughout the construction and operation period. Environmental monitoring practices will be maintained throughout the operation period with the same meticulous care as in the construction phase. At the end of the first year of operation, the monitoring schedule will be revised in accordance with legal requirements and implemented accordingly.

**Investment in Project Phase: Kemah Dam and Hydroelectric Power Plant**

Kemah HEPP project is of particular importance as the largest hydroelectric power plant project in Akenerji's portfolio. Scheduled to be operational in 2017-2018, the project is expected to generate 564 GWh of electricity per year. Feasibility studies of the project are completed; preparations for design and pre-construction permits will be made in 2013. Our offer to increase the project's capacity from 160 MW to 198 MW was approved by EMRA. In line with this approval, we submitted the new EIA Report regarding the amendment to be made in the energy generation license for the increase in installed capacity to the Ministry of Environment and Urbanization. The report is of final quality and the procedure to obtain EIA certificate continues with the Ministry.

**Energy Trade**

As one of Turkey's most experienced energy companies, Akenerji had an extremely productive year in 2012 with accelerated energy trade activities. Towards the end of 2011 we went one step further and started to purchase and sell sources of other energy generation companies in addition to generating and selling our own energy. Thus we took important steps not only in energy generation but also in energy trade.

The agreements that became effective as of January 1st, 2012 accelerated our commercial activities. Following the first EFET (European Federation of Energy Traders) agreement signed with RWE in 2011, we established long-term relationships with four other energy generation and trade companies. Making prudent and proper decisions in our energy trade activities, we signed a total of 27 EFET-like private contracts with new companies. Additional value was created for the Company from the sale of approximately 120 million kWh of outsourced energy, excluding imports in 2012.

As Akenerji, one of our goals for 2013 is to increase the outsourced capacity. With this goal in mind, the first steps were taken for the procurement and sale of 600 million kWh of energy that will be activated as of January 2013, and the legal requirements were fulfilled in that respect. This amount is expected to reach 1 billion kWh in 2013.

As a result of our high efficiency-oriented approach, we continued to efficiently operate the resources of our power plants within the scope of the prices realized in the "Day-Ahead Market" and "Energy Balancing Market". In addition, with the help of Primary Frequency transfer agreements, we ensured minimum negative impact of this liability on Akenerji.

One of the important activities carried out in 2012 by Akenerji was to serve within the "Secondary Frequency Control" framework. We believe that in this way we assumed an important role in improving the quality of the Turkish electricity grid frequency.

As a founding member of the Energy Traders Association, we retained and reinforced our key position among the organizations that shape the Turkish energy market in 2012.

**Making prudent and proper decisions in our energy trade activities, we signed a total of 27 EFET- like private contracts with new companies. Additional value was created for the Company from the sale of approximately 120 million kWh of outsourced energy, excluding imports in 2012.**

Throughout the year, maintaining close ties with private sector representatives, public sector participants and regulatory authorities, we continued our activities towards the establishment of the Turkish Energy Exchange and the best and most effective applications of the regulations in the sector.

## Customers

With the aim of retaining our leadership in the growing and developing energy sector and of achieving a more dynamic structure, we, as Akenerji, initiated an extensive change in our organizational structure in 2012. As a result of this change, we divided the Energy Trade and Strategic Planning Department into five main units: "Retail Department" for retail with independent consumers; "Energy Trade Department" for wholesale purchase and sale of energy and electricity imports-exports; "Post-Sales Support Service Department" for invoicing customer consumption and supporting customers in all problems related to electricity supply; "Planning and Analysis Department" for short and mid-term pricing, demand forecasting, risk management for portfolio balancing, production planning, and process analyses and monitoring of other units; "Strategic Planning Department" for new investment project assessments and long-term investments, market analyses, and plans. In order to complete the formation phase of this new organizational structure, we identified business processes of units, made job descriptions, and set responsibilities and duties.

We also divided our customers into four groups: independent consumers as end consumers; wholesale companies that we purchase-sell energy and import-export electricity through bilateral agreements; busbar customers directly linked to power plants; and spot market.

In 2012, our portfolio reached 350 customers and 15,000 subscribers in line with our goals and we automated customer analysis and offer processes. In the same year, we implemented local site sale project in two regions. With this development, we aimed to introduce potential customers in regions to Akenerji and to meet customer needs faster and with face-to-face communication by extending the sales team in İstanbul in a way

that covers other areas. We plan to increase the number of regions that we implement local sale project in 2013.

We make offers based upon requested time and capacity required by energy needs of potential customers, using meter and customer-based analyses. Following the approval of such offers, in order to meet the energy demand, we include not only our own generation sources but also sources of other companies that especially generate energy using renewable sources into our portfolio; in this way, we increase our sale capacity. On the other hand, busbar customers can get energy directly from our power plants as they are located in the vicinity of our plants.

With our robust financial structure, know-how and market strength, we play an active role in offering sources of other producers as well as our own resources to the market. Through standard and tailor-made products that we offer to the market, we provide efficiency-focused solutions to independent consumers, suppliers and production companies.

## Customer Satisfaction

The primary component of our efforts to ensure customer satisfaction is our survey. We hold separate customer satisfaction surveys for busbar customers and other segments. With these surveys, we measure the level of satisfaction experienced as Akenerji customers under five main topics. In addition to common topics for both surveys, the survey for busbar customers includes additional questions on the capability of Akenerji to provide uninterrupted energy, on timely notification of technical and organizational changes in power plants, and on the quality of energy.

Customers rate our performance on the scale of 5. They also share their suggestions and opinions. As a result of this feedback, average score for these five topics is calculated.

**In 2012, our portfolio reached 350 customers and 15,000 subscribers in line with our goals and we automated customer analysis and offer processes.**

Outcomes of the customer satisfaction survey we held in 2012 and 2011 are presented in the table below.

<b>MAIN TOPICS OF CUSTOMER SATISFACTION SURVEY</b>	<b>2011 SCORES</b>	<b>2012 SCORES</b>
Satisfaction with Akenerji	3.94	4.14
General opinions on Akenerji	4.02	3.97
Customer’s knowledge about the market and approach to green energy	3.56	3.71
General opinions on sale services of Akenerji	3.70	3.89
General opinions on customer-operation services of Akenerji	3.62	3.92

**We initiated the preparations for a new invoicing method named “Smart Invoice” in 2013.**

Outcomes of the busbar customer satisfaction survey we held in 2012 are given below.

<b>MAIN TOPICS OF BUSBAR CUSTOMER SATISFACTION SURVEY</b>	<b>2012 SCORES</b>
Satisfaction with Akenerji	4.50
General opinions on Akenerji	4.14
Customer’s knowledge about the market and approach to green energy	4.00
General opinions on sale services of Akenerji	3.75
General opinions on customer-operation services of Akenerji	4.63

The outcomes reveal that our customers are in general fond of the performance of Akenerji. The basic satisfaction score in the “Energy Supply” topic, which is the main service of our Company, indicates that our customers are highly satisfied with our services. Covering not only information and opinions on Akenerji, but also customers’ knowledge about the market to help us serve better, this survey has proved that our customers have sufficient knowledge on renewable energy and markets. Outcomes of questions regarding operations, sales, and objection management services also report that our customers are in general fond of working with Akenerji and do not experience any significant problems.

According to the feedback received from customer satisfaction surveys and face-to-face interviews, the major area for improvement is delayed invoicing to customers. This results from delayed meter-reading by licensed distribution companies or delayed notification of consumption to Akenerji. Within the scope of the management decision to ensure that invoices reach customers as early as possible

and customer satisfaction is achieved, we initiated the preparations for a new invoicing method named “Smart Invoice” in 2013. In addition to this, we are redesigning the invoices so that customers may have more detailed information on their invoices and the sector. The new detailed, easy-to-read and clear invoices comprising sector information will be launched by the end of 2013.

With the annual customer satisfaction survey, we achieve a better understanding of customer needs and expectations and we include improved customer knowledge and insight into our service management. Thanks to these efforts, outcomes of customer satisfaction surveys indicate a trend of improvement every year.

## Suppliers

Practices regarding suppliers are a part of our product and service responsibility. Before selecting a supplier, we use a selection form decide on the most appropriate candidate. We evaluate the information given in the forms and select our suppliers accordingly. In the forms, we request information about practices regarding Quality, OHS and Environmental management systems and related certifications (ISO 9001, ISO 14001, OHSAS 18001). Final selection is made based upon the performance in meeting these criteria.

As Akenerji, we expect all of our suppliers to share our vision of responsible approach towards sustainability and environmental issues. We use evaluation forms to evaluate the selected and current suppliers' performance. In these forms, accordance of raw materials, products or services with the Akenerji specs, delivery time, price and method of payment, after sales service, complaint management, competency of the supplier personnel, and ability to work in harmony with Akenerji are evaluated on a percentage value. As a result of this evaluation, we continue to work with suppliers meeting the required criteria and maintaining good performance.

## Climate Change and Akenerji

As one of the first energy companies to invest in renewable energy sources, Akenerji continued its pace in such investments following the first one in 2005 and started to run 9 renewable energy plants one after the other. The share of renewable energy in Akenerji's portfolio increased to 52% in 2012. Within the framework of the increased awareness in consumers and recent legal regulations, Akenerji aims to continue investing in cleaner and renewable energy sources to fight climate change, which is a global issue caused by greenhouse gases.

With the 15 MW Ayyıldız Wind Power Plant launched in September 2009, we, as Akenerji, have become the first company to be registered in the National Carbon Registry established with the initiative of the Ministry of Environment and Urbanization. This registry system created within the framework of the "Communique on Registration of

Projects Reducing Greenhouse Gas Emission" aims to record emission reduction projects developed and implemented in Turkey in a single registry, thereby to ensure that these projects have a better value in international markets and figures related to such voluntary reductions performed in Turkey are registered officially to be used in the most efficient way in climate change negotiations.

In addition to our renewable sources-based energy generation, we also benefit from modern and environment-friendly Technologies to keep operational efficiency at the maximum level at all of our power plants. Our Bozüyük Natural Gas Power Plant, which rewarded as the most environment-friendly plant in the city of Bilecik, is a good example of our goal and practices.

We not only implement environment and climate-friendly energy generation strategies, but also continue our efforts to become the largest energy trade platform in Turkey in full pace. Benefiting from the supply agreements with other energy companies, we manage an energy portfolio that is much larger than our generation capacity and thus continue our growth. Among such practices, we attach special importance to the sale of "Green Energy" generated at wind and hydroelectric power plants.

Following the fast development pace in emission reduction and voluntary markets, we, as Akenerji, became a pioneering company in emission trade and emission reduction certifications. We obtained carbon certification for all of our renewable energy projects.

In order to disclose our carbon emission-reduction practices to the public, we participated in the Carbon Disclosure Project (CDP) managed by Sabancı University Corporate Management Forum. As a global voluntary initiative, the CDP is created to ensure that information required to help corporations, investors and governments to take measures against the threat of climate change is gathered and shared. Companies voluntarily participating in the Project in Turkey disclose their carbon emission strategies and figures. These strategies and figures are then used to devise strategies to combat climate change globally.

**We are proud to be one of the two energy companies in Turkey that participated in the Carbon Disclosure Project, through which we disclose our climate change strategy and goals.**

**We are committed to increase our renewable energy capacity and to maintain our leading position in sustainability in the sector through our high-efficiency energy generation processes.**

**Renewable Energy Generation**

Operating in the energy sector since 1989, Akenerji is one of the first private sector electricity producer companies to invest in renewable energy. We started investments in renewable energy sources by participating in the first hydroelectric power plant tenders held by the Energy Market Regulatory Authority (EMRA) in 2005. Ayyıldız Wind Power Plant, our first renewable energy generation plant, started operations in 2009. Subsequently Akocak, Bulam, Burç Bendi, Feke II and Uluabat hydroelectric power plants were activated in 2010 and Himmetli HEPP (27 MW), Feke I HEPP (30 MW), and Gökkaya Dam HEPP (30 MW) successfully became operational in 2012, thus increasing our total capacity to 745 MW and the share of the renewables in the portfolio to 52%.

**Carbon Certification, Emission Trade and Carbon-Neutral Electricity Project**

We, as Akenerji, are aware of the role undertaken by energy companies in controlling climate change, which is one of the main problems facing the world today. With this in mind, while investing in renewable energy sources, we also procure carbon-neutral energy for our customers that aim to reduce or neutralize their carbon emissions.

Performing carbon certification in all of our renewable energy investments, we have a leading role in the sector in terms of preventing carbon emissions.

Following the registry of Ayyıldız Wind Power Plant with the Gold Standard, the certification processes for Uluabat, Burç Bendi, Akocak, Feke I, and Feke II power plants were completed to help us maintain our leading position in the area. As of the registration date, Uluabat HEPP is the largest hydroelectric power plant with a dam in Turkey that was registered with the Voluntary Carbon Standard (VCS). In addition, with 7 MW of installed capacity, Bulam HEPP is at the final stage of registry process for the Gold Standard. For the Gökkaya and Himmetli HEPPs activated in 2012, certification work is ongoing and the approval process is in the final stage.

Akenerji also pioneers the emissions trade in the sector. We actively sell Gold Standard emission reduction certificates, which correspond to the electricity generated at Ayyıldız Wind Power Plant. Certifications of Akocak, Uluabat ve Feke II power plants that became operational in 2010 started to be actively sold in 2012.

Considering customers that pay attention to their carbon footprints, we aim to procure carbon-neutral electricity by offering our emission reduction certifications of energy generated in our own renewable energy power plants as a single package. Certification of carbon-neutral electricity that we procure will be provided by an independent confirmatory institution and thus our customers will be able to zero their carbon footprints resulting from their electricity consumption.

With the full operation of our renewable energy plants, we aim to prevent up to 1 million tons of greenhouse gas emissions on the basis of their feasible generation capacities. In other words, we target a contribution equivalent to the fresh air provided by approximately 42.2 million trees.

**We, as Akenerji, have the largest renewable energy share by installed capacity among energy producers with capacity higher than 500 MW.**

**Carbon neutralization means the process in which companies or consumers neutralize the effect of unpreventable carbon (greenhouse gas) emissions resulting from their operations through certified third-party projects that reduce carbon emissions.**

# Occupational Health and Safety



**The major priority of Akenerji is to ensure that employees work healthfully in a pleasing and peaceful environment and that the best occupational health and safety (OHS) performance is achieved by integrating all legal requirements into the work model.**

## Our Approach

The major priority of Akenerji is to ensure that employees work healthfully in a pleasing and peaceful environment and that the best occupational health and safety (OHS) performance is achieved by integrating all legal requirements into the work model. The basis of our approach to OHS at Akenerji is the value we attach to humans.

As stated in the “Approach to Sustainability” section of this Report, OHS operations of Akenerji are performed in full integration with the Environment and Quality Management Systems within the scope of “Integrated Management Systems”. The major operations within this framework are training and awareness-raising, risk assessment, prevention and control of occupational risks, monthly environment and OHS committee meetings of power plants, change management, and internal and external audits. The main factor in the success of our operations is the active participation of employees and leadership of executives.

## OHS Policy

Based upon our corporate principle of people-oriented operations (“People Come First”) that is also adopted by all our subsidiaries, occupational health and safety forms the basis of every phase of operations.

In accordance with our Occupational Health and Safety policy, we are committed to:

- Preventing occupational accidents and health risks by creating a healthy and safe workplace in accordance with all legal obligations and other related conditions,
- Creating awareness in all stakeholders about the potential risks and taking necessary precautions for protection against such risks,
- Ensuring stakeholders safety by assessing potential emergency procedures and preparing necessary action plans,
- Continuously improving our occupational health and safety performance by making risk assessments with active participation of employees.

**OHS Management**

It is the responsibility of all employees under the leadership of the Company’s senior executives to pursue and continuously improve occupational health and safety in all operations. Each employee has certain OHS responsibilities that are clearly stated in job definitions. In order to fulfill such responsibilities, we have implemented the OHSAS 18001 Occupational Health and Safety Management System in our headquarters and power plants. Details of our management system certificates are given in the “Approach to Sustainability” section of this Report.

In Akenerji, communication and coordination of OHS operations are performed by the Technical Security, Health and Safety Manager who directly reports to the Operation and Maintenance Assistant General Manager as well as by the Occupational Health and Safety Senior Specialist, one Health and Safety Representative from each power plant and their assistants (if available). Operation and Maintenance Assistant General Manager is also the Management Representative of Integrated Management Systems including OHSAS 18001. In addition, there is an OHS committee in each power plant.

**It is the responsibility of all employees under the leadership of the Company’s senior executives to pursue and continuously improve occupational health and safety in all operations. Each employee has certain OHS responsibilities that are clearly stated in job definitions.**

**OHS Committees at Power Plants**

Occupational Health and Safety Act requires workplaces with more than 50 employees to have OHS boards. Although number of employees at each power plant of Akenerji is less than 50, in 2010, we started to hold monthly Environment and OHS committees at every plant in order to achieve functionality and participation of all parties. All of our employees at power plants are represented in these committees.

An Environment and OHS Committee (if there is an employee with specified duties in the power plant) comprises the Plant Manager (Chairman), Assistant Plant Manager, Operational Officer (Environment and OHS Representative of the Plant), Maintenance Officer, Environment Representative, Health and Safety Representative, Maintenance Operator Representative, Operations Representative, Shift Supervisor Representative, Operator Representative, Mechanical Maintenance Representative, Instrumentation and Control Representative, and Warehouse Representative. In addition, if there are Directorates of Environment and Quality Systems as well as Technical Safety, Occupational Health and Safety at the power plant, related personnel from these directorates are also members of this Committee.

With monthly meetings, the Environment and OHS Committee reviews the Plant’s Integrated Management Systems Action Plan devised in the previous meeting as well as the related corrective and preventive actions. It discusses the findings of plant



internal inspections and plans corrective and preventive actions to be included in the Power Plant’s Integrated Management System Action Plan. The Committee also reviews environmental and occupational health and safety suggestions made since the last meeting and plans the required corrective and preventive actions. Workplace accidents, near-miss incidents, environmental accidents and environmental complaints reported and investigated since the last meeting are also discussed. Legal requirements in terms of the environment and OHS are reviewed. Monthly Control Charts of Occupational Health and Safety are inspected. The Committee also discusses action definitions stated in occupational health and safety site visit reports and Monthly Waste Inventory forms. Finally, it reviews the requirements arising from the Change Management Procedure and discusses various related issues.

**OHS Trainings and Awareness Activities**

In order to protect the well-being and safety of our employees and power plants, we, as Akenerji, organize trainings and informative activities. Average OHS training days per Akenerji employee in 2012 are summarized in the table below.

**Average OHS training days per employee**

OHS TRAININGS	DAY/YEAR	DAY/EMPLOYEE/YEAR
2010	242.4	0.79
2011	320	1.19
2012	468	1.75

Note: Monitored figures represent employees of operation sites and the headquarters (excluding employees of investment site) and therefore they are lower than the number of employees used as a basis for trainings.

Note: While calculating the days, 1 day is accepted as 7.5 hours.

We, as Akenerji, ensure that our employees possess the required knowledge especially in terms of OHS in power plants and operation areas such as plants and that they are capable of preventing potential risks by taking precautions.

We, as Akenerji, ensure that our employees possess the required knowledge especially in terms of OHS in power plants and operation areas such as plants and that they are capable of preventing potential risks by taking precautions. Among the main subjects of trainings given in our power plants and the headquarters are Workplace Risks and Precautions, Safe Labor Program, Ergonomics and Handling, Permit to Work Program (Work permit, Hot Work permit, Confined Space Entry permit, Work at Height permit), Safe Driving Techniques, Internal Auditor Training, Occupational Health and Safety General training, Occupational Health and Safety Legislation, Near-Miss and Accident Reporting Instructions, Risk Assessment and Fire, Emergency Response, Emergency Drill.

improvement principle stated in OHSAS 18001 management system.

With the aim of ensuring active participation of employees to trainings, we identify the annual trainings needs based upon the training procedures. We ask for employees' opinions through the Survey for Identifying Training Needs of Employees that covers all kinds of trainings given within the Company. Surveys and demands are evaluated by an approval system and then trainings to be given are identified.

We also aim to make sure that site managers/supervisors develop competence to reflect our OHS sensitivity to the site in terms of management. With this aim, since 2010, every year two engineers from one of our power plants attend International Occupational Safety and Health Qualification trainings given by the National Examination Board in Occupational Safety and Health (NEBOSH).

**Employee Trainings**

The orientation training given to all new employees of Akenerji includes a detailed OHS training as well. We devise annual OHS training plans not only in a way that meets legal requirements, but also that enables us to improve our training performance within the framework of continuous

We provide a 15-minute video-training to contractors and subcontractors to work at our site. These video-trainings are given in both English and Turkish and cover rules to be abided by at site. In addition, we make sure that all subcontractors have attended the required OHS trainings before starting to work for us.

### Awareness Activities for Local Communities

As Akenerji, we act upon not only operational excellence and profitability, but also the principles of community engagement and environmental sensitivity in all of our investments. We adopt a cautious and stable management style that is based upon mutual trust. In line with this approach, in locations where we have hydropower plants, we implemented some practices to create awareness in local communities and to protect them from potential hazards. We prepared brochures and posters highlighting potential dangers of HPPs and ways of protection and we published these materials in the Environment section of our official website in 2011.

In 2013, we aim to distribute these posters and brochures in public areas around our HPPs - namely in the village headmen's office, schools, city halls, coffee houses, aviation plants, etc. With this initiative approximately 1,700 brochures and 400 posters will be delivered to the cities of Trabzon, Adiyaman, Bursa, and Adana. We plan to increase the number of print materials to be distributed as well as the number of cities in the coming years.

### OHS Performance

It is a material issue for us to ensure that Akenerji employees adopt and internalize the OHS culture in order to improve our occupational health and safety performance. We periodically monitor our OHS performance and implement necessary precautions within our work plans to improve this performance. In addition to the periodically monitored OHS data, we also focus on the performance in vehicle accidents and during outages.

### Vehicle Accidents

The nature of the operations performed at the eight hydroelectric plants in our portfolio require our employees to drive vehicles in rough site conditions and this creates a risk factor that needs to be monitored. Since the initial operation and transfer of the management of plants to the Office of Operation and Maintenance Assistant General Manager, the only vehicle accident causing a minor injury was recorded in 2011 in Adana. Detailed information on the total number of road accidents in 2011 and 2012 is given in the table below.



Total Vehicle Accident Rate (TVAR) in 2011 and 2012

POWER PLANT	2011		2012	
	NUMBER OF ROAD ACCIDENTS	TOTAL VEHICLE ACCIDENT RATE	NUMBER OF ROAD ACCIDENTS	TOTAL VEHICLE ACCIDENT RATE
AYYILDIZ	0	0.0	0	0.0
ÇERKEZKÖY	2	126.3	1	81.4
KEMALPAŞA	0	0.0	2	29.4
BOZÜYÜK	1	30.7	0	0.0
AKOCAK	1	14.5	1	11.7
BURÇ	0	0.0	0	0.0
BULAM	0	0.0	1	30.1
FEKE II	3	44.4	3	64.9
ULUABAT	0	0.0	0	0.0
<b>Total</b>	<b>7</b>	<b>15.9</b>	<b>8</b>	<b>16.1</b>

Note: The formula used in calculating the road accidents is given below:

Total Vehicle Accident Rate (TVAR) =	Number of road accidents	x 1,000,000 km
	Total use of vehicles (km)	

**Performance Data of Scheduled Maintenance**

By performing scheduled maintenance in our plants, we aim to prevent damages due to malfunctions and the causes of such malfunctions. We identify potential causes of potential problems through periodical inspections and maintenance of major and critical equipment and thus prevent equipment and performance loss by taking corrective and preventive actions. Frequency of outages varies depending on the nature of plants. During such maintenance, number of employees in plants may increase up to 10-fold since contractors and subcontractors work simultaneously at site.

During scheduled maintenance, number of employees in plants may increase up to 10-fold since contractors and subcontractors work simultaneously at site.

**Scheduled Maintenance**

**At Combined Cycle Gas Turbine Plants**

*CI (Combustion Inspection):* This is the maintenance in which the Combustion Chamber and components are checked. It is performed at the end of every 12,000-hour performance of turbines.

*HGPI (Hot Gas Path Inspection):* This is the maintenance in which not only the Combustion Chamber and components are inspected, but also the fixed and rotating blades in which the production is made after the combustion chamber are inspected and renewed. It is performed at the end of every 24,000-hour performance of turbines.

*MI (Major Inspection):* This inspection covers the maintenance performed during HGPI and additionally includes the inspection of major equipment such as Rotors, Gearbox, and Generator. It is performed at the end of every 48,000-hour performance of turbines.

**At Hydroelectric Power Plants**

*AI (Annual Inspection):* It is the annual inspection and maintenance performed at HPPs, regardless of the operating hours.

**At Wind Power Plants**

*AI (Annual Inspection):* It is the annual inspection and maintenance performed by the manufacturing company at WPPs, regardless of the operating hours.

Due to its nature, which includes time pressure and non-routine operations, scheduled and extensive maintenance poses more specific hazards and higher risks. During the scheduled maintenance listed below, a total of 59,776 hours of operations were performed at Akenerji power plants, including the working hours of contractor and subcontractor employees. In 2012, an employee of a contractor had an accident without any amputation, but with loss of time during the mentioned maintenance. No accidents involving death have been reported.

Working Hours Statistics During Outages in 2012 at Akenerji Power Plants

POWER PLANT	MAINTENANCE DATES	AKENERJİ PERSONNEL (MAN X HOUR)	CONTRACTOR AND SUBCONTRACTOR (MAN X HOUR)	TOTAL (MAN X HOUR)
Bulam	July 2012	1,872	0	1,872
Burç	July 2012	1,512	0	1,512
Fekeli II	September-October 2012	3,286	306	3,592
Uluabat	November 2012	3,096	655	3,751
Ayyıldız	July 2012	50	330	380
Akocak	September-October-November 2012	2,136	1,888	4,024
Kemalpaşa	March-May 2012	6,848	36,412	43,260
Bozüyük	October 2012	519	856	1,375
<b>Total</b>		<b>19,319</b>	<b>40,447</b>	<b>59,776</b>

### Lost Days and Absenteeism

Lost days and absenteeism rates due to health issues in 2012 are given in the table below:

LOST DAYS AT POWER PLANTS	ABSENTEEISM RATES AT POWER PLANTS
390	1,771.97

Note: Absenteeism rate is calculated using the formula below and it includes maternity leaves.

Absenteeism rate =	Number of days of absence due to health issues	X 200,000
	Total workdays	

### Occupational Accidents

Workplace incidents that occur within the requirements identified by regulations and that cause negative effects on employees are defined as “occupational accidents”. Occupational accident data of the last 3 years, covering power plant employees as well as contractor and subcontractor employees are given below:

#### Frequency and weighted rates of occupational accidents

EMPLOYEES OF AKENERJİ SUBSIDIARIES	2010	2011	2012
Frequency of occupational accidents	12.4	6.2	0
Weighted rates of occupational accidents	93.3	55.8	0
EMPLOYEES OF AKENERJİ CONTRACTORS AND SUBCONTRACTORS			
Frequency of occupational accidents	144.6	0	7.7
Weighted rates of occupational accidents	144.6	0	53.7

Note: The figures given above cover power plants being actively operated by Akenerji. The following formula have been used in calculating rates:

Frequency of occupational accidents =	Number of accidents with loss of days	X 1,000,000
	Total working hours	
Weighted rate of occupational accidents =	Number of lost days due to occupational accidents	X 1,000,000
	Total working hours	

We, as Akenerji, record frequency and weighted rates of all occupational accidents. During the reporting period no accidents involving death or long-term loss have occurred at our power plants and headquarters. Frequency and weighted rates of occupational accidents indicate a downtrend every year, the main reason of which is the trainings we hold in our power plants and our efforts based upon the principle of continuous improvement.

Frequency and weighted rates of occupational accidents indicate a downtrend every year, the main reason of which is the trainings we hold in our power plants and our efforts based upon the principle of continuous improvement.

### OHS Audits

In order to fulfill the liability to perform audits, Directorate of Technical Safety and OHS at Akenerji pay announced and unannounced visits to sites. We monitor findings based upon the site visit reports prepared during the visits, identify corrective and preventive actions, and ensure that such actions are included in the general work plan. Site visits are performed at operating power plants as well as those in investment stage, i.e. those still in construction.

In 2012, our OHS Department performed 57 site visits. During these visits, 98 OHS issues to be improved were identified and related corrective and preventive actions were included in work plans. In addition to internal audits, related public authorities (e.g. Workplace Inspection Committee of the Ministry of Labor and Social Security) also pay announced and unannounced visits to power plants. At the independent audits made in our power plants in 2012, no cases of unconformity requiring penalty were identified.

### Process Safety

Our concept of process safety adopts the "from-cradle-to-grave principle", starting from the design stage and aims to expand the culture of safety throughout the company. We, as Akenerji, ensure process safety via risk assessments, compliance with industrial standards, design and engineering, permit to work system, corrective and preventive maintenance, and management of change at our power plants.



In 2012, our OHS Department performed 57 site visits.

### Emergency Management

Every power plant has the Akenerji Emergency Plan that is prepared considering emergencies such as fire, natural gas leakage, earthquake, large-scale chemical leakage, bomb warning, leakage in water structures. Periodical drills are performed. The Akhan building in Istanbul, where the Headquarters is located, is also included in the Emergency Plan; we distribute tasks and responsibilities at every floor of the building and make the necessary implementations in coordination with the Akhan building management. We aim to customize the Akenerji Emergency Plan separately for every power plant and issue a unique Standard Operation Procedure for each power plant in 2013.

# Employees



**The basis of Akenerji Human Resources policy is providing appropriate and fair support for employees' needs and offering equal opportunities for training and development in order to increase their performance.**

## Human Resources Policy

The basis of Akenerji Human Resources policy is providing appropriate and fair support for employees' needs and offering equal opportunities for training and development in order to increase their performance. The strategy we use within the framework of this policy is to build the organizational structure to reach strategic goals, to improve employee efficiency and performance, and to employ qualified workforce.

Our Company adopts a management system that values people and encourages creativity, communication and employee involvement. We are fully aware that creating an environment of transparent, close, and seamless communication between the management and employees is very important for the motivation and productivity of employees.

The senior management of Akenerji is committed to implementing human resources (HR) practices that use internationally-recognized models and integrated systems. In addition, the management also aims to benefit from

systems that ensure contemporary and integrated business results in every stage of HR management - from recruitment to performance management system, improvement, remuneration and resignation.

Fundamental aspects of our HR policy are as follows:

- Organizational Development: We provide equal opportunities for everyone.
- Selection and Recruitment: We match the right person with the right task.
- Salary Management: We adopt fairness in salary, based upon performance.
- Performance Management: We evaluate success based upon performance and competence; we improve productivity by creating motivation and loyalty.
- Recognition and Rewarding: We timely recognize and appreciate success.
- Industrial Relations: We cooperate by ensuring continuity of a peaceful environment within the industry.
- Communication: We provide timely, accurate, transparent and multi-directional information.

## EMPLOYEES

### Goals and Commitments

COMMITMENT	2012 ASSESSMENT	FUTURE GOALS
Talent Management	Talent Management process is performed manually.	To transfer the Talent Management process to the electronic environment in 2013.
Performance Management System	Performance Management System is performed manually.	To transfer the Performance Management System to the electronic environment in 2013.
Flexible Payment System	-	To establish and implement a criteria-based bonus system for mid-level and blue-collar employees in 2014.
Training	-	To transfer the process to the electronic environment and to ensure that e-learning is provided within the Company in 2014.
Employee Satisfaction Survey	-	To hold the first employee satisfaction survey in 2014.
Investors In People - IIP	We earned the IIP certificate in early 2012.	To work for earning the Bronze Certificate in 2015.

### Employee Profile

The profile of employees working at our power plants and headquarters is defined by the requirements of energy industry. All of Akenerji employees work on a fixed-contract basis and we do not employ any part-time employees. Disabled employees have 3% share in the total number of personnel. Some data on our employee profile whom we recognize as our greatest value are presented below.

NUMBER OF EMPLOYEES ACCORDING TO WORK CONTRACT	2010	2011	2012
Indefinite-term contract	302	302	296
Definite-term contract	0	0	0
<b>Total</b>	<b>302</b>	<b>302</b>	<b>296</b>

NUMBER OF EMPLOYEES ACCORDING TO REGIONS	2010	2011	2012
Headquarters (Istanbul)	114	111	110
Ankara	8	8	7
Bozüyük Natural Gas Power Plant	25	26	25
Çerkezköy Natural Gas Power Plant	28	27	21
Kemalpaşa Natural Gas Power Plant	26	27	27
Ayyıldız Wind Power Plant	5	5	5
Akocak Hydroelectric Power Plant	14	12	12
Bulam Hydroelectric Power Plant	8	8	7
Burç Bendi Hydroelectric Power Plant	13	10	10
Uluabat Hydroelectric Power Plant	18	15	14
Himmetli Hydroelectric Power Plant	6	8	7
Gökkaya Hydroelectric Power Plant	12	13	11
Feke I Hydroelectric Power Plant	12	14	12
Feke II Hydroelectric Power Plant	10	11	12
Erzin Natural Gas Power Plant	3	7	16
<b>Total</b>	<b>302</b>	<b>302</b>	<b>296</b>

The profile of employees working at our power plants and headquarters is defined by the requirements of energy industry.

NUMBER OF EMPLOYEES ACCORDING TO POSITIONS	2010	2011	2012
Senior Management *	9	8	8
Mid-level Management **	34	44	41
Non-managing White-collars***	103	93	94
Operational Level ****	156	157	153
<b>Total</b>	<b>302</b>	<b>302</b>	<b>296</b>

\*Senior Management: General Manager, Assistant General Manager, Director

\*\*Mid-level Management: Group Manager, Manager, Project Manager, Consultant, Supervisor

\*\*\*Non-managing White-collars: Assistant Manager, Engineer, Chief, Project Supervisor, Senior Specialist, Specialist, Assistant Specialist

\*\*\*\*Operational Level: Operator, Technician, Assistant, Employee, Foreman, Laboratorian, Driver

We outsource some services including cleaning and security. Number of outsourced employees in last three years;

	2010	2011	2012
<b>Number of outsourced employees</b>	112	116	140

## EMPLOYEES

### Gender Distribution

The gender distribution among our employees is presented in the table below. The number of female employees in senior management, mid-level management and non-managing white-collar is increasing every year. Especially the rate of female employees in the mid-level management increased from 18% in 2010 to 46% in 2012. In total, number of female employees increased to 58 from 54 in the last 3 years.

GENDER DISTRIBUTION	2010				2011				2012			
	MALE		FEMALE		MALE		FEMALE		MALE		FEMALE	
POSITIONS	%	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER
Senior Management	78	7	22	2	75	6	25	2	67	6	33	2
Mid-level Management	82	28	18	6	73	32	27	12	54	28	46	13
Non-managing White-collar	67	69	33	34	70	65	30	28	52	63	48	31
Operational Level	92	144	8	12	92	144	8	13	92	141	8	12
<b>Total</b>	<b>82</b>	<b>248</b>	<b>18</b>	<b>54</b>	<b>81</b>	<b>247</b>	<b>19</b>	<b>55</b>	<b>80</b>	<b>238</b>	<b>20</b>	<b>58</b>

Akenerji Board of Directors is not included in the above-mentioned functions.

Gender distribution of Board Members is as follows:

GENDER DISTRIBUTION OF THE BOARD OF DIRECTORS	2010		2011		2012	
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
Board of Directors	8	0	7	0	10	0

### Age Distribution

Average age of our employees is 35 as of 2012.

AGE DISTRIBUTION (%)	2010			2011			2012		
	UNDER 30	30-50	OVER 50	UNDER 30	30-50	OVER 50	UNDER 30	30-50	OVER 50
Senior Management	1.1	2.5	20.0	0.0	2.3	25.0	0.0	2.7	18.2
Mid-level Management	0.0	13.6	46.7	1.8	17.4	41.7	0.0	16.0	54.5
Non-managing White-collar	58.4	24.7	13.3	71.4	23.9	8.3	73.1	25.1	9.1
Operational Level	40.4	59.1	20.0	26.8	56.4	25.0	26.9	56.2	18.2

Age distribution of Board Members that is not included in the above-mentioned functions is presented below:

AGE DISTRIBUTION OF THE BOARD OF DIRECTORS (NUMBER)	2010			2011			2012		
	UNDER 30	30-50	OVER 50	UNDER 30	30-50	OVER 50	UNDER 30	30-50	OVER 50
Board of Directors	0	5	3	0	5	2	0	5	5

### Employee Turnover Rates

Number of employees who resigned in 2012 is 22. Their reason for resignation is mainly deciding to try other business opportunities.

TURNOVER RATE AND NUMBER ACCORDING TO REGIONS (%)	2010		2011		2012	
	%	NUMBER	%	NUMBER	%	NUMBER
Headquarters	7.8	9	15.3	17	12.7	14
Power plants	7.4	14	11.5	22	4.3	8
<b>Total</b>	<b>7.7</b>	<b>23</b>	<b>12.9</b>	<b>39</b>	<b>7.2</b>	<b>22</b>

Note: The table above covers only the employees who resigned on their own will.

The main reason for the increase in resignation especially in the power plants in 2011 is the fact that investments of Akenerji were about to be completed.

TURNOVER RATE ACCORDING TO GENDER (%)	2010				2011				2012			
	FEMALE		MALE		FEMALE		MALE		FEMALE		MALE	
	%	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER
<b>Total</b>	0.6	2	6.8	21	2.3	7	10.6	32	1.6	5	5.7	17

While the rate of resignation was higher in the 30-50 age group in 2010 and 2012, this rate was higher in the age group "under 29" in 2011.

TURNOVER RATE AND NUMBER ACCORDING TO AGE GROUP	2010						2011						2012					
	UNDER 29		30 - 50		OVER 51		UNDER 29		30 - 50		OVER 51		UNDER 29		30 - 50		OVER 51	
	%	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER
<b>Total</b>	9	2	74	17	17	4	49	19	41	16	10	4	40	9	55	12	5	1

### Recruitment and Placement

With the aim of serving our strategy and goals, during recruitment and placement process, we focus on recruiting candidates who are eligible in terms of conformity with the corporate culture and values of Akenerji; who possess the know-how, talents, experience and competence required for the job; and who have the capacity to carry our Company further. Throughout the process, we use contemporary assessment systems to support taking the most objective decisions and thus recruiting the right person for the right job.

Number of newly-employed blue and white-collar employees in the last 3 years of operation:

YEAR	WHITE-COLLAR EMPLOYMENT	BLUE-COLLAR EMPLOYMENT	TOTAL
2010	40	38	78
2011	33	15	48
2012	23	16	39

## EMPLOYEES

Akenerji attaches importance to employing newly-graduates and has been doing so since 2009. By employing newly-graduates, we aim to attract talented and promising young people to our Company. Newly-graduates applying for a job at Akenerji go through gradual processes including General Ability and Foreign Language Tests, Personality Inventory and Assessment Center Practices, and Competence-based Interviews. Having employed 7 newly-graduates in 2010 and 2 in 2011, we aim to recruit approximately 10 newly-graduates in 2013.

We have been implementing a consistent recruitment policy for employment of newly-graduates since 2009. Starting from the year 2010, this process is handled in parallel with the Akkök Holding - our parent company. With the Talent Seeds process, we pursue the policy of employing young, promising, newly-graduate and inexperienced people in order to timely win, improve and retain competent leaders and employees of the future who will realize our strategies and meet the needs of our organization.

### The Buddy System

2012 was a year in which we successfully implemented and brought continuity to HR practices that had been initiated in the previous year. The Buddy System is a good example of such initiatives. Within this system, a "buddy" is assigned to the new employees or those who are on job rotation among departments. The "buddy" helps the new employee in adaptation to business processes and provides first-hand information on the knowledge required for

the job, operation of processes and basic information about professional life.

### Trainings

We support and encourage our employees to attend all kinds of trainings, symposiums, panels, conferences, seminars, and sectoral events that will contribute to their personal and professional development.

Trainings within Akenerji consist of three groups: Technical Trainings; Quality, Environment, Occupational Health and Safety Trainings; and Personal Development Trainings. Mass trainings provided for employees include:

- **Technical Trainings:** Law of Contracts, Sales Academy, Managing Today's Business, Energy and Day-Ahead Market
- **Quality, Environment, Occupational Health and Safety Trainings:** Integrated Management Systems, Safe Drive Techniques, Crane-driving, Working at Height
- **Personal Development Trainings:** GRID - Teambuilding and Communication, Manager Trainings (Motivation, Leadership, Mentoring), Human-focused Performance Coaching, Personal Impression and Persuasion

As seen in the table below, on the basis of all Akenerji employees, training days per employee in 2012 was 4.37. The average number of training days in 2010 was high especially due to Managing Today's Business and English Language trainings attended by mid-level managers.

Trainings within Akenerji consist of three groups: Technical Trainings; Quality, Environment, Occupational Health and Safety Trainings; and Personal Development Trainings.

#### TOTAL TRAINING DAYS ACCORDING TO POSITIONS X NUMBER OF EMPLOYEES ATTENDING TRAININGS

	2010	2011	2012
Senior Management	11	25	9
Mid-level Management	526	274	230
Non-managing White-collars	468	477	380
Operational Level	90	367	640
<b>Total</b>	<b>1,095</b>	<b>1,143</b>	<b>1,259</b>

Note: 1 training day is considered to be 7.5 hours.

ANNUAL AVERAGE OF TRAINING DAYS PER EMPLOYEE	2010	2011	2012
Senior Management	1.2	3.1	1.1
Mid-level Management	15.4	6.2	5.6
Non-managing White-collars	4.5	5.1	4
Operational Level	0.5	2.3	4.1
<b>Total average</b>	<b>3.62</b>	<b>3.78</b>	<b>4.37</b>

Note: 1 training day is considered to be 7.5 hours.

In addition to these trainings, for employees who would like to continue their academic education, we have signed an agreement with Bahçeşehir University which gives employees the opportunity to take PhD, graduate or certificate classes with 50% discount on tuitions. Within the scope of the same agreement, students of Bahçeşehir University are given the opportunity to work as interns at Akenerji.

## Performance Management System

Our Performance Management System is a process that aims to ensure that individuals adopt our corporate goals and that reinforces our common corporate culture. Output of this process is used in the remuneration, training and development planning, and talent management practices of our human resources. In this way, all processes feed each other and combine within an integrated system.

The Performance Management System at Akenerji uses the "Balanced Score Card" model. Comprising Financing, Process and Operation, Customer, and Employee dimensions, this model allows employees both to focus on their own professional goals and to act in accordance with common corporate goals.

First initiated as a pilot project in 2009 with the participation of only white-collar employees, the Performance Management System was extended to cover all employees in 2011. The Project Mosaic that we started in 2010 to transfer the Talent Management and Performance Management systems to an electronic environment will be completed and put into operation in 2013. With this transfer, automation of approval hierarchy, systematic approach, reporting, automatic calculation of scores were made easier and standardized. All employees are subject to periodical performance evaluation.

The Performance Management System at Akenerji uses the "Balanced Score Card" model.

## Development Planning

Our aim in employee development planning is to achieve continuous learning, development, and business results. To reach these aims we implement development programs in line with our Company's goals as well as employees' know-how, talents, experiences and competence.

During the development planning process, by considering the needs of our Company and employees, we try to generate training and development solutions that suit best to the current situation. We offer all employees the opportunities they need in areas and competencies that they would like to accelerate their personal development. Our Development Planning process initiated in 2010 ensures that each employee evaluates his/her own competence together with the related director. As a result of such evaluations, we make action plans for the competencies that require development.

## Benefits to Employees

We use an internationally recognized and reliable Job Evaluation and Remuneration model. This is an objective, transparent, equality and fairness-based payment and benefits model that reflects the realities of national and international business and that focuses on remuneration according to the work performed.

Within the scope of benefits to employees, we offer meals and shuttles for commuting. White-collar employees in the headquarters and power plants are provided with private health insurance. All employees benefit from personal accident insurance. Senior and mid-level executives are provided with official cars and mobile phones.

## **Internal Activities and Communication**

In order to improve the communication among employees and reinforce loyalty, we organize a variety of social activities and events. Employee dinners, celebration of special days such as Women's Day and Mother's Day, happy hours, messages for birthdays, losses and newborn babies are examples of our internal communication activities.

We ensure the involvement of employees in management through a suggestion system and various meetings including annual goal setting and performance evaluation meeting. In addition, during the development planning process, we try to improve internal communication by using evaluation processes that require combined decisions of directors and employees in setting performance goals, reviewing and evaluating these goals. Thanks to our open door policy and transparency principle, senior management is within the reach of every level within our organization. Therefore, each employee can easily communicate with the General Manager and other senior executives for issues about his/her job and Akenerji.

Our Human Resources Team periodically visits power plants and hold informative meetings with the departments in the headquarters to improve internal communication. We hear requests and answer questions of employees in these meetings.

## **Employee Suggestion System “We Are The Energy”**

“We are the Energy” Employee Suggestion System is a platform that was launched in 2011 to encourage employees to share their suggestions and opinions. Suggestions that have the potential to contribute to the Company and other employees are selected and suggestion owners are awarded symbolically. Applicable suggestions are designed and implemented.

## **Investors In People Certificate of Commitment**

Investors In People (IIP) is a program that aims to create a common corporate culture in which employees can reveal their potentials and to improve company's performance and profitability by contributing to the employees' motivation and productivity.

We, as Akenerji, started to work towards this aim in May 2010 and managed to earn the IIP Certificate of Commitment within only 10 months. During this period we reviewed our existing HR processes and improved them in line with contemporary needs. IIP's audit included face to face interviews with a sample group formed by employees in the site and the headquarters. Employees were asked questions about the processes and systems used by Akenerji; thus, proficiency of these processes and employee satisfaction were measured. As the interview results and inspected information and documents met the requirements of IIP standards, we earned the Certificate. In January 2012, we became the first energy company in Turkey to receive the Investors in People (IIP) Certificate of Commitment.

Thanks to the processes we created during the IIP certification, we achieved improvement in areas such as building a human and development oriented management culture, developing a performance management culture, increasing awareness on competencies, prioritizing personal development planning, launching the Employee Suggestion System, aligning corporate goals with training and development activities, and creating awareness in learning and development costs.

**“We are the Energy”  
Employee Suggestion  
System is a platform  
that was launched  
in 2011 to encourage  
employees to share  
their suggestions and  
opinions.**

# Environment



**Making investments for a future of clean and sustainable energy, preventing environmental pollution, ensuring protection of natural resources and increasing productivity with the help of advanced technological solutions are among the material environmental issues that we focus on.**

## Our Approach

We, as Akenerji, have been working to minimize potential risks for more than 22 years, keeping in mind the environmental and social impacts of our operations. Making investments for a future of clean and sustainable energy, preventing environmental pollution, ensuring protection of natural resources and increasing productivity with the help of advanced technological solutions are among the material environmental issues that we focus on. Our principle is to achieve maximum amount of production with the minimum use of resources possible, by using modern technologies.

Practices and performance data in this section of the Report cover our 12 hydroelectric, wind and natural gas power plants in Turkey as well as our Headquarters in Akhan, İstanbul. Two power plants still in investment phase as of 2012 year-end are covered in the "Product and Service Responsibility" section of the Report.

## Environmental Policy

To create a future as bright as today, we, as Akenerji and its subsidiaries, always aim to operate with an approach that is sensitive towards environmental issues.

Within the scope of our Environmental Policy, we are committed to:

- Using energy and natural resources in the most efficient manner,
- Minimizing our emissions by choosing equipment that has the best environment-friendly technology,
- Minimizing wastes through efficient use of resources and disposing of wastes that are collected systematically in line with regulations,
- Discharging waste water in the most environment-friendly manner,
- Continuously improving processes that have impact on the environment, by always considering the prevention of pollution,
- Fulfilling our environment-related legal liabilities and responsibilities as well as other provisions and working to define new standards that meet the demands of the era,
- Ensuring that all of our stakeholders, mainly employees, are sensitive towards environmental issues and gain awareness on environment.

## Environmental Management

In addition to making investments for a “clean and sustainable energy future”, in order to measure and mitigate the environmental impacts of our operations, we implement ISO 14001 Environmental Management Systems that are certified by independent audits. We execute the Environmental Management in an integrated way with Occupational Health and Safety and Quality Management within the scope of “Akenerji Integrated Management Systems”. Detailed information on this is available in the “Approach to Sustainability” section of this Report.

Our Directorate of Environment and Quality Management Systems monitors our compliance with the environmental regulations and legislations. The Directorate is responsible for the operation of our Headquarters in İstanbul and electricity generation plants in various cities in compliance with environmental legislations. In addition, each power plant has Environmental Representatives. Trainings of these representatives are monitored by the Directorates of Environmental and Quality Management Systems and Human Resources. All environmental Representatives possess Quality-Environmental-OHS Management Systems internal audit certifications. On the other hand, all departments are responsible in identifying and mitigating environmental impacts caused by our operations.

Compliance level of our operations with legal liabilities and creditor provisions is evaluated periodically. These evaluations include:

- Internal audits and external audits performed once a year within the scope of Integrated Management Systems (ISO 9001, ISO 14001, OHSAS 18001),
- Internal Environmental Inspections performed in all sites by the Environment and Quality Management Systems Department at least once a year within the scope of the Environmental Audit Regulations.

Nonconformities are monitored through Internal Environmental Inspection reports prepared in conformity with the format used by the Ministry of Environment and Urbanization. Such nonconformities are treated with corrective and preventive practices in line with regulations and

standards within the Integrated Management System. Thus, compliance with the Environmental Regulations and actions taken against deficits are followed closely.

In terms of power plant operations, the major regulations that we are obliged to adhere within the scope of the Environmental Regulations is the Regulations on Permits and Licenses Required by Environmental Law. Our natural gas power plants are subject to the environmental permit that has to be renewed every five years within the scope of these Regulations, whereas our hydroelectric and wind power plants are out of the scope. Environmental permit of the Kemalpaşa Power Plants was obtained in July 2012 and Temporary Operation Certificated were taken for the Çerkezköy and Bozüyük plants towards the end of 2012.

### Environmental Impact Assessment (EIA)

**Regulations:** Each of our power plants is audited in terms of the EIA Regulations by independent experts prior to operations and “EIA not required” or “EIA affirmative” certificates are obtained. During construction of power plants, indicators required to be monitored every six months in line with EIA are monitored and the results are reported to the Ministry of Environment and Urbanization.

### Industrial Air Pollution Control Regulations:

Our natural gas, hydroelectric and wind power plants implement their liabilities within the scope of the Industrial Air Pollution Control Regulations. In addition, emissions released from natural gas power plants are subject to environmental permit within the scope of the Regulations on Permits and Licenses Required by Environmental Law. In 2012, our natural gas power plants received Emission Measurement Reports given by a laboratory with a proficiency certificate granted by the Ministry of Environment and Urbanization. Valid for 2 years, these reports indicate that our emission is within boundary values.

**Combustion Plant Regulations:** Our natural gas power plants fill in the Combustion Plants Inventory Form every year on March 31st the latest. This form covers information on the previous year and is submitted to the Provincial Directorate of Environment and Urbanization.

In addition to making investments for a “clean and sustainable energy future”, in order to measure and mitigate the environmental impacts of our operations, we implement ISO 14001 Environmental Management Systems that are certified by independent audits.

**Communique on Continuous Emission Monitoring Systems:** In 2010 and 2011, we installed Continuous Emission Measuring Systems at our natural gas power plants within the scope this communique. We identified Power Plant Continuous Emission Measuring System (CEMS) Representatives. We submitted our feasibility reports to the Provincial Directorate of Environment and Urbanization and received approval. For Quality Safety System (QSS)-2 we will contact authorized companies and complete our QSS-2 and QSS-3 (monthly measuring at power plants) practices in 2013.

**Regulations on General Principles of Waste Management - Hazardous Waste Control Regulations:** Wastes produced in our power plants are identified in accordance with the waste codes given in the Regulations on General Principles of Waste Management. Such wastes registered daily and monthly by the Environmental Representative of the plant, using the hazardous wastes and scrap follow-up forms in accordance with our Waste Management Procedure. When the wastes reach a certain amount, they are transferred to companies licensed by the Ministry of Environment and Urbanization. Hazardous wastes within power plants and the Headquarters are collected in a separate place. Within the scope of these regulations, each power plant annually declares information on wastes transferred to licensed companies in the previous year until the end of March.

**Waste Oil Control Regulations:** Each power plant annually declares information on oils used in the plant and waste oils transferred to licensed companies in the previous year until the end of February.

**Water Pollution Control Regulations:** All of Akenerji power plants fulfill their responsibilities in water pollution. Our compliance with the boundary values stated in Regulations within natural gas power plants with process waste water is monitored through periodical analyses. At the Çerkezköy and Kemalpaşa plants that are within the borders of organized industrial zones, boundary values of the organized industrial zone treatment plant are achieved. Except for the Kemalpaşa power plant, all

domestic waste water produced at the power plants are transferred by sewage trucks of contracted institutions that have treatment plants and that discharge waste water in accordance with environmental regulations. At the Kemalpaşa power plant, domestic waste water is discharged at the organized industrial zone.

**Wetland Protection Regulations:** Our hydroelectric power plants are within the scope of these regulations and all of our plants have wetland operation permits.

**Trainings**

In 2012, our Environment and Quality Management Systems Department organized Environmental Regulations and Waste Management Trainings at least once in each power plant. In addition to these trainings, ISO 14001, ISO 9001 OHSAS 18001 internal audit trainings were provided by third parties. What we call as environmental trainings per employee has been 0.04 days throughout the year.

Environmental trainings days per employee and total days of trainings per employee are given in the table below.

DAY/YEAR	DAY/EMPLOYEE/YEAR
11.96	0.04

Note: 1 day is calculated as 7.5 hours. Environmental trainings include all trainings on wastes, energy, energy efficiency etc.

Among the material issues at our natural gas power plants is the fuel efficiency, which also has direct impact on costs.

**Energy Management**

As one of the largest companies in the Turkish energy sector, we consume a considerable amount of energy in our production and management operations. Natural gas that is used for energy generation and heating and diesel fuel that is used in vehicles are among the directly consumed energy sources. On the other hand, indirect energy source consumed by Akenerji is electricity. In our hydroelectric and wind power plants, we use renewable-based electricity that we generate.

## ENVIRONMENT

Among the material issues at our natural gas power plants is the fuel efficiency, which also has direct impact on costs. Fuel efficiency is monitored online by the Directorate of Operation Performance and Fuel Management located at the Akenerji Headquarters. In case an abnormal value is identified in the real-time efficiency calculations in natural gas power plants, we intervene immediately and find the root cause of the problem. In addition, in order to ensure that our hydroelectric power

plants operate with maximum efficiency, we review daily production programs and make sure that the plants operate with optimum capacity. Operators working at power plants are responsible for energy management.

### Energy Consumption

The table below shows our direct energy consumption data by primary source. We mainly use natural gas and diesel fuel during our operations at production and management.

The figures for direct energy consumption reveal that in 2012 less energy is consumed compared to 2011.

DIRECT ENERGY CONSUMPTION (GIGAJoule/YEAR)	2010	2011	2012
<b>Natural Gas</b>			
NGPP (Çerkezköy, Bozüyük, Kemalpaşa)*	321,800	359,401	318,915
Headquarters	n.a.	n.a.	242
<b>Diesel fuel (Generator)</b>			
NGPP (Çerkezköy, Bozüyük, Kemalpaşa)	1,109	424	536
WPP (Ayyıldız)	8	22	12
HEPP (Akocak, Uluabat, Feke I, Feke II, Himmetli, Gökçaya, Burç, Bulam)	23	480	622
Headquarters	n.a.	n.a.	545
<b>Gasoline (Vehicles)</b>	n.a.	n.a.	1,836
<b>Diesel fuel (Vehicles)</b>	n.a.	n.a.	5,243
<b>Fuel oil (Headquarters)</b>	n.a.	n.a.	64
<b>TOTAL</b>	<b>322,940</b>	<b>360,327</b>	<b>327,475</b>

n.a.: not available

\* Natural gas consumption is the amount that corresponds to our internal consumption.

The figures for direct energy consumption reveal that in 2012 less energy is consumed compared to 2011. The main reason for this reduction is the fact that Akenerji decided to close down the Çerkezköy Power Plant towards the end of 2012 and thus the plant's capacity fell. Also with the market clearing prices based upon costs in the electricity markets, we started to give priority to the production in new hydroelectric plants and reduced the production in natural gas power plants. Due to large-scale maintenance and

test operations in new power plants in 2010, generators consumed more energy in this year compared to 2011 and 2012.

The table below shows indirect energy consumption of Akenerji. Non-renewable source-based energy means the electricity purchased from suppliers for HEPPs and WPP and the electricity generated by our own sources at NGPPs. Electricity generated and used for internal use at HEPPs and WPP is stated as renewable-based in the table.

The world of science recognizes the fact that greenhouse gas emissions cause climate change, which is a global issue.

INDIRECT ENERGY CONSUMPTION (GIGAJOULE/YEAR)	2010	2011	2012
<b>Non-renewable based</b>			
NGPP, HEPP and WPP	14,609	13,633	18,370
Headquarters	1,554	1,855	1,637
<b>Renewable-based</b>			
HEPP and WPP	1,667	4,281	6,135
<b>TOTAL</b>	<b>17,830</b>	<b>19,769</b>	<b>26,142</b>

The reason for higher consumption in 2012 compared to 2011 is that the Feka I, Himmekli and Gökaya HEPPs in Adana started operations in 2012.

### Energy Saving

While performing our operations, we aim to achieve our goals for energy efficiency and mitigation of carbon emissions. Our natural gas power plants that operate as balancing units within the scope of the Balancing and Reconciliation Regulations work on the basis of cost-based Market Clearing Price. As bidding method for especially natural gas power plants is cost-based, bids are made depending on the capacity we generate at high efficiency level to keep the plant going. To ensure that our hydroelectric power plants operate at the most efficient level, their daily production programs are reviewed for optimum capacity.

### Greenhouse Gas Management

Natural gas and diesel fuel that are directly consumed energy sources and electricity that is indirectly consumed and generated from fossil fuels cause greenhouse gas emissions. The world of science recognizes the fact that greenhouse gas emissions cause climate change, which is a global issue. Therefore we, as Akenerji, attach

great importance to monitoring, control and mitigation of greenhouse gas emissions.

The table below shows the ton CO<sub>2</sub>-equivalent of greenhouse gas emissions resulting from our operations. Almost all of the direct greenhouse gas emissions are created due to the burning of natural gas in our natural gas power plants. In addition, diesel fuel consumed by our leased vehicles and natural gas used for heating in buildings cause minor amounts of direct greenhouse gas emissions. Indirect greenhouse gas emissions result from the electricity consumed at the Headquarters in İstanbul.

As energy sources consumed may vary and occasionally electricity is purchased from the grid, detailed data collection is required to be able to calculate the greenhouse gas emissions resulting from the electricity consumption at our power plants. We plan to include the greenhouse gas emissions of electricity consumption for internal uses at our power plants in the data to be used in 2013 Carbon Disclosure Project and Akenerji Sustainability Reports.

Expanding the scope of our direct and indirect greenhouse gas emissions in 2012, we also calculated the emissions resulting from business related air travels. The figure for 2012 has been 151 ton CO<sub>2</sub>-e.

GREENHOUSE GAS EMISSIONS	2010	2011	2012
<b>Direct (tonCO<sub>2</sub>-e)</b>	668,535	725,189	616,677
<b>Indirect (tonCO<sub>2</sub>-e)</b>	-	-	961
<b>Total</b>	<b>668,535</b>	<b>725,189</b>	<b>617,638</b>

Note: Values used in the table are the data acquired from Akenerji CDP 2012 Report. Direct greenhouse gas emission data include all fuels used for energy generation.

## Water Management

We consume water for energy generation at our natural gas power plants and for domestic uses such as hygiene and cleaning at our Headquarters, HEPPs and WPPs. The source of water consumed varies depending on the location of power plants. Water sources may be rivers, springs, wells or waterworks.

As seen in the table below, water consumption varies in power plants:

WATER CONSUMPTION (m <sup>3</sup> /YEAR)	SOURCE	2010	2011	2012
Çerkezköy	Well	680,894	652,281	560,215
Bozüyük	Waterworks	602,900	680,800	584,174
Kemalpaşa	Well	102,000	84,000	80,000
<b>NGPP Total</b>		<b>1,385,794</b>	<b>1,417,081</b>	<b>1,224,389</b>
Ayyıldız	Well	63	48	33
<b>WPP Total</b>		<b>63</b>	<b>48</b>	<b>33</b>
Uluabat	Well	200	408	408
Akocak	Well	120	150	140
Feke I	Göksu River	-	-	80
Feke II	Spring water	180	939	1,480
Himmetli	Göksu River	-	-	250
Gökkaya	Göksu River	-	-	50
Burç	Well	3	220	255
Bulam	Spring water	60	130	150
<b>HEPP Total</b>		<b>563</b>	<b>1,847</b>	<b>2,813</b>
<b>Headquarters</b>		<b>n.a.</b>	<b>n.a.</b>	<b>1,032</b>
<b>Total</b>		<b>1,386,420</b>	<b>1,418,976</b>	<b>1,228,267</b>

Note: Our Çerkezköy Power Plant has open circuit cooling water cycle. Amount of water used includes cooling water data. Our Bozüyük Power Plant has open circuit cooling water cycle. Amount of water used includes cooling water data. Our Kemalpaşa Power Plant has closed circuit cooling water cycle. Amount of water used excludes cooling water data.

As our Feke II Power Plant became operational towards the end of 2010, amount of water used in that year is low. In addition, in some power plants number of employees tripled in 2011 and 2012 due to annual maintenance works. This resulted in an increase in the amount of water consumed.

Similar to our approach to other natural resources, in order to save water we implement savings projects within the framework of efficiency goals set for raw water consumption. As a result of these efforts, total water consumption indicates a decrease achieved by such measures.

Beyond legal requirements, within the scope of the Cumulative Impact Assessment made during the project design of the HEPPs in Adana, we also performed surface water quality measurement, flow rate measurement considering locations with high risk of a change in hydrological characteristics (low flow rate) and identification of the ecological qualifications of the water.



**Water Management at HEPPs**

HEPPs use dam or river water to generate electricity. The water accumulated behind the dam passes through generators propelled by water turbines and then refilled into the river or stream without any loss. In some of our HEPPs dams are built for energy generation and thus dam reservoirs are created. In other HEPPs, energy is generated by benefiting from the natural slope and therefore there aren't any reservoirs. In our water management practices in areas with dam reservoirs, we consider the needs of local communities and the wildlife in order to ensure continuity of wildlife. On the other hand, in water resources without dam reservoirs, we implement water management according to the amount of lifeline water identified in the first phase of the project in line with the opinions of related public institutions. Beyond legal requirements, within the scope of the Cumulative Impact Assessment made during the project design of the HEPPs in Adana, we also performed surface water quality measurement, flow rate measurement considering locations with high risk of a change in hydrological characteristics (low flow rate) and identification of the ecological qualifications of the water.

**Waste Management**

Our priority in waste management is compliance with laws and regulations. Disposal of solid wastes and discharge of waste water generated during our operations are implemented in line with the provisions stated in relevant laws.

**Solid Wastes**

We dispose of solid wastes by a variety of methods including recycling recovery, reuse), incineration and landfills, depending on the nature of wastes. The table below shows the information on the disposal methods by waste types and total waste amounts of 2012. Amount of wastes is measured regularly and reported to related public institutions.

In accordance with the waste categories identified in laws, we sort wastes into two groups: hazardous wastes and domestic wastes. We deliver domestic wastes to municipalities and other wastes to disposal companies licensed by public institutions. With the aim of preventing environmental pollution and protecting natural resources, we take necessary measures in waste management and pay attention to create awareness on the issue.

**In accordance with the waste categories identified in laws, we sort wastes into two groups: hazardous wastes and domestic wastes. We deliver domestic wastes to municipalities and other wastes to disposal companies licensed by public institutions.**

## ENVIRONMENT

### Types of Wastes and Disposal Methods

TYPE OF WASTE	EXAMPLES	METHOD OF DISPOSAL	2012 TOTAL (TON)
<b>Hazardous Wastes</b>	Category 1 Waste Oil	R9: Refining or other ways of reusing oils	13.6
	Waste Barrel-Drum	R12: Exchange of waste for processes stated in regulations to be applied	3.6
	Waste Filter	R12: Exchange of waste for processes stated in regulations to be applied	6.9
	Rockwool	R12: Exchange of waste for processes stated in regulations to be applied	2.4
	Contaminated Waste Cloth	R13: Temporary storage of waste until processes stated in regulations are applied	3.7
	Waste Battery	D5: Regular storage requiring special engineering	0.045
	Waste Cartridge	R13: Temporary storage of waste until processes stated in regulations are applied	0.313
	Waste Fluorescent	R13: Temporary storage of waste until processes stated in regulations are applied	0.126
	Waste Vehicle Power Supply	R4: Recovery or recycling of metals and metal compounds	0.063
	Waste Absorbance	R13: Temporary storage of waste until processes stated in regulations are applied	0.090
	Electronic Waste	R4: Recovery or recycling of metals and metal compounds	0.309
<b>Total Amount of Hazardous Wastes</b>			<b>31.4</b>
<b>Non-hazardous (domestic) Wastes</b>	Paper, Cardboard, Plastic, Wood, Glass, etc. Packaging Wastes	R5: Recovery or recycling of other inorganic materials	1.5
	Scrap, Metal Wastes	Recovery and sorting	2.6
<b>Total Amount of Non-hazardous Wastes</b>			<b>4.1</b>
<b>Total Amount of Wastes</b>			<b>35.5</b>

### Amount of Hazardous Solid Wastes

YEAR	2010	2011	2012
<b>Recycling (Kg)</b>	156,533	47,439	31,315
<b>Disposal (Kg)</b>	386	35	45
<b>Total (Kg)</b>	<b>156,919</b>	<b>47,474</b>	<b>31,36</b>

Under the supervision of our Environmental Management Department, we transfer all of the waste generated in our power plants and the Headquarter to licensed institutions authorized by the Ministry of Environment and Urbanization for recycling or disposal. As of the end of 2012, about 31.4 tons of hazardous waste was disposed of at our power plants and Akenerji Headquarters and about 31 tons of this waste was recovered.

A major part of the hazardous waste generated due to the operations at our power plants is Category 1 waste oils. Such waste oil is delivered to licensed institutions for recycling into appropriate base oil, petrol products and original oil.

Paper consumption is an issue we focus on within the framework of waste management. Paper consumption is monitored per power plant however as the number of plants vary depending on the years, the comparison made in this Report covers only the Headquarters. Accordingly, 3 tons, 2.55 tons and 2.5 tons of paper was consumed at our Headquarters in 2010, 2011, and 2012 respectively. Paper wastes sorted by employees are collected by the municipalities and recovered and recycled by a contracted licensed institution of the municipality.

At Akenerji Group Head Office, we sort waste batteries, electronic wastes and fluorescents with participation from all employees of Akenerji and other Akkök Group of Companies. These wastes are then delivered to licensed disposal institutions.

Thanks to our waste reduction and recycling projects as well as the increase in the awareness and efforts of employees, amount of solid wastes generated in the last three years improved significantly. With the aim of raising awareness in our employees, we organize various trainings at our power plants and the Headquarters.

### Waste Water

We discharge our waste water in line with the criteria and methods defined in local regulations such as national regulations and organized industrial zone regulations. Amount of water discharged in the last three years is presented in the table below.

WATER DISCHARGE (m <sup>3</sup> /YEAR)	PLACE OF DISCHARGE	2010	2011	2012
<b>Process waste water</b>				
Çerkezköy	Çerkezköy Organized Industrial Zone Waste Water Infrastructure	21,439	29,385	30,727
Bozüyük	Bozüyük Municipality Waste Water Line (Kocadere)*	36,975	39,735	42,344
Kemalpaşa	Kemalpaşa Organized Industrial Zone Waste Water Infrastructure **	72,000	54,000	50,000
<b>Turbine wash waste water</b>	Licensed disposal institution	9	26	12
<b>TOTAL</b>		<b>130,423</b>	<b>123,146</b>	<b>123,083</b>

Note: Domestic waste water delivered to the sewage system is not included in waste water figures.

\*Bozüyük Municipality Waste Water Line is not actually a line but the Kocadere River.

\*\*Waste water data for our Kemalpaşa power plant are estimated values. The watermeter at the plant measures only additional water consumption. Estimated figures are calculated by proportioning the raw water tank level based upon additional meter data.

Except for the Kemalpaşa Natural Gas Power Plant, domestic waste water of all other plants is collected in cesspools and then drawn by sewage trucks of municipalities or licensed institutions. Domestic waste water at the Kemalpaşa Power Plant is discharged to the common sewage channel of Kemalpaşa Organized Industrial Zone.

At Akenerji natural gas power plants not only domestic waste water but also process waste water and turbine wash water is generated. Çerkezköy and Kemalpaşa Natural Gas Power Plants are located within Organized Industrial Zones (OIZ) and therefore process waste water is discharged to the waste water infrastructure of the OIZs. Process waste water of both plants is in compliance with the discharge criteria of the OIZs. At Bozüyük Power Plant, process waste water is discharged to the stream after all discharge standards are ensured. Turbine wash water of these three plants are collected and delivered to the licensed disposal institution.

At Akenerji Group Head Office, we sort waste batteries, electronic wastes and fluorescents with participation from all employees of Akenerji and other Akkök Group of Companies. These wastes are then delivered to licensed disposal institutions.

## Other Emissions

### Gas Emissions

In line with the Large Combustion Plants Regulations, continuous emission measurement systems were installed in Kemalpaşa Power Plant in 2010 and in Bozüyük and Çerkezköy Power Plants in 2011. Also, in accordance with the Industry-based Air Pollution Control Regulations that require emission measurement reporting every two years, we commissioned an independent institution to run an emission measurement report in 2012. The analysis reveals that our emission is within boundary values. In addition to these, we use steam injection systems or Dry Low NOx system in turbines in order to reduce the amount of nitrogen oxide in the flue gas emissions of our natural gas power plants.

### Biodiversity

Within the scope of impacts on conservation areas and biodiversity, new plants or capacity increases in existing plants may be subject to Environmental Impact Assessment (EIA) as required by the Environmental Law. In projects that are subject to EIA, all aspects of biodiversity are taken into consideration, measures to mitigate potential negative effects are identified and goals are set.

We implemented EIA in the design phase of all of our power plants that are operational as of the end of 2012. To avoid any negative impact on the natural ecosystem in which the plants are located, we took necessary precautions and executed legal procedures during operation and investment phases. Although Ayyıldız power plant did not require EIA, we monitored the plant's impacts on wildlife. Bird monitoring reports made in 2011 and delivered positive results is an example of such initiatives.

In addition, we planted 7,400 and 1,550 saplings in 2010 and 2011 respectively for afforestation of the regions of Akocak and Uluabat HEPPs with the aim of contributing to the improvement of wildlife.

**We implemented EIA in the design phase of all of our power plants that are operational as of the end of 2012.**



# Contribution to Society



**We sincerely believe that the success of a company is measured not only by financial performance, but also by the benefit provided to society.**

## Our Approach

We, as Akenerji, are aware of the fact that the responsibility of improving the well-being and maintaining the sustainable growth of a society belongs not only to individuals, but also to organizations serving the community. In all of our activities, we are committed to contributing to the social, cultural and economic wealth of the society. While supporting the Turkish economy by creating employment, we also aim to generate a positive influence on social development in all of our operations. With this approach, we implement corporate social responsibility projects in education, environment, culture, and arts across Turkey. Such projects also inspire our subsidiaries in terms of social responsibility.

## CSR Projects

### Overview of Electricity Market and Trade Certification Program

We, as Akenerji, believe that creating professional employment is as important as providing high-quality services in the fast-evolving energy industry and therefore we aim to contribute to the employment in the industry and in Turkey. The goal of the Overview of Electricity Market

and Trade Certification Program that we created in cooperation with Istanbul Bilgi University Career Center is to introduce university students to the energy industry as a popular sector of the age and to give them basic information on the electricity market. Implemented by Akenerji Directorate of Sales and Marketing, the Program offered basic information on electricity generation, components of the electricity market, development of the market, recent developments, and the current status of the market in Turkey.

### Akenerji and SEDAŞ sponsors KSO Chamber Orchestra

Within the scope of our social responsibility activities in culture and arts, together with our subsidiary SEDAŞ, we became the sponsor of the concerts given by the Kocaeli Chamber of Industry (KSO) Chamber Orchestra in 2010-2011. As a part of this cooperation, KSO Chamber Orchestra gave three concerts - namely, the celebration concert held at the Kazıklı Kervansaray Cultural Center in Kocaeli/Gölcük and two concerts for the Gratitude Days for İzzet Baysal at Düzce University Conference Hall and Bolu Provincial Culture and Tourism Directorate.

### **Akenerji contributes to social life in HPP locations**

We pay attention to meet various needs and to solve problems of regions we operate in, with the aim of improving the social life. For instance, while executing the Gökkaya and Himmetli HPP projects in 2011, we helped the local authorities and people to improve roads, build lodging for mosques, build houses, and improve water pipelines in the villages of Yardibi, Kapaklı, and Himmetli. We also renovated the Cumhurlu Village Elementary School, procured a projector for the Atatürk Elementary School in the town of Saimbeyli, and met the lighting needs of Saimbeyli Prison.

Akkur Enerji Üretim Tic. ve San. A.Ş., a subsidiary of Akenerji, built a dormitory next to the Lütfiye Ayşe Baytok Boarding Elementary School for secondary school students in Adana. Within the framework of the protocol signed by and between Akkur, Adana Governorship, Provincial Directorate for National Education, Feke District Governorship, and Feke Directorate for National Education on 29 July 2011, the construction works of the dormitory started on 14 September 2011 and the building was delivered to the Feke Directorate for National Education on 15 February 2012.

### **Relations With Local Communities**

#### **Employment in Local Communities**

During the construction of our power plants, we pay attention to recruiting new employees within the local communities of the cities that we operate in. In this way we help local people to acquire professions and we contribute to employment and thus to regional development. We employ around 100-150 local people for each construction work. We ensure that they continue to work in different positions such as cleaning and security when the project starts operations. Using this system, we employed a significant number of people in our power plants including those in Feke, Himmetli, and Gökkaya.

According to projections, 1,000 people will be employed at the construction of Erzin Power Plant and 60 people will be recruited

after the plant starts operating. During the construction works, with the aim of offering jobs to local communities, the Gama-GE Consortium visited Erzin Public Education Center to receive information on the labor force potential of the region. In the first year of construction approximately half of the 470 employees were selected amongst the local people. In addition, we paid attention to contributing to the local economy by purchasing required materials from the region when possible.

#### **Site Visits**

The Video Training Project that was launched in 2011 for people such as guests, contractors, visitors, or interns who come to visit the Akenerji Group power plants was completed and implemented in 2012. With this project, visitors to the hydro, natural gas and wind power plants receive information on electricity production, environmental and OHS legislations, and our environmental and OHS practices.

#### **Sponsorships and Donations**

In conformity with our principle of contributing to the society, through a collaboration with the Turkish Education Foundation (TEV), we awarded scholarship to 10 university students from the town of Araklı in Trabzon, where our Akocak Hydroelectric Power Plant is located. The scholarship support continued with the same number of students in 2012. We also built a prefabricated dormitory and a three-story building for the Directorate of National Education in the town of Feke. In 2011, through our Mem and Akkur Power Plants, we provided financial support to an elementary school to be built in Adiyaman within the scope of "Build Your Own School" campaign.

**According to projections, 1,000 people will be employed at the construction of Erzin Power Plant and 60 people will be recruited after the plant starts operating.**

# GRI G3 Sustainability Reporting Guidelines Index

We prepared and issued this Report to share with our stakeholders Akenerji's sustainability performance and practices during the period 1 January 2012 and 31 December 2012 as well as our future goals and strategies.

The contents of the Report are developed in compliance with the G3 version of the GRI (Global Reporting Initiative) Sustainability Reporting Guidelines, which is an internationally recognized reporting standard. The Report contains data and information meeting the requirements of C-application level, which has been also approved by the GRI Secretariat. The table below shows the information provided in the Report per indicator and the related pages.

## STANDARD DISCLOSURES PART I: PROFILE DISCLOSURES

### 1. STRATEGY AND ANALYSIS

PROFILE DISCLOSURE	DESCRIPTION	REPORTED IN	SCOPE OF REPORTING	REFERENCE PAGES/ EXPLANATIONS
1.1	Statement from the most senior decision-maker of the organization, regarding the relevance of sustainability to the organization and the strategy of the organization	Message from the General Manager	Full	2-3
1.2	Description of key impacts, risks, and opportunities	Message from the General Manager Company Profile	Partial	2-3, 11-12

### 2. ORGANIZATIONAL PROFILE

2.1	Name of the organization	Company Profile	Full	Akenerji Elektrik Üretim Anonim Şirketi
2.2	Primary brands, products, and/or services	Company Profile	Full	5
2.3	Operational structure of the organization	Company Profile	Full	6, 13, 15
2.4	Location of organization's headquarters	Company Profile	Full	Gümüşsuyu Miralay Şefik Bey Sok. Akhan No:15 Beyoğlu-İstanbul, Turkey
2.5	Countries where the organization operates	Company Profile	Full	Turkey
2.6	Nature of ownership and legal form	Company Profile	Full	13
2.7	Markets served	Company Profile	Full	4-5
2.8	Scale of the reporting organization	Company Profile	Full	8-10
2.9	Significant changes during the reporting period regarding size, structure, or ownership	Company Profile	Full	4-5
2.10	Awards received in the reporting period	Company Profile	Full	16

### 3. REPORT PARAMETERS

PROFILE DISCLOSURE	DESCRIPTION	REPORTED IN	SCOPE OF REPORTING	REFERENCE PAGES/ EXPLANATIONS
3.1	Reporting period	About the Report	Full	1 January 2012 - 31 December 2012
3.2	Date of most recent previous report (if any)	About the Report	Full	This is the first sustainability report published.
3.3	Reporting cycle	About the Report	Full	The Sustainability Report will be published annually.
3.4	Contact point for questions regarding the report or its contents	Credits and Contacts	Full	<a href="mailto:info@akenerji.com.tr">info@akenerji.com.tr</a>
3.5	Process for defining report content	About the Report Approach to Sustainability	Full	1, 19-20
3.6	Boundary of the report	About the Report	Full	Services of Akenerji Elektrik Üretim A.Ş. in Turkey
3.7	Specific limitations on the scope or boundary of the report	About the Report Approach to Sustainability	Full	1, 18
3.8	Basis for reporting on joint ventures and other related organizations	Approach to Sustainability	Full	20
3.9	Data measurement techniques and the bases of calculations	About the Report	Full	Given in related tables
3.10	Explanation of the effect and reasons of any re-statements of information provided in earlier reports	About the Report	Full	This is the first sustainability report published.
3.11	Significant changes in the scope, boundary, or measurement methods applied in the report	About the Report	Full	This is the first sustainability report published.
3.12	GRI Indicators table	GRI Index	Full	The mentioned table is this table given between pages 63 and 67.
3.13	External assurance		Full	Although external assurance was not obtained within the scope of the Report, Integrated Management Systems data and financial indicators given in the Report are audited data.

### 4. GOVERNANCE, COMMITMENTS, AND ENGAGEMENT

4.1	Governance structure of the organization	Company Profile Corporate Governance	Full	15, 24-26
4.2	Whether the Chair of the highest governance body is also an executive officer	Corporate Governance	Full	24
4.3	Number of independent members of the highest governance body	Corporate Governance	Full	24

#### 4. GOVERNANCE, COMMITMENTS, AND ENGAGEMENT

PROFILE DISCLOSURE	DESCRIPTION	REPORTED IN	SCOPE OF REPORTING	REFERENCE PAGES/ EXPLANATIONS
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body	Corporate Governance	Full	27
4.5	Linkage between compensation for members of the highest governance body and the organization's performance	Corporate Governance	Full	26
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided	Corporate Governance	Full	26
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation	Corporate Governance	Full	28
4.11	The precautionary approach or principle	Corporate Governance Environment	Full	28, 52-53
4.12	Externally developed sustainability initiatives to which the organization subscribes or endorses	Approach to Sustainability	Full	20
4.13	Memberships in associations	Approach to Sustainability	Full	21
4.14	List of stakeholder groups engaged by the organization	Approach to Sustainability	Full	19-20
4.15	Identification and selection of stakeholders with whom to engage	Approach to Sustainability	Full	19-20
4.16	Approaches to stakeholder engagement	Approach to Sustainability	Full	19-20
4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to them	Approach to Sustainability	Partial	20

#### STANDARD DISCLOSURES: PART III PERFORMANCE INDICATORS

ECONOMIC				
EC1	Direct economic value generated and distributed	Company Profile	Full	11
EC2	Financial implications and other risks and opportunities for the organization due to climate change	Product and Service Responsibility	Partial	34-35
EC8	Infrastructure investments and services provided for public benefit through commercial, in-kind, or pro bono engagement	Contribution to Society	Partial	62
EC9	Indirect economic impacts	Contribution to Society	Partial	62

**ENVIRONMENTAL**

<b>PROFILE DISCLOSURE</b>	<b>DESCRIPTION</b>	<b>REPORTED IN</b>	<b>SCOPE OF REPORTING</b>	<b>REFERENCE PAGES/ EXPLANATIONS</b>
<b>EN3</b>	Direct energy consumption by primary energy source	Environment	Full	54
<b>EN4</b>	Indirect energy consumption by primary source	Environment	Full	55
<b>EN5</b>	Energy saved due to conservation and efficiency improvements	Environment	Partial	55
<b>EN6</b>	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives	Product and Service Responsibility	Full	34-35
<b>EN8</b>	Total water withdrawal by source	Environment	Full	56
<b>EN9</b>	Water resources significantly affected by water withdrawal	Environment	Full	56-57
<b>EN11</b>	Protected areas and areas of high biodiversity value	Environment	Full	We do not have operations in such areas.
<b>EN13</b>	Habitats protected or restored	Environment	Partial	60
<b>EN14</b>	Strategies, current actions, and future plans for managing impacts on biodiversity	Environment	Partial	60
<b>EN16</b>	Total direct and indirect greenhouse gas emissions by weight	Environment	Full	55
<b>EN17</b>	Other related indirect greenhouse gas emissions by weight	Environment	Full	55
<b>EN18</b>	Initiatives to reduce greenhouse gas emissions and reductions achieved	Product and Service Responsibility	Full	35
<b>EN21</b>	Total water discharge by quality and destination	Environment	Full	59
<b>EN22</b>	Total weight of waste by type and disposal method	Environment	Full	58
<b>EN26</b>	Initiatives to mitigate environmental impacts of products and services	Product and Service Responsibility	Full	30-31
<b>EN28</b>	Monetary value of significant fines for non-compliance with environmental laws and regulations	Environment	Full	There were no fines for non-compliance with environmental laws and regulations.

**SOCIAL: LABOR PRACTICES AND DECENT WORK**

<b>LA1</b>	Total workforce by employment type, employment contract, and region	Employees	Full	44-45
<b>LA2</b>	Rate of employee turnover by age group, gender, and region	Employees	Full	47
<b>LA3</b>	Benefits provided to full-time employees	Employees	Full	49

**SOCIAL: LABOR PRACTICES AND DECENT WORK**

PROFILE DISCLOSURE	DESCRIPTION	REPORTED IN	SCOPE OF REPORTING	REFERENCE PAGES/ EXPLANATIONS
LA5	Minimum notice period(s) regarding significant operational changes	Employees	Full	For minimum notice periods regarding significant operational changes, we comply with the requirements indicated in the Turkish Labour Law.
LA6	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs.	Occupational Health and Safety	Full	37
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	Occupational Health and Safety	Full	39-41
LA8	Training, education, guidance, disease prevention and risk control programs for severe diseases	Occupational Health and Safety	Full	38-39
LA10	Average hours of training per year per employee by employee category	Employees	Full	48
LA11	Programs for skills management and lifelong learning that support the continued employability of employees	Employees	Full	49
LA12	Percentage of employees receiving regular performance and career development reviews	Employees	Full	49
LA13	Composition of governance bodies and breakdown of employees according to gender, age group, minority group membership	Employees	Full	44-46

**SOCIAL: HUMAN RIGHTS**

HR6	Incidents of child labor, and measures taken to contribute to the elimination of child labor		Full	Akenerji does not have any operations that might pose such risks.
-----	--	--	------	---

**SOCIAL: SOCIETY**

SO1	Programs and practices that assess and manage the impacts of operations on communities	Product and Service Responsibility	Full	30 (Social/cultural impact assessment is made in the project design and development phase.)
-----	--	------------------------------------	------	---

**SOCIAL: PRODUCT RESPONSIBILITY**

PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction	Product and Service Responsibility	Full	33
-----	--	------------------------------------	------	----



## Statement GRI Application Level Check

GRI hereby states that **Akenerji Elektrik Üretim A.Ş.** has presented its report “Akenerji Sustainability Report 2012” to GRI’s Report Services which have concluded that the report fulfills the requirement of Application Level C.

GRI Application Levels communicate the extent to which the content of the G3 Guidelines has been used in the submitted sustainability reporting. The Check confirms that the required set and number of disclosures for that Application Level have been addressed in the reporting and that the GRI Content Index demonstrates a valid representation of the required disclosures, as described in the GRI G3 Guidelines. For methodology, see [www.globalreporting.org/SiteCollectionDocuments/ALC-Methodology.pdf](http://www.globalreporting.org/SiteCollectionDocuments/ALC-Methodology.pdf)

Application Levels do not provide an opinion on the sustainability performance of the reporter nor the quality of the information in the report.

Amsterdam, 11 December 2013

A handwritten signature in blue ink, appearing to read "Nelmara Arbex", is written over a light blue circular watermark of the GRI logo.

Nelmara Arbex  
Deputy Chief Executive  
Global Reporting Initiative



*The Global Reporting Initiative (GRI) is a network-based organization that has pioneered the development of the world’s most widely used sustainability reporting framework and is committed to its continuous improvement and application worldwide. The GRI Guidelines set out the principles and indicators that organizations can use to measure and report their economic, environmental, and social performance. [www.globalreporting.org](http://www.globalreporting.org)*

**Disclaimer:** Where the relevant sustainability reporting includes external links, including to audio visual material, this statement only concerns material submitted to GRI at the time of the Check on 5 December 2013. GRI explicitly excludes the statement being applied to any later changes to such material.

Akenerji Elektrik Üretim A.Ş. Sustainability Report ("the Report") was prepared solely for informative purposes and does not create a basis for any kind of investment decisions. All contents and information in this Report are prepared using the information and sources deemed to be accurate and reliable in the time the Report was written. None of the information and content in this Report can be interpreted as a statement, warranty and/or commitment; nor is it guaranteed that the information and content in this Report is complete and constant.



**Akenerji Elektrik Üretim A.Ş.**

Miralay Şefik Bey Sokak 15-17 Akhan,  
Gümüşsuyu 34437 İstanbul/Türkiye

**T** +90(212) 249 82 82 **F** +90(212) 249 73 55

[www.akenerji.com.tr](http://www.akenerji.com.tr)