



SUSTAINABILITY REPORT

2016-2017



102-1, 102-3, 102-45, 102-46, 102-50, 102-52, 102-54

About This Report

It has been the sixth Communication of Progress and fifth Sustainability Report by Ak-Kim since the company became a party to the United Nations Global Compact (UNGC) on December 13th, 2007. This report has been prepared in accordance with the GRI Standards: Core option. The Report states Ak-Kim's approach to the global principles besides the company's goals determined within this frame.

Report Content

This report is developed mainly in light of the opinions and expectations of our company's senior management in addition to key stakeholders - employees, customers and business partners. The social, economic and environmental performances of Ak-Kim within the scope of whole operational activities are described.

Boundaries and Limitations

Unless stated as otherwise, this report covers, without any limitations and boundaries, all services and operations of Ak-Kim Kimya Sanayi ve Ticaret A.Ş. performed between January 1st, 2016 and December 31st, 2017, at the production facilities located in Yalova and at company's headquarters in Istanbul. This report excludes sub-contractors for logistics and sub-employers from which we receive support services at production sites.

Our Next Report

Reporting frequency is biennial. Our next report will be issued in 2020, covering the sustainability performance in 2018 & 2019.



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Message To Stakeholders

We aim to make major contributions for both Turkey's economy and chemical industry thanks to our ability to evaluate the right opportunities at the right time.

Dear Stakeholders,

As Ak-Kim, we are glad to present our fifth sustainability report, which we evaluate our activities in terms of economic, environmental and social activities, by adding value to our society and our sector and presenting our sixth Progress Report to you, our esteemed stakeholders, in which we talk about our efforts undertaken by us in the context of the United Nations Global Compact.

Now, we proud to see that our potential reaches 800,000 tons of capacity and 1,500 products in total together with our subsidiaries in the chemical industry in which we entered by producing thousand tons of sulphur dioxide per year in 1977. We have conducted strategic investments by assessing organic and inorganic growth opportunities rationally and expanding our product portfolio in these 41 years. We became one of Turkey's leading chemical company thanks to our experience in know-how processes, entrepreneurial spirit and ability to make a right choice. As the first and only producer of many products in our production items, we continue contributing to national economy and being a model company which is a pioneer the sector. We achieved the capability to establish turnkey plants thanks to our conducted engineering works, the facilities we have established and our ever-expanding product range by following the technology closely since our establishment. We aim to continue to create added value for each sector we get in touch with raw materials and semi-finished products we manufactured.

We have added inorganic growth to our organic growth activities since 2013. In particular, we incorporated Akferal Company by getting into an equal partnership with Feralco. We grew more by acquiring full ownership of Gizem Frit in 2015, one of the world's largest enamel and ceramic frit producer. We started the production of equipment by entering advanced water treatment technologies thanks to our ultrafiltration process project



Onur Kipri General Manager

Message To Stakeholders

in 2015. At the beginning of 2017 we continued our inorganic growth by acquiring full ownership of Dinox, a German Chemical Company. In addition, we acquired shares of Feralco in the Akferal Company; therefore Akferal Company became a wholly-owned subsidiary of Ak-Kim. The fact that Gizem Frit, incorporated by us in 2017, acquired Megacolor, one of the most important ceramic chemicals companies, contributed us to grow more. We aim to make significant contributions for both Turkey's economy and chemical industry thanks to our ability to evaluate the right opportunities at the right time.

The concept of sustainability is considered an integral part of business life on a global scale. As Ak-Kim, we continued our sustainability efforts increasingly which we started thanks to our strategies and the roadmap designed in 2014. We updated our sustainability priorities with holding workshops by taking into consideration the views of our key stakeholders in line with the current situation and expectations of the industry. We aim to develop projects within the framework of our priority issues in the five-year medium term period, which covers the years 2019-2023, by setting targets in line with these strategies. In addition, we aligned our sustainability strategies and goals with the Global Development Goals declared by the United Nations, based on common grounds such as human, welfare, planet, peace and partnerships. Thus, we made our practices traceable on a national and international scale. In this way, we can analyse the changes in our domains and take actions according to these analyses by proceeding with meaningful and measurable steps.

"Great Place to Work" predicates a trusted work environment where our employees, our most important stakeholders, can reliably be engaged and get attached to, be proud of their workplace and the job they perform and work in perfect harmony and cooperation with their colleagues. As Ak-Kim, we will continue to strive to provide a working environment in which we observe the dimensions of "Reliability", "Respect", "Justice", "Pride" and "Team Spirit" for our employees.

As a necessity for a decent work approach, we realize all our business processes in accordance with occupational health and safety principles. With our effective Occupational Health and Safety practices such as performance monitoring, occupational health and safety trainings, drills and field inspections, Behaviour-Oriented Occupational Safety Project (ROTA), we strive to provide a safe working environment for our employees.

We collaborate manner and try to obtain maximum efficiency from the projects by taking positions according to the needs and expectations of our employees in the projects we carry out related to our employees' development.

In 2017, we included our customers' related processes into the digital transformation studies which were added to the R&D processes in 2016. The fact that we are already taking steps in the field of digitalization which is developing rapidly and will have a more important value in the future makes us stand out in our industry. We conduct studies in parallel with the market and customer needs in our R & D Centre established in 2013 thanks to our qualified engineers and years of experience in the sector. With the Ak-Kim Innovation Culture Project, launched in 2016, we aim to transform innovation studies we carry out in line with the global standards into a more highly-adapted and supported area within the organization. We aim to provide an appropriate and encouraging environment in order for our employees to discover new products and processes.

We will continue our works adding value to Turkey and the World for sustainable future in the light of science and technology in order to maintain our position in the chemical industry in the national and international platforms we have today.

Kind regards...

102-4, 102-5, 102-6

About Ak-Kim

Ak-Kim, incorporated within the structure of Akkök Holding and being the leader chemicals producer of Turkey, established in Yalova in 1977, has gradually broadened its production activities for 41 years. Today Ak-Kim is a global chemical company serving customers in six continents with its broad product portfolio including chlor-alkali and derivatives, peroxides, bisulfites, textile auxiliaries, paper and water treatment chemicals, cement and concrete additives.

The company is a market leader in many products such as basic and performance chemicals, provides services sectors including cleaning, chemistry, textile, paper and water treatment, food, metal, agricultural pesticide, energy, building, mining, leather, plastic and construction.

Ak-Kim, which aims to enrich its products and produce innovative solutions by

directing its activities to the right targets in R & D Center established in 2013, turned into an organization capable of making innovation at global standards. The usage of resources is reorganized and aligned in parallel with the requirements of the market and customers.

Using its presence and synergy in the water treatment sector, Ak-Kim entered the advanced technology treatment sector with the ultrafiltration membrane module investment at Yalova Plant. Ak-Kim is the first and only manufacturer of this product in Turkey thanks to the modern factory established in 2016.

Ak-Kim has been exporting its know-how processes and technologies to foreign companies since 2002 and rendering all services, from engineering to turnkey contracting.

The company emphasizes on inorganic growth opportunities in its growth strategy. Ak-Kim entered new markets by acquiring full ownership of Gizem Frit in 2015, one of the world's largest enamel and ceramic frit producer. Acquiring companies continued in 2017. Providing services in 70 countries abroad, Ak-Kim acquired Dincox, a chemical sales and marketing company in Germany, in order to be close to its customers in the European market and to expand its export activities.

Gizem Frit, a subsidiary of Ak-Kim, has recently performed a significant integration investment by acquiring Megacolor, which produces ceramic printing inks in Spain.

Together with its subsidiaries, Ak-Kim has a special place in the chemical industry with its more than 850 employees, producing in 6 different locations and its structure offering various products for different sectors.

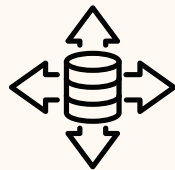


About Akkök Holding

Founded in 1952 by dear departed Raif Dinçkök, Akkök Holding is one of the deep-rooted institutions of Turkey with its 66 years of experience. There are 19 commercial and industrial companies, one of them is abroad and 19 production plants in the holding structure operating in chemical, energy and real-estate industries. Closely monitoring overseas markets in the sectors participated in, Akkök Holding aims to achieve global competition conditions and reach world standards with all of its companies.



800
thousand
tons production capacity



400
thousand
m² production site



70
countries
Export



509
Employees



1500+
products



11
turnkey projects
abroad

Milestones



Mission, Vision, Values and Key Qualifications



We add value to life with chemistry

Our Mission



Becoming the global and pioneering chemical company of Turkey with minimum 1 billion USD turnover by 2023.

Our Vision



Our Values

- Innovation
- Code of Ethics
- Team Spirit
- Respect for People
- Sustainability



Key Qualifications

- Strong engineering, R&D and Innovation Capabilities
- Our Competent and Committed Employees, Our Intellectual Capital
- Our Entrepreneurial Spirit
- Our Sectoral Diversity
- Our Customer Proximity



Products and Services

Basic Chemicals



Sulfur Compounds

- Sodium Bisulphite
- Sodium Metabisulphite

Organic Chemicals

- Acetic Acid
- Dimethylamine
- Dimethylacetamide
- Dimethylformamide
- Monomethylamine
- Trimethylamine

Per Chemicals

- Ammonium Persulphate
- Hydrogen Peroxide
- Potassium Persulphate
- Sodium Percarbonate
- Sodium Persulphate
- Epoxidized Soybean Oil

Chlorinated Compounds

- Hydrochloric Acid
- Chlorine
- Hydroxide (Liquid)
- Sodium Hypochlorite
- Trimethylamine Hydrochloride
- Dimethylamine Hydrochloride

Inorganic Coagulants

- Ferric III Chloride
- Polyaluminium Chloride
- Aluminium Sulphate

Paper & Water Treatment Chemicals



- Wet Strength Chemicals
- Dry Strength Chemicals
- Internal Sizing Chemicals
- Yankee Coating Chemicals
- Softeners
- Bleaching Chemicals
- Coagulants
- Flocculants
- Active Carbon
- Antiscalants
- Emulsion Breakers
- Defoamers
- Odor Control

Construction Chemicals



- Asphalt Additives
- Concrete Admixtures
- Concrete Admixtures Polymers
- Cement Grinding Aids
- Shotcrete Admixtures

Textile Chemicals



- Spinning and Conning Oils
- Pretreatment Auxiliaries
- Dyeing & Printing Auxiliaries
- Washing Agents
- Softeners
- Finishing Agents

Water Solutions



- A type of membrane filtration (Ultrafiltration)

Sectors Served

1. Cleaning
2. Chemical
3. Textile
4. Paper
5. Water Treatment
6. Food
7. Metal
8. Agricultural Pesticide
9. Energy
10. Building
11. Mining
12. Leather
13. Plastic
14. Construction

Completed Abroad Projects

- Chlorine Alkali Plant in Jordan (JBC)
- Chlorine Alkali Plant in Jordan (NCI)
- Turnkey Chlorine Alkaline Plant in Jordan(JBC)
- Hydrogen Peroxide Facility in Pakistan (Sitara)
- Two turnkey Chlorine Alkali Plants in Saudi Arabia (Cristal ve Jana)
- Hydrochloric Acid Plant in Greece(Kapachim)
- Chlorine Alkali Plant in Algeria (Adwan)
- Ferrous 3 Chloride Plant in Algeria (Adwan)

Significant Developments in the Reporting Period

Ak-Kim built and commissioned ammonium persulfate & potassium persulphate plant in Çerkezköy with the new technology and capacity of 10,200 tons / year in Southern Ak-Kim (Yalova).

The company started to produce ESBO product for the PVC sector and Peracetic Acid product for the cleaning sector.

Ak-Kim was granted the NSF (National Sanitary Foundation) certificate for the use of Akualys branded ultrafiltration module, which is approved for use in drinking water.

Ak-Kim was accepted into Turquality, which is the most prestigious and extensive incentive program, as of June 2, 2016.

2016

Ak-Kim incorporated Dinox, a chemical sales and marketing company established in Soest province of Germany and has 20 Million Euro turnover. It was aimed to be close to the customers in the European market and to expand export activities.

In addition the shares of Feralco in Akferal Company were acquired. Therefore it became a subsidiary of Ak-Kim. Dilovası and Osmaniye facilities started to be operated under the name of Ak-Kim.

Gizem Frit, a subsidiary of Ak-Kim and a producer of enamel coating, incorporated Megacolor, manufacturing inkjet ink for ceramic industry in Spain. This investment enables Gizem Frit to start production of inkjet ink and pigment for the ceramic industry.

It rebuilt the persulphates plant with new technology and 10.000 tons capacity per year in Yalova which was previously operated in Çerkezköy. 40% capacity increase was carried out.

2017

Significant Developments in the Reporting Period

• Ak-Kim established KABAM together with Koç University (Koç University Ak-Kim Boron Based Materials and Advanced Technology Chemicals Application and Research Center) as a research center for boron technologies .

• Ak-Kim conducted a series of communication activities within the scope of its 40th anniversary on October 5.

• Ak-Kim, Turkey's leader chemicals producer, founded Science-Chemistry laboratory for children who are curious about science in cooperation with KidZania, the world's first city made for children.

• Both plant capacity and product cost were improved thanks to the innovation project implemented at the SMBS facility at the end of 2017.

• In December 2017, ISO 9001 and ISO 14001: 2015 standard version transitions were completed. In December 2017, ISO 9001 and ISO 14001: 2015 standard version transitions were completed.

• In 2017 June, the Oracle ERP R11 version, which has been in use since 2007, was upgraded to R12 at the end of the year. In parallel with Industry 4.0, it was aimed to create both corporate memory and to serve customers faster by developing work and business model.

• At the end of the year 2017, the new Hydrochloric Acid plant was commissioned with the capacity of 40,000 tons/year by having a new investment about chlorine alkali.

• In 2017, the DMAHCL Plant with a capacity of 5,000 tons / year was commissioned after the new investment made to the pharmaceutical industry. The appropriate product was manufactured in the first production.

• Under the guidance of an advisor workshops were held on "Sustainability", "Sustainable Development Goals", and "Compliance of Business Goals with Sustainable Development Goals" with the participation of employees from the departments including Ak-Kim Executives, Health-Safety-Environment, Human Resources and Organizational Development, Management Systems, Planning and Logistics, Production, Investment and R&D.

2017

Significant Developments in the Reporting Period

Awards

2016

Ak-Kim's 2014-2015 Sustainability Report prepared in accordance with the United Nations Global Compact and internationally recognized Global Reporting Initiative (GRI) was awarded the Gold Award by LACP, one of the world's most reputable communication platforms.

2017

In the process of "Star Akkök Employees Reward System" which is held to determine the most successful practices within the Akkök Group of Companies; it was rewarded First Prize with the project a Chemical Finish Development and Applications for Carbon Fiber Process 'developed in cooperation development category with DowAksa.





**Ak-Kim and
Sustainability**

Corporate Governance

Akkök Holding is aware of the importance of joint and participatory approaches in shaping the future of societies. Therefore, the Group signed the United Nations Global Compact in late 2007 and thus assured that it will protect rights of its employees, contribute to the society and act in an environmental-friendly manner in all of its operations.

Having reinforced its reliable and strong image with this initiative, Ak-Kim Group continues its commitment to fulfil voluntary responsibilities in global and sustainable development. A Board Member of Ak-Kim represents Akkök Holding in the Global Compact Local Network.

Board of Directors

Ak-Kim Kimya Sanayi ve Ticaret A.Ş. is a non-public joint stock company. Ak-Kim Board of Directors is comprised of nine members with a gender distribution of seven male and two female members. The Chairman of the Board is not a member of the Executive Board. The General Manager represents the Board of Directors and has executive responsibility.

Within the social scope of the triple sustainable performance, the Board gives the final approval for corporate social responsibility projects. Approval and authorization of all projects and budgets

related to environmental practices is also within the responsibility of the Board of Directors.

Regarding economic scope, the Board's responsibility includes approving the budgets of sustainability practices and encouraging such practices in other companies of the Akkök Holding. The Board equally adopts all strategic issues within the framework of sustainability.

Committees

Akkök Holding has a special committee focused solely on sustainability. Ak-Kim has committees for sustainability, environment,

occupational health & safety and labour rights.

Additionally, Akkök Ethics Board was established and commissioned in 2014. The Board members are Directors of Audit, Human Resources and Legal Affairs Departments of Akkök Holding. Human Resources Directors of each company within the Group are also represented at the Board.

The Ethics Board guides the Akkök Holding in thorough adoption and implementation of Akkök Business Ethics Principles as fundamental and indispensable corporate values. Akkök Holding companies issue monthly bulletins and run employee surveys to raise awareness in this regard.

The management systems are indispensable parts of Sustainability Management in Ak-Kim.



Dialogue with Stakeholders

We reviewed the existing stakeholder portfolio and prepared a stakeholder map during the sustainability workshop we held in this reporting period with the participation of our senior management team. During prioritization, we gave special importance to those that have a high influence on managing our impact on sustainability and those that might be most affected by our operations.

In addition to these platforms, during the reporting period, we held a sustainability awareness survey with the participation of senior management and the selected focus group. With such practices we ensured the involvement of our employees in the reporting process. The two main purposes of the survey were to improve sustainability awareness in our employees and to receive their opinions on this issue. During the reporting period, we run similar awareness survey to learn about the opinions of our dealers on our strategic issues.

Feedback from the dealers revealed that Ak-Kim’s idea of sustainability has the positive influence on the subjects of occupational health and safety (92%), improving quality and durability of products (75%) and preventing water pollution (75%). These subjects coincide entirely with the material sustainability issues we identified in the strategy workshop.

Ak-Kim defines its stakeholders as “all people and institutions that are affected by our products, services and operations and that might affect our company in reaching its strategic targets”.

Key Stakeholders

Employees	Local Authorities
Public Institutions	Customers and Dealers
Shareholders	Local Communities
Media	Non-Profit Organizations
Group Companies	Students and Potential Employees
Financial Institutions	

Stakeholders - Communication Method - Frequency

Employees



GPTW (Great Place to Work) Surveys, conversation meetings with CEO, Ak-Kim Social Activities Club (ASEK), internal department meetings

GPTW: Biannually; Conversation Meetings with CEO:
Once per 3 months

Local Authorities



Visits

Regularly

Public Institutions



Visits

Regularly

Customers



Customer Satisfaction Survey (CSS), fairs, product launches, customer visits

CSS: domestic and international, biennially
Biennially

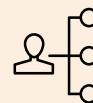
Shareholders



Board Meetings

Quarterly

Suppliers



Supplier visits and audits

Regularly

Local Communities



Open Door, Akkök Children's Festival, Social Responsibility Projects

Open Door: Upon request; Akkök Children's Festival:
Annually

Memberships

Ak-Kim stays in communication with institutions and organizations through being a member of associations on economy, environment and social. Thus, it can be up to date about social and sectoral topics and can learn their requirements.

International Memberships

- CEFIC (The European Chemical Industry Council) – ESA Association

Associations On Economy

- Sectoral Assembly of the Union of Chambers and Commodity Exchanges of Turkey
- Sectoral Assembly of İstanbul Chamber of Industry
- Turkish Chemical Manufacturers Association
- Yalova Association of Industrialists
- İstanbul Chamber of Commerce
- İstanbul Commodity Exchange
- İstanbul Union of Mine and Metal Exporters
- İstanbul Chemicals and Chemical Products Exporters' Association
- Central Anatolian Exporters Union
- Federation of Industrial Associations
- Supply Chain Management Association
- YALKİM Organized Industrial Zone
- Carbon Association
- Chemport

Associations On Environment

- Environmental Working Group of İstanbul Chamber of Industry
- Environmental Working Group of the Turkish Industry and Business Association
- Environmental Working Group of the Turkish Chemical Manufacturers Association
- Turkish Association of Chemical Tanker Cleaning
- Quality Association of Turkey
- Turkish Marine Environment Protection Association (Deniztemiz Turmepa)
- TUSIAD Environment and Climate Change Working Group
- TUSIAD Energy Efficiency Working Group

Partnerships In Social Responsibility Projects

- Global Compact Local Network
- Corporate Social Responsibility Association of Turkey
- Community Volunteers Foundation
- Educational Volunteers Foundation of Turkey
- Turkish Association for People Management
- Women Entrepreneurs Council of Yalova Chamber of Industry and Commerce
- Quality Association of Turkey
- Yanındayız Association

Sustainability Cooperation

Ak-Kim has voluntarily committed and approved sustainability initiatives in place.

- Ak-Kim is one of the first Turkish companies to commit to Responsible Care and implement the program. [February 11th , 1993]
- Ak-Kim is one of the pioneering Turkish companies to sign the UN Global Compact. [December 13th , 2007]
- Ak-Kim is a member of the Executive Board of the Global Compact Local Network, on behalf of Akkök Holding. [2013 - 2016]

Responsible Care is a program primarily considering the protection of human life, environment and natural resources in all stages of activities and giving particular importance to this consistently.

The Canadian Chemical Producers' Association initially suggested the idea in 1984; then it spread all over the world, and today it is implemented in more than 50 countries. Responsible Care Program is a voluntary initiative for the chemical industry. It is coordinated by the Turkish Chemical Manufacturers Association (TKSD) on behalf of CEFIC in our country.

In accordance with the Responsible Care Program, Ak-Kim attaches importance to the protection of the environment and human health as well as industrial safety at every stage of feasibility, planning, project designing, assembly, production activities, transportation, maintenance, and other services.

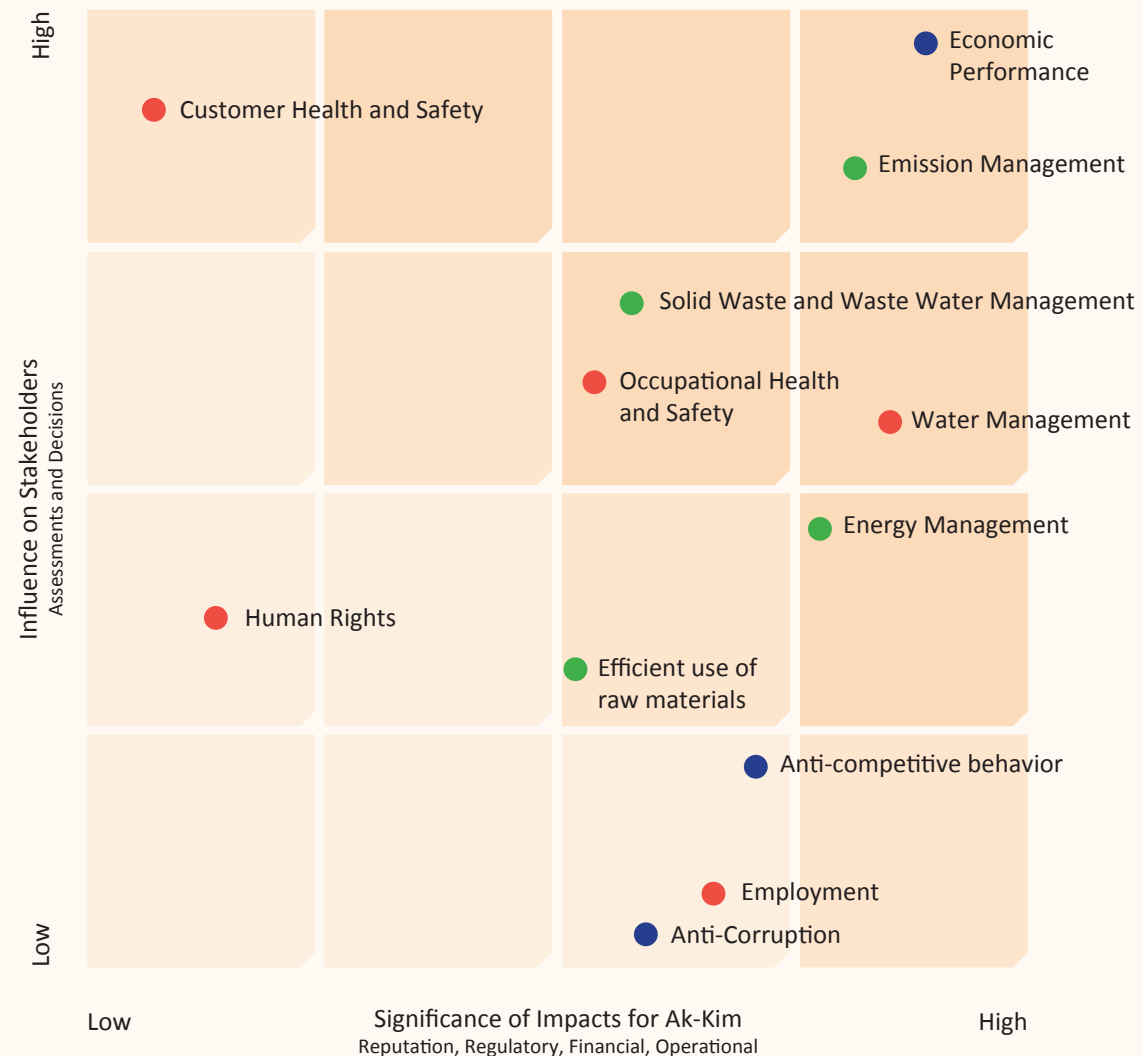


Prioritized Sustainability Issues and Ak-Kim's Sustainability Goals

While Ak-Kim is carries on the activities, it prioritizes some topics as economic performance, emission management, solid waste and waste water management, occupational health and safety, water management.

Ak-Kim acts with the awareness of the importance of identifying the primary indicators of economic, social and environmental strategies and related objectives. The priority areas, which are essential for the stakeholders and closely affecting the way Ak-Kim' business, are determined through regular prioritization studies. The subjects that Ak-Kim will focus on in the next five years are determined and Ak-Kim Sustainability Issues Matrix was established in the sustainability workshop held in 2017 with the participation of senior management.

Ak-Kim also considers contributing to the Sustainable Development Goals which aim to find solutions to the global problems in line with the priority issues and targets set.



Goals and Compliance with Sustainable Development Goals

Ak-Kim is aligned its econmic, environmental and social goals with “Sustainable Development Goals” which is global agenda in recent years.

Ak-Kim aims to be developed and implemented within the framework of priority issues in the five-year mid-term period of 2019-2023 in the light of all the reviews and the issues determined by Ak-Kim Sustainability Matrix regarding sustainability.

All functions were aligned with local and global targets, taking into consideration the priorities of internal and external stakeholders within the framework of corporate business objectives in the workshops held in the company to determine Ak-Kim’s strategic sustainability strategies.

Ak-Kim’s focal sustainability issues were determined by analysing in detail in economic, environmental and social aspects technically. Following this strategic work, the focal plans were prioritized for the next five-year medium term and action plans were determined and road map studies were initiated with the participation of senior management and function leaders.



Goals and Compliance with Sustainable Development Goals

Economic Goals :

Economic Development and Innovativeness...



Ak-Kim is among the pioneer and leading actors of the chemical industry in Turkey. Ak-Kim, which contributes to the development of reducing the foreign dependency of chemistry industry in Turkey thanks to its R & D Activities, aims to become a global producer of specialty chemicals in the most critical position in Turkey in the near future.

Ak-Kim, which export one third of its production with strength and reliable position in the chemical industry, the third largest field of export in Turkish economy following automotive and textile, is increasing its influence day by day by exporting more than 70 countries in 6 continents.



Projects will be prepared for the continuation, development and dissemination of energy efficiency enhancing works in all processes.

There are some structural problems which restrict the chemical industry in Turkey to achieve preferred progress. High input costs are at the top of this list. The energy has a prominent place among the inputs of chemistry.

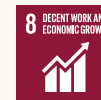
Ak-Kim focuses on energy efficiency studies to reduce input costs significantly. Ak-Kim aims to use all its channels to share its good practices with its external stakeholders actively as well as continue to work on energy efficiency increasingly.



The effectiveness of the platforms such as the suggestion system supporting innovative studies within the organization will be increased.

Ak-Kim progresses not only with its R & D centre but also with the suggestions of its employees in every function. R & D and innovativeness approach are the most critical zones of development for the chemical industry.

In order to make Ak-Kim employees' participation in innovative work more effective and efficient, studies will be made to disseminate the suggestion platform within the organization and to facilitate its access.



Active and pioneering participation in sectoral platforms will be increased by following the activities to support sectoral development.

The chemical industry has an important status in Turkey's development. The chemical industry is a field of operation that provides competitive advantage and development in local development thanks to both its final goods and intermediates products which are supplied to other branches of industry.

The most critical issue in the progression of the chemical industry in Turkey is that lack of activeness of the sectoral actors for developing effective policies in the platforms in which they participate. As Ak-Kim, our primary strategy is to intensify external stakeholders' relations in order to make the participation and guidance in the platforms where the chemical sector is together more active.



Joint projects with external stakeholders will be developed in order to increase the knowledge and awareness of institutional and individual consumers about the chemical industry.

The chemical industry and its production have the most critical sectors in ensuring the natural and sustainable harmony of humanity with the world. The chemical industry has an active role in ensuring the production of almost every industrial area and the compatibility of the production outputs and wastes with nature.

Increasing relevant factors about solutions of the chemical industry against problems faced by active and potential organizational customers primarily in the field of industry, ensuring them to understand the chemistry as a solution partner have an indispensable position among communication goals of Ak-Kim. It is also essential that individual users perceive chemistry as one of the most effective fields of knowledge in ensuring the harmony of humanity with nature.

Goals and Compliance with Sustainable Development Goals

Environmental Goals : Protection of Fresh Water and Energy Efficiency...



In research conducted, Ak-Kim is defined as environmental friendly corporate by its stakeholders. Ak-Kim carries out advanced practices in the field of environment with the participation of employees as well as fulfilling all requirements of ISO 140001: 2015 Environmental Management System.

The utmost care is shown to ensure that the products manufactured are environmentally friendly while Ak-Kim performs advanced practices at the production stage in the fields of practices such as solid waste management, water management, wastewater management and water re-use, emission management in the context of climate change.



Efforts related protecting water and energy in the production stages will be continued and improved. By 2023, water reports will be prepared concerning the production facilities and strategies will be developed in the light of this report.

Ak-Kim made significant progress especially in the areas of water use and waste water and efficient use of energy. We are proud to mention that Ak-Kim's performance is at an internationally recognized and appreciated level in all areas.

However, in addition to these developments, As Ak-Kim, we aim to carry out analysis regarding "water footprint, sustainability and supply risks". Ak-Kim's water policies will be examined by 2023, and revised if necessary in the light of the analyses presented in this report, and a strategic action plan will be prepared in the light of these policies.



R & D and P & D approaches and projects will be extended to all employees. Again, efforts will be made to encourage suppliers about R & D activities.

As Ak-Kim, we are aware of the importance of the development and participation of our suppliers in the full alignment of all our activities and business objectives in accordance with the global targets. It was determined that informative inspirer studies should be performed which will enable our suppliers of goods and services to increase their commitment on sustainable development targets and to perform R & D and P & D studies in order for them to be compatible with global targets within this framework in the next five years.



For responsible consumption, Ak-Kim will participate in active projects. Studies will be conducted to develop responsible production approach in a way to include suppliers.

Ak-Kim have prioritized the conservation of regional resources, adequate provision of consumer needs, and user health since starting from the day it was founded. Responsible production approach constitutes the basic production philosophy of Ak-Kim beyond international and local legal regulations in many fields of operation.

In addition to this, it was determined that Ak-Kim should take a more active role in transferring the knowledge and experiences necessary for the corporate and individual stakeholders to discipline their consumption with the same sense of responsibility in the upcoming period.

It was decided that Ak-Kim should support qualified projects oriented towards raising awareness of consumers by both public and sectoral platforms and projects should be produced.

Goals and Compliance with Sustainable Development Goals

Social Goals:

The position of Chemistry in the Life, Business Ethics...



Ensuring the production of goods with high added value, working on product and technology development in areas that are likely to gain importance in the future by monitoring the developments in the industry are deemed as prioritized responsibilities of Ak-Kim. In this context, multi-stakeholder projects are planned to be conducted which enable the consumers to understand the importance of chemistry and to increase their right choice capabilities.



Future oriented innovative studies will be conducted thus improving the chemistry in life by increasing the contribution of chemical industry to the health of individuals.

We encounter a product of chemistry in almost every point of our daily life. There is chemistry at every point we touch for example from the food we eat to the clothes we wear. As a human being, we benefit from the solutions of the chemical industry in almost every production, in our zero waste works, in the disposal and recovery of our production waste. Chemistry is an indispensable field of knowledge for us to live in harmony with nature as a human being and to have a sustainable common future.



Ak-Kim Sustainability Policy



Ak-Kim Kimya San. Ve Tic. A.S., whose mission is that “adding value to life with chemistry” we aim to manage all of our processes in line with this mission and to become an exemplary company in the field of sustainability management in our country and in our sector with our principles and priorities determined on the basis of our sustainability values. In line with our UN Global Compact and Responsible Care commitments and

Our Sustainable Development Goals in all domestic and international operations;

- *SKH.08 Decent Work and Economic Growth*
- *SKH.09 Industry, Innovation and Infrastructure*
- *SKH.06 Clean Water and Sanitation*
- *SKH.07 Affordable and Clean Energy*
- *SKH. 12 Responsible Consumption and Production*

Within the scope of essential and priority issues for our company and key stakeholders, we at this moment declare and undertake to manage our sustainability impacts and our economic, social and environmental responsibilities beyond the laws and expectations, to create sustainable value for our stakeholders with innovative ideas, investments and products,

To use our all resources in order to perform activities determined for achieving our sustainable goals,

To work together with all our personnel to achieve sustainability targets and to keep all communication channels open,

To review, improve and develop our goals and performance periodically,

Moreover to present our sustainability report to our stakeholders biennially.



**Economic
Performance**

Operational and Financial Indicators

Ak-Kim invests in the direction of its goals and extends its portfolio. Compared to the previous reporting period, it increased both its total sales and export share in these total sales.



Number of Employees

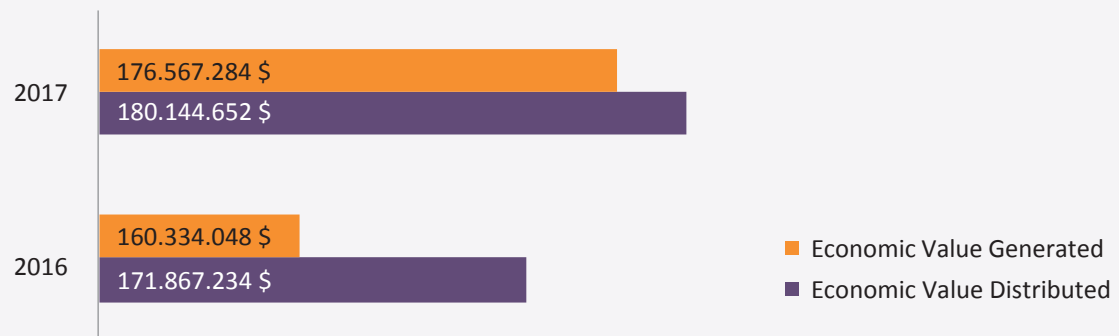


Operational and Financial Indicators

	2015	2016	2017
Number of Employees	516	488	509
The share of exports in total sale volume	18%	19%	21%
Number of main product groups	30	29	30
Total Sales Realized (tons)	394,685	395,277	414,818



The share of exports in total sale volume



Efficient Use of Raw Materials

Ak-Kim performs all production operations in its integrated production facilities. In other words, outputs of a facility are used as raw material in another facility. It brings to Ak-Kim a considerable advantage in costs and competition. For instance, Ak-Kim does not only produce and sell hydrogen peroxide in high tonnage sales, but also use it as the raw material in another facility (sodium percarbonate). Similarly, Ak-Kim produces and sells methylamines but it also produce dimethylformamide by using these methylamines.

Ak-Kim facilities also monitor raw material consumption with process control devices and improve processes when necessary.

Among practices to involve employees in the resource use processes are including raw material efficiency into individual production goals, training the staff on raw material efficiency, and giving instructions to improve raw material efficiency.

Thanks to its strong engineer team and engineering skills, Ak-Kim has an ability of monitoring efficiency, if required, improvements are made in this way material efficiency is increased.



Ak-Kim Investments

Ak-Kim makes use of an inorganic growth opportunities in addition it cares R&D studies, carries works and runs projects on innovation, scientific and technical topics.

Continuing the inorganic growth which would support the achievement of future goals and taking the available acquisition opportunities, in 2017 Ak-Kim acquired 100% ownership of Feralco in Akferal Company.

Allocating at least 2% of its total turnover each year to R&D activities and technology investments, Ak-Kim attached great importance to research and development activities in 2016 and 2017 and conducted many innovative, scientific and technical projects and studies in many fields of operation. Research and development activities are also carried

out for biotechnology, nanotechnology, health products and food additives in addition to the studies conducted in the areas of textile, construction, paper, water treatment, performance chemicals and process development and basic chemicals in the Ak-Kim R & D Centre, following the world trends. In 2016 and 2017, Ak-Kim R & D laboratories developed more than 40 new products each year. Ak-Kim continues to create the development of new research areas and develop new products in R & D Centre and has focused on issues such as scientific paper, patent application, collaboration with university and industry especially in recent years.

There are some on-going projects related to the issues such as ESD processes within the scope of Seveso, developing DCS, fulfilling Atex directives, developing firefighting systems, developing issues related to monitoring and instrumentation, works related to grounding and equipotential and lightning protection systems in 2016 and 2017. The projects are comprehensive and will continue in the upcoming years.

The project, which was initiated to double the capacity of the Adwan Chlorine Alkaline Facility in Algeria established in 2015, continued in 2016 and 2017 as well.

7,200 tons/year

In the first phase of the sodium persulfate facility with an annual capacity of 1,200 tons was commissioned at the end of 2015. The second phase of the project will be completed in 2019, and the third phase will be started in 2020. The company targets to reach a total annual capacity of 7,200 tons by completing third phase in 2018. Ak-Kim created value addition by manufacturing a raw material in Turkey which used to be entirely dependent on import in the past.

The Performance Chemicals Plant was rebuilt with the modernization project in 2016 and 2017.

The APS Factory, which was located in Çerkezköy until 2016, was moved to Yalova Settlement. Facility modernization is completed with the replacement of old technologies with new ones. The facility, which also provides the production of PPS at the same time, was commissioned in January 2017. Thus two factories were integrated with each other in Yalova. The project is costed approximately 14 Million USD.

300 tons/day

The HCl synthesis unit project was completed to increase the capacity in addition to the existing synthesis units. The use of the Chlorine Alkali plant was thus increased from 75% to approximately 90%. HCl production capacity of 220 tons / day was increased to 300 tons / day. The new cooling tower was built together with the HCl synthesis unit, and the new cooling system was started to be used which is modern and has high efficiency.

5,000 tons/year

DMAHCl (Dimethylaminehydrochloride), a new product in Ak-Kim's product portfolio, consists of dimethylamine and hydrochloric acid components. The first phase of the project Ak-Kim developed thanks to its own know-how and dominant engineer staff was completed with a capacity of 5,000 tons / year.

Ak-Kim Investment



Ak-Kim Ultrafiltration Plant

Ak-Kim entered on water treatment technologies at the 2015 year and started to the production of Ultrafiltration module in 2017. Ak-Kim water solutions produces Ultrafiltration Modules in Yalova Turkey. Water solutions production facility is build on 2.800 square meters covered area. We are the first and sole manufacturer in Turkey as well as in the region. 350 m2 of the total plant area is comprised of the laboratory and the pilot facility.

Module production is performed in parallel with the sales volume in Ultrafiltration Module Production Plant. Also, product and process development activities continue in parallel with production.

The product in the high technology class is in the upper segment in the world market regarding quality and performance.

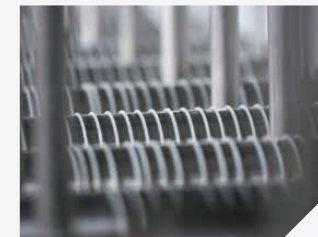
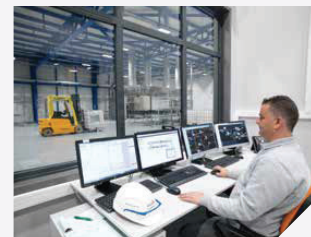
The support of pre-sales project and after-sales technical service as well as the production of water chemicals is one of the important services provided by Ak-Kim to its customers.

The hollow fiber membrane, designed and produced by Ak-Kim with its own technology, ensure physical treatment process via absolute filtration model without changing the chemical properties of water.

Through long term R&D activities, Ak-kim Water Solutions developed high performance hollow fiber membrane module specially designed for ultrafiltration process.



Special, High Performance, Hollow Fiber





**Environmental
Performance**

Environmental Performance

Taking every required measurement in every process and prioritizing environmentally friendly technologies in line with continuous improvement, Ak-Kim carefully considers the utility of power and natural resources both during the design of its processes and during production stages.

Sustainable growth has become one of the most critical existing issues in today’s world where the natural environment is rapidly getting polluted and sources were getting scarce. Ak-Kim particularly values environmental sustainability and aims at producing environmentally friendly products allowing reduction of chemicals consumption.

Taking every necessary measure to prevent environmental pollution in every process and prioritizing environmentally friendly technologies in line with the continuous improvement in all its operations, Ak-Kim carefully considers the utility of power and natural resources both during the design of its processes and during production stages. Ak-Kim intends to raise awareness on the protection of the environment through

cooperation with suppliers and customers and works to reduce its environmental impact not only in production phases, but also during the use of its products.

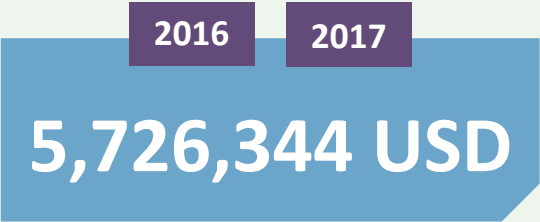
Environmental specialists conduct environmental activities within the Health Safety Environment (HSE) Department and Systems Management Department. All Ak-Kim employees are trained and competent in performing environmental as well as occupational health and safety (OHS) activities. They assume responsibility and actively participate in improvement efforts. Several committees were set up for the regular and systematic progress of environmental sustainability efforts. There are some committees to improve these processes, including the Suggestion, Emission, SEVESO (Prevention of Major

Industrial Accidents), Energy Management, ROTA Group, Behaviour Oriented Occupational Safety Committees, OHS Committees, Process Safety Committees as well as the Akçevre Board coordinated by Akkök facilities in Yalova.

As Ak-Kim, we provide energy efficiency trainings to all employees. Waste and energy training was provided to 408 employees in 2016 and to 490 employees in 2017. Ak-Kim allocated 2,982,107 USD for environmental and waste water treatment practices in 2016 and TL 2,744,237 USD in 2017.



Total budget for environmental and treatment studies in 2016 and 2017





Energy Efficiency

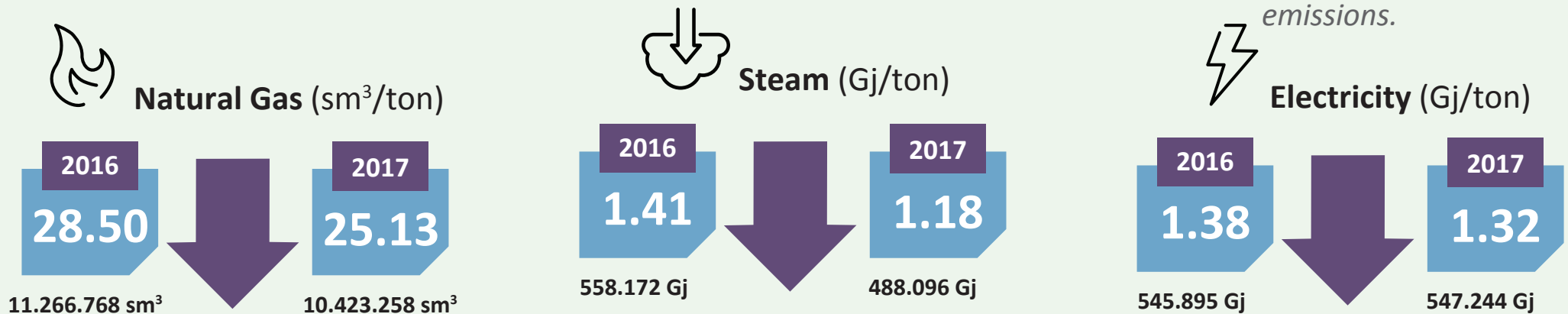
Efficient use of energy resources, energy saving and recovery has become important in every aspect of life with technological and industrial advances. Energy Management System is to be integrated into existing management systems to maximize the benefits; the system is also quite significant for cost reduction, easier legal compliance regarding GHG emissions, increased business performance and application to Efficiency Increasing Projects.

Ak-Kim purchases a portion of the energy and steam it uses from its sister company, Aksa Akriklik, and thus achieves a cost advantage. Energy consumption of the facilities is monitored through process control devices and improvements are made by Production Department when necessary. Also, electricity and steam are directly purchased from auto producer and thus no additional emission is caused.

In the facilities that Ak-Kim built with its know-how and technology, energy

efficiency and savings are given priority in the selection of processes and equipment. For instance, while establishing the ICI-licensed Chlorine Alkali Facility in 1992, Ak-Kim selected membrane process which is more environment-friendly compared to other processes. Ak-Kim has been the first company in Turkey to implement the high-investment membrane technology, which does not generate hazardous waste as it does not use mercury in the process.

Ak-Kim established the ISO 50001: 2011 Energy Management System in 2015 for the efficient and systematic management of energy use and energy-related emissions.



*Results of energy efficient studies which were performed in 2016 and 2017:
 Natural gas consumption is decreased 11.8% per ton,
 Electricity consumption is decreased 4.3% per ton,
 Steam consumption is decreased 16.3% per ton.*



Energy Efficiency Applications in Ak-Kim



7,400 tons / year steam as a result of the economizer application conducted in the methylamines plant,

As a result of cooling tower revision in Chlorine Alkaline Plant, the electricity of **1,050,000 kWh / year**; **486,000 kWh / year** electricity as a result of Chiller System revision,

As a result of improvements performed in the dryer and oven in SMBS Plant, **478,500 kWh / year** of electricity and steam system improvements resulted in **2,175 tons / year** of steam and **2,460 tons / year** of steam savings as a result of waste heat exchanger replacement.



It is aimed to increase energy sufficiency in terms of water consumption and energy waste by renewing cooling towers at inorganic plants within the scope of changing Cooling Tower and Pumps. This project continues and **300,000 kWh/year** efficiency has been obtained so far.

In the Drive Application and Fan Replacement Project in Sodium Percarbonate Plant Fans, the addition of drivers and replacement fan additions were made in order to save energy in the relevant facility. The project resulted in **642,000 kWh / year** savings.

All existing luminaries are planned to be replaced with LED luminaries within the scope of LED Technology Transformation Project in Lighting. **300,000 kWh / year** efficiency was aimed to be achieved and **70,000 TL / year** was saved as a result of the completed phases of the project.

It is planned to establish a single system and improve the processes by monitoring the consumption of electricity, natural gas, water, conditioned water, steam, compressed air, process air within the scope of the Energy Monitoring System Project.



Climate Change and Emission Management



Ak-Kim performs the following activities for fighting against climate change and for reduction of emissions:

- Selection of suitable technological equipment and process improvement
- Assigning an odour team and making odour measurements
- Calculating greenhouse gas emissions (carbon footprint)
- Weather modelling
- Making internal monitoring measurements

Within the scope of these practices, Ak-Kim pays utmost attention to ensure that the state-of-the-art equipment is purchased for existing or new production facilities and that environmental impact of such equipment is minimal.

Emissions of facilities are stored in absorbers of process funnels before reaching out to the atmosphere and are re-fed into the system. This way, air quality is maintained, resource use is reduced, and chemicals are reused. In addition, organic steams are burned in the incinerator system to avoid any environmental damage. 1,750 tons/year steam power is generated during the incineration and this energy is used for heating the facilities.

During air pollution distribution modelling, the distribution of air pollutants in the atmosphere are mathematically simulated by using parameters such as source data, meteorological data, landforms, etc. During air pollution distribution modelling, the distribution of air pollutants in the atmosphere are mathematically simulated by using parameters such as source data, meteorological data, landforms, etc. HSE Department Management conducts this study.

With a variety of emission measurement devices, Ak-Kim makes internal measurements in emergencies or pre-defined periods and thus prevents environmental pollution through timely intervention in case of any problems. Besides, Ak-Kim actively participates in activities of related non-governmental platforms, public institutions and the business world and contributes to such practices.

Ak-Kim conducts required operations regarding global warming and the reduction of gas emissions causing global warming, the global issue which has gained even more importance after the execution of the Kyoto Protocol. Ak-Kim prepares greenhouse gas emission monitoring reports within this scope and delivered the internal greenhouse gas emission monitoring plan to the Ministry of Environment and Urbanization in 2014 in accordance with the Communiqué on Monitoring and Reporting Greenhouse Gases. The company was qualified in 2015 for “ISO 14064 Greenhouse Gases Inventory” Certificate forming the basis of activities conducted to reduce carbon emissions. With this certificate, the company made a significant progress towards reduction of its carbon footprint through ensuring measurement of current emissions and approval of such measurements by an independent body. Performing all operations and activities with the consciousness of environmental protection, these efforts of Ak-Kim to reduce carbon emissions is quite significant particularly regarding sustainability and for the solution of environmental issues. This Certificate also enabled Ak-Kim to achieve the company goal of “making sustainability a company culture” included in the list of company strategies.

Ak-Kim revised the foundation year as 2017 after the company moved APS Plant from Çerkezköy to Yalova.

17,756.16

**Scope 1:
Direct tCO₂e**

99,583.91

**Scope 2:
Direct tCO₂e**

117,340.07

**Total
Greenhouse Gas
tCO₂e**

	tCO ₂ e/ton	scope 1	scope 2	Total
2017	Emission	0.04	0.24	0.28

Efficient use and saving of water, which is one of the most vital resources for sustainable development, has an important role in Ak-Kim's environmental practices.



Water Management

Efficient use and saving of water, which is one of the most vital resources for sustainable development, has an important role in Ak-Kim's environmental practices. Ak-Kim procures the water used in its two factories in Yalova from the Dam and from Aksa Akrilik, which is a sister company. Utility water is received directly from the Gökçe Dam. Amount of utility water may differ in line with the increase in operational activities.

Water used in processes is procured from two sources. In the Southern Ak-Kim facilities, water from the dam is softened

before usage, whereas in the Northern Ak-Kim facilities water is received from Aksa Akrilik. Approximately 60-65% of water used in processes becomes product component and the rest becomes waste water. Cooling water is taken from the dam and Aksa and used in a closed circuit system. Thus water is added only when there is loss due to evaporation/leakage since the system is closed circuit system. The water taken from the dam goes through a treatment system to be used as drinking water. The personnel are given periodical training on efficient use of water and water savings.

Water Consumption

Dam Water	2015	2016	2017
m ³ /year	554,068	648,591	767,712
m ³ /tons	1.40	1.64	1.85

Reuse of Waste Water

Each of the two factories in Yalova, which makes production, has its own waste water treatment facility. The wastewater collected in these pools is sent to the typical treatment facility within the boundaries of YALKİM OSB and the treated water is discharged according to the limits specified in the Regulation on Control of Water Pollution.

The construction of the wastewater treatment plant initiated by Akkök in order for all companies of YALKİM OSB to collect and discharge in a conventional treatment plant was completed in 2015. As a result, all domestic and industrial wastewater within YALKİM OSB, including Aksa, Ak-Kim and DowAksa, companies incorporated of Akkök Holding, were started to be treated together. In addition, the sludge drying unit will be completed by the end of 2018. Aim of this project that is implemented to simplify treatment processes by using the synergic effect of waste water with different characteristics, to allow reuse of water by using advanced treatment (ultrafiltration) technologies, to ensure smooth operation/maintenance, to optimize land and natural resource use in the production facility and to sustainably meet future increase in capacity.



Ak-Kim carries out many projects in order to reduce waste water pollution loads. 40% of the ammonia is recovered as a result of the recovery unit established in the ammonia-containing wastewater plant from the Persulfates plant.

Thanks to the additional exchanger installed DMAC Plant, amines, which may be mixed with wastewater, are recovered into the system. As a result of the studies conducted, significant reductions in wastewater pollution loads were achieved.

*Sulphide-containing waste water forming the pollution load from SMBS plant and negatively affecting its activities in biological treatment is recovered as a result of process change in the plant. Therefore, **16,500 m³/year** wastewater is recovered as well as sulphide.*

*In addition, **14,500 m³/year** wastewater generated in the Sodium Percarbonate Facility is recovered for reuse in the production system. In this way, not only water saving is achieved, but also loss of products within the waste water is prevented. Similarly, the water regained from cooling water is used in watering green areas, thus enabling approximately **6,000 m³/year** water saving in the summer.*

Solid Waste Management

Ak-Kim has a variety of projects to reduce wastes. In addition, personal scorecards of employees include targets for reducing wastes.

Another example is hydrochloric acid, one of the chemicals produced by Ak-Kim and used in many areas, including metal cleaning. After being supplied to the galvanize industry, hydrochloric acid is used in metal cleaning and then it becomes waste. This waste is called “Ferric II chloride solution” or “rotten acid”. The waste is transferred from customers’ facilities with vehicles licensed by the Ministry of Environment and Urban

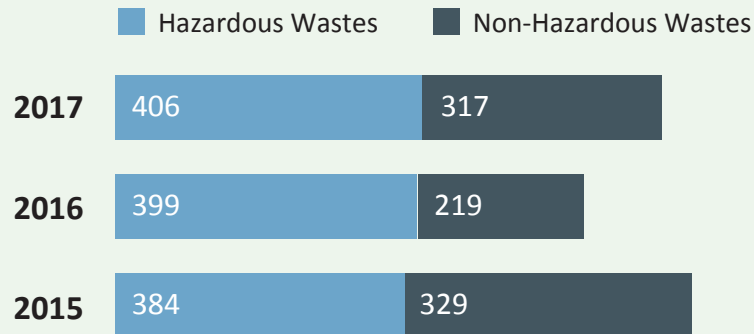
Planning and is then recovered at Ak-Kim’s Ferric III Chloride facility, which is also licensed by the Ministry. After being processed, this waste is turned into Ferric III Chloride. Ferric III Chloride is one of the chemicals used in wastewater treatment. With this system, environmental damage to be caused by rotten acid is prevented and the waste is recovered. The average amount of rotten acid or Ferric II Chloride solution recovered per year is approximately 6,000 tons.

In addition to performing waste management practices, Ak-Kim also contributes to such processes of its customers.

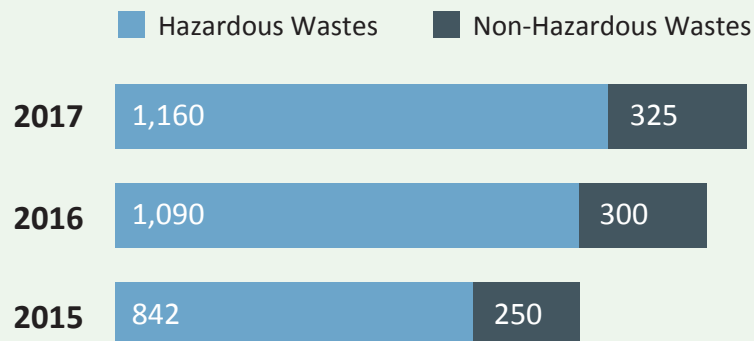
Collecting the 52% of the paper and plastic packing materials of its products in 2016 and 54% in 2017, Ak-Kim contributed to recycling.



Recovered Waste (tons/year)



Landfilled and Incinerated Waste (tons/year)



Compared to 2016, the increase in the number of wastes, contaminated barrels, plastic drums and IBC tanks resulting from the process resulting from the process is due to the destruction of products whose shelf-life is ended.

Waste Management Practices

9 tons of DMAC was recycled monthly by reducing 10 tons of DMAC leak to 1 ton per month

At the DMAC production plant, there was a loss of product due to DMAC leaks during the process. 9 tons of DMAC was recycled monthly by reducing 10 tons of DMAC leak to 1 ton per month as a result of studies to prevent product wastage by preventing DMAC leakage.

The total nitrogen value was decreased from 1130 mg/lit to 730 mg/lit

The ammonia used in the production of APS/PPS was discharged with wastewater at the end of the process Thanks to the ammonia stripping system, both ammonia recovered and nitrogen-induced pollution loads are reduced. With this project, the total nitrogen value was decreased from 1130 mg/lit to 730 mg/lit.



Environment - Friendly Products

Investigation of environmental dimension is among the acceptance criteria of a new chemical designed with an R&D process. Today, saving in resource usage especially energy and water is a significant issue. In full awareness of our responsibility towards future generations, we, as Ak-Kim, do not develop any products that could be harmful to the environment. In addition, we give priority to efficient use and saving of existing resources while developing R&D projects.

Ak-Kim adopted the vision of “offering tailor-made integrated solutions to its customers”. One of the critical aspects of its R&D practices is enabling customers to save resources by improving processes through environment-friendly chemicals. Other environment-friendly chemicals developed at Ak-Kim R&D Center and offered to customers during the reporting period are listed below.

AKUA END 6133 and AKUA END 6140 - Used as decolorant and for sedimentation in treatment of particularly textile waste water and also for paint, pulp and paper, printing ink and similar industrial waste waters. Ensures reuse of treated water in appropriate processed and thus contributes to water saving and reduction of sludge and waste amounts.

AKUA SAN 1012 - Prevents corrosion without inhibiting heat transfer by creating a barrier between the monomolecular film adsorbed on metal surfaces and water & metal. In this way the product ensures efficient functioning of steam and condensate systems and prevents energy losses.

AKSOFT CSK - Used as cationic and organic softener in palette form by textile plants this product can dissolve in cold water contrary to the other commercially available products which can only dissolve in hot water, and thus and helps save energy since it enables preparation of solutions with cold water, eliminating the heating and post process cooling operations entirely.

AKSOFT CSK - Used as nonionic and organic softener in palette form by textile plants. This product can dissolve in cold water contrary to the other commercially available products which can only dissolve in hot water, and thus and helps save energy since it enables preparation of solutions with cold water, eliminating the heating and post process cooling operations entirely.

AKSHOT 250 AF - Compared to the alkali-containing product used in shotcrete practices such as metro, tunnel, it provides an improved working environment thanks to its non-aggressive properties, minimizing environmental impacts and reducing operating costs.

AKASF PE 280 – Anti-peel asphalt chemicals need special odors for cleaning and specific odors that disturb the working environment. Such conventional problems could be avoided thanks to this product. Any contaminated equipment can be washed easily with water and there is no unpleasant odor.

AKBOND 130 – It provides physical properties for paper by increasing the dry strength values such as rupture and bursting of paper during the re-evaluation of waste paper. It increases the drainage during the paper production process and provides energy saving by ensuring easy drying of the paper during production.

AK DIMER 120 – It gives showerproof feature to corrugated cardboard paper. It prevents the loss of strength of the paper by allowing the paper to be exposed to less moisture. This makes it possible for natural, environmentally friendly packaging papers to be preferred.



**Social
Performance**

Social Performance



Product Responsibility in Value Chain

R & D Centre, established to ensure the production of high value-added products by following the developments in the sector, to make technology and product development studies on the issues that are likely to gain importance in the future, to increase the quality in the existing technologies and processes and to reduce the costs and accredited by the Ministry of Science, Industry and Technology on October 25, 2013, continues its studies with approximately 60 employees. Ak-Kim R&D Directorate performs with the vision of “becoming a leading R&D center that generates know-how” and the mission of “offering chemical and engineering solutions that create value added products, processes and new implementation areas by using advanced technologies in performance, basic chemicals and by-products”.

Supply Chain Management

Ak-Kim has been conducting its supply chain activities in the scope of three major strategies and policies namely planning, purchasing and logistics. Planning, purchasing, production, logistics and quality departments are safeguarding the strategies employed by Ak-Kim in the execution of their strategies and policies and taking the actions strictly in line with these strategies.

Planning department is responsible for preparing efficient and productive product planning in order to reach the desired volume and delivery time requested by the customers taking the current performance capacity of the facility into account. Moreover, it also plans the procurement of the raw materials and controls the state of stocks to satisfy the customers’ orders successfully

Purchasing department is in charge of procurement of the essential materials and services at the desired quality, amount, time and specifications from both domestic and international markets required for the sustainability of Ak-Kim business activities. The procurement is achieved by taking changing market and competition conditions and quality- price balance at an optimum level into consideration. During the procurement process, we work with the supplier who comply with the supplier selection criteria and quality, delivery date, performance, stability and price elasticity are further inspected in these criteria. AK-Kim who does not pay attention only to the education of its own personnel but also to the development of its suppliers. To this end, it also trains its suppliers. The suppliers who are experts in the fields of finance and

operation are preferred to work with provided that they are reliable and hold the required certificates to conduct their business.

Purchasing department supports the strategy regarding EBITDA directly by doing its best to procure the materials in need for the best prices possible, helps the planning department in order to enable them to make correct stock planning during the supply chain management.

AK-Kim, for logistics as the last chain of the supply chain management, has set up a way of doing its business with the principles of on time and error-free delivery, cost-efficiency, sustainability, consistency and flexibility. They are in charge of circulation of the goods, services and information efficiently, securely and in line with the legislation between production and consumption points in order to attain the customer satisfaction.

Ak-Kim gave acceleration digitalization and innovation works in 2016 and 2017.

Digitalization

In 2016;

A digital solution was implemented which provides the coordination of the activities of the people involved in the studies starting from the idea stage and the effective management of the resources used in the in the R & D and Digital Processes, R & D and Investment processes in which all relevant departments can enter data through a single platform. With the project, it is aimed to transform ideas into a fast and profitable product and to create institutional memory.

In 2017;

Ak-Kim with Ak-Kim Customer Relationships Management System, put into the practice by Ak-Kim in line with its 4th Generation Industrial Revolution Strategic Plans, Ak-Kim became more effective, more systematic, faster and easily led thanks to the digital channels starting from customers to R & D including Sales Processes and Functions, Customer & Customer Relationships Management, Order Management and Case Management.

Another project is Ak-Kim E-Transformation in Settlement; thanks to this platform, settlement processes of customers/ suppliers which can not be traced via phones, e-mails and fax are transferred to digital platforms.

Innovation

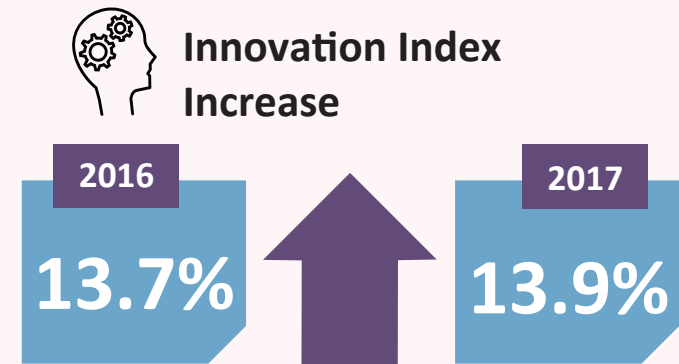
In achieving the mission and vision of the company, and in realizing the strategic goals, the innovation was determined as a priority corporate value and competence for Ak-Kim. Innovation is an important element in Human Resources policies and strategies.

Ak-Kim aims to transform the corporate culture into a structure that adopts and supports innovation, and to create an environment for the production of new products and processes with an innovation project initiated in 2016. Ak-Kim, aiming to create a common language for innovation through the innovation project, encourages its employees to believe, adopt, contribute and wait patiently for innovation in order to create value and achieve company goals.

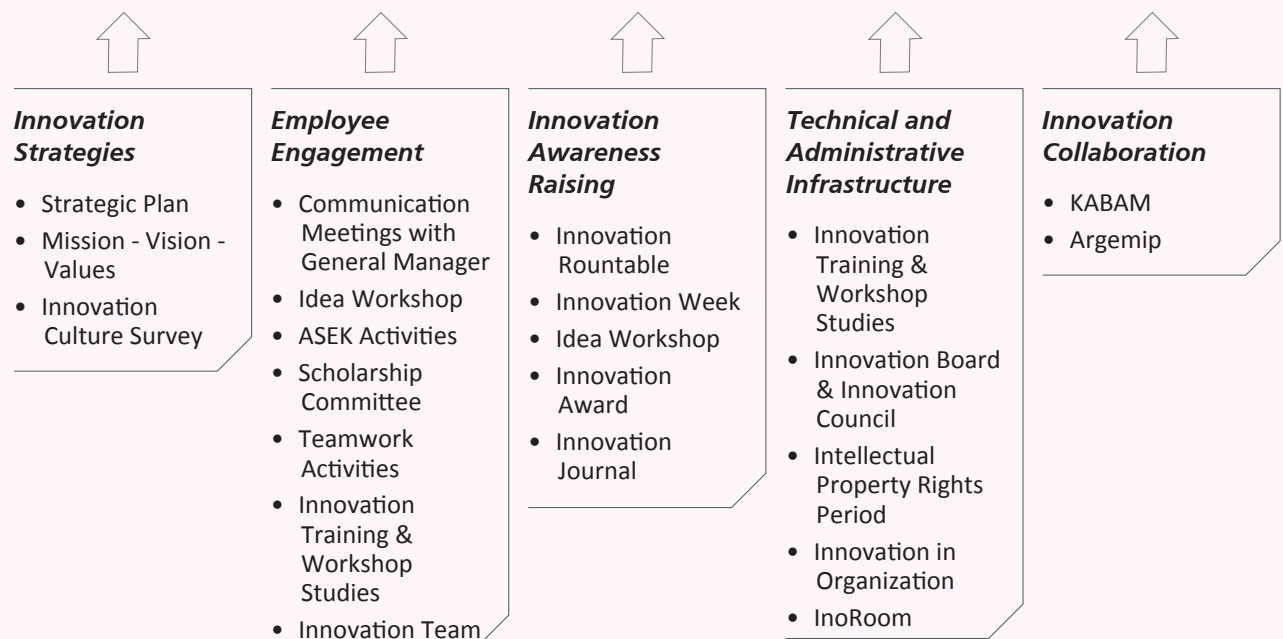
The Ak-Kim Innovation Culture Project encompasses efforts to raise awareness concerning the values that constitute the basis for the culture of innovation, to encourage participation and to implement the relevant action plan for the creation of a climate that will stimulate innovation. With this project, new product revenues, earnings from incentives, the sum of revenues collected from innovation projects and increasing the profitability of the company are aimed. In order to increase the innovation competence of the employees and thus the innovation competence of the organization, employees' participation in the ideas, suggestions and projects were ensured, and the communication between the company and the team increased, internal and external communication were increased and finally the road which leads to the added value products was opened. The relationship between the Project activities and the Innovation Culture Model is shown in the diagram below.

More revenue was achieved with fewer new products thanks to the development of new value-added products in 2017. In addition, there has been a continuous increase in the innovation index since 2014.

The innovation week, in which voluntary employees came together and formed the concept, was first realized in 2016. Ak-Kim, which believes in the power of innovative thinking, celebrates the innovation week in activities held in each October by making it a tradition.



Innovation Culture in Ak-Kim



Compliance with International and Local Regulations

REACH (Registration, Evaluation, Authorization and Restriction of Chemicals)

With its subsidiary, Dincox Handels GmbH, Ak-Kim completed registration and authorisation procedures of all Ak-Kim products exported to Europe according to REACH.

Authorized Economic Operator Certification

Ak-Kim's EU Distributor Dincox Handels GmbH has successfully obtained the AEO (Authorized Economic Operator) Certification in "F" status. With this certification, Dincox possesses the conditions required for the safety of the supply chain, starting from loading at the Ak-Kim's factory until delivery to the end-user and the following rights:

- Reliability
- Accountability and Traceability of Commercial Records
- Financial Competence
- Security and Safety Standards
- Material Safety Data Sheet
- Technical Data Sheet

Certificate of Approved Economic Operator implementation, which has facilitated Ak-Kim's import and export processes and made the company a trusted international merchant, shall cease in August 2017. We started the necessary procedures for obtaining the Certificate of Approved Economic Operator in 2016 which will be the substitute for the above mentioned certificate.

European Agreement Concerning the International Carriage of Dangerous Goods by Road

Within the scope of this Directive effective as of 2013, Ak-Kim:

- Obtained Hazardous Material Operation Certification in 2014. Has provided awareness trainings to employees on the Directive.
- Two employees were trained as hazardous material consultants and were certified as accordingly.
- Audits transporters to ensure that they fulfil the requirements of the Directive. (SRC5 inquiry, sign checks etc.)
- Continues efforts to systemize its existing practices for conformity with the Directive (integration software for alignment with the Directive, software for hazardous material transportation etc.).

Ak-Kim has adopted and since then has been implementing the rules of the

European Agreement concerning the International Carriage of Dangerous Goods by Road (known as ADR) as early as 1997, whereas many articles of the Directive started to be implemented in Turkey in 2014.

Ak-Kim has completed the studies on the integration of processes in compliance with the regulation; and continues improvement studies.

Since 2016, Ak-Kim has continued its research and development activities in order to make the transportation vehicles and equipment transporting their products safer on the roads.

Ak-Kim follows national and international standards for many years and completes all the necessary certifications and documents for its facilities and products. In this context, Ak-Kim has GMP-Good Manufacturing Practice Certificate, product-based Halal and Kosher certificates, TSE, CE, Biocidal permits.



KOSHER
CERTIFICATION



Customer Satisfaction

Always attaching great importance to customer satisfaction, Ak-Kim runs domestic and international customer satisfaction surveys biennially. With this survey, customers' opinions on issues such as corporate image, products and production, pricing and payment terms, quality of logistics, quality and competence of technical support, and quality of sales and marketing are obtained.

Ak-Kim considers every complaint that it handles in the Customer Relations Management process as an opportunity for continuous development. In parallel with this principle, Ak-Kim is always committed to improving business processes in a way that meets customers' expectations to avoid recurring complaints and developing services to meet these expectations.

In Ak-Kim, Customer Services Department Management is responsible for receiving oral and written complaints through

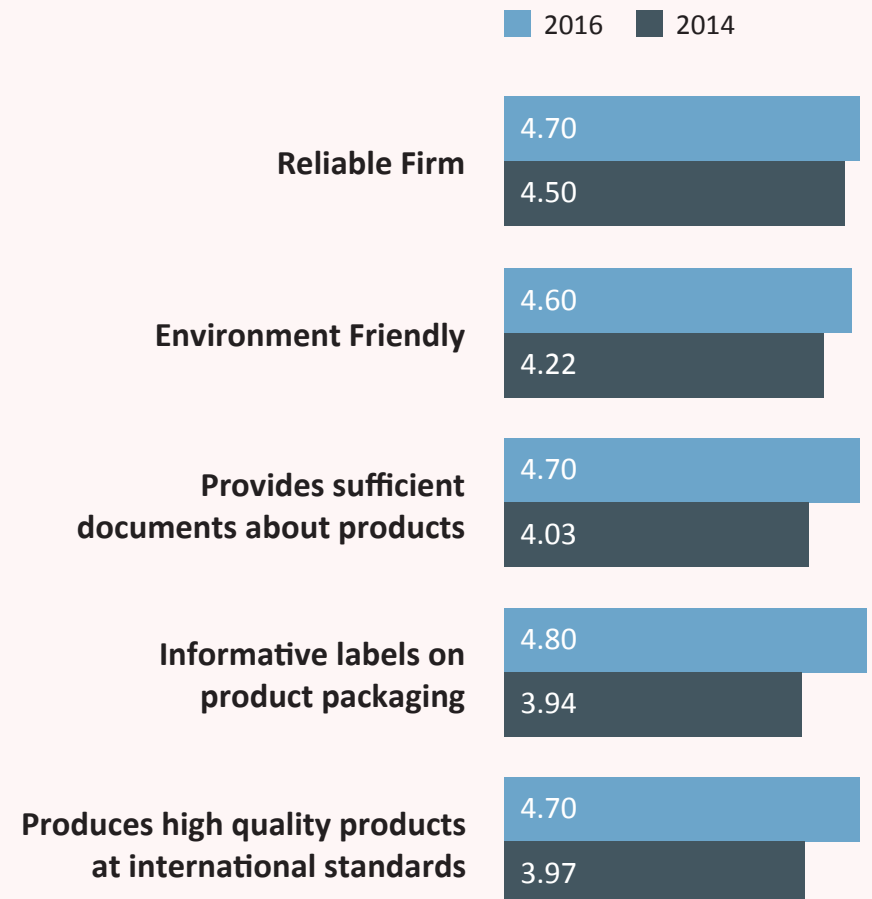
related channels and informing the related parties that the complaint is being assessed by Ak-Kim. All complaints and other feedback are kept in records. According to the customer complaint evaluation process, once the complaint is received, the customer should be informed within 24 hours that the complaint is in process. Monthly written customer complaint reports are shared with the management and related departments. On the other hand, complaints and response times are evaluated at monthly quality meetings. In addition potential problems are identified to take actions.

Ak-Kim has not experienced any violation of customer confidentiality or loss of customer data, nor has it received any complaints regarding this issue.

Some customer assessments regarding Ak-Kim's stand on a scale of 0-5 as taken from 2016 customer satisfaction survey are provided below.



Result of Ak-Kim Customer Satisfaction Surveys



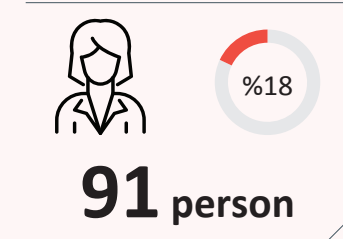
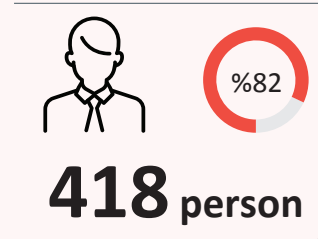
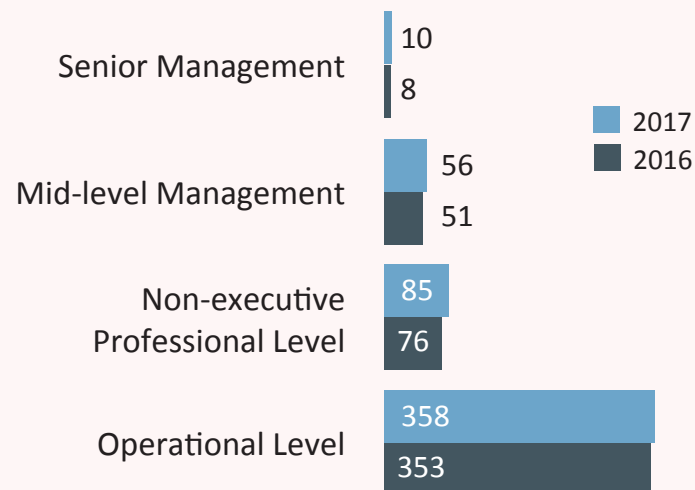
Business Life in Ak-Kim

By Location

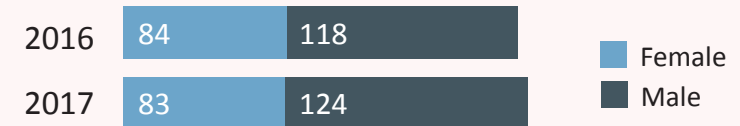


Employees (Person)	2016	2017
İstanbul	60	46
Yalova	425	441
Dilovası	-	14
Osmaniye	-	8
Çerkezköy	3	-
Total	488	509

By Management Category



Professional level



Operational level

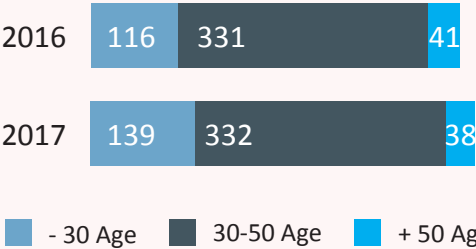


Female Employees in Management

	2016	2017
Senior Management	2%	2%
Mid-level Management	17%	16%
Non-executive Professional Level	41%	41%
Operational Level	40%	41%
Total	100%	100%

As of the end of 2017, the average age of employees in Ak-Kim was 36.5; the average of company seniority, which is an indicator of employee loyalty, was 8.33 years.

Age Distribution in Employee Profile



Employee Satisfaction and Engagement

Great Place To Work

“Great Place to Work” predicates a trusted work environment where our employees can reliably be engaged and get attached to, be proud of their workplace and the job they perform and work in perfect harmony and cooperation with their colleagues. Providing us with opportunities which would carry our company forward, this survey is an independent and contemporary management tool, focusing on “Reliability”, “Respect”, “Justice”, “Pride”, “Team Spirit” dimensions of our current business life and taking the picture of our actual status in these areas.

In Ak-Kim, “Great Place to Work” was implemented at R&D Department as a tool for “Participative Management” in 2015 and applied as pilot scheme in R & D Directorate. It was run with all our employees in 2016. It has been planned to be applied biennially.



While the participation ratio was measured as 84% in employee satisfaction survey conducted in 2016, company reputation and working conditions, environment, occupational health and safety and the meaning of the work performed were determined as the most 3 successful practises in which Ak-Kim operated.



Working Standards and Human Rights

Ak-Kim bestows rights to its employees beyond the limits required by the laws and international standards. We closely monitor legal regulations and inform our employees on changes in laws practices concerning them. Ak-Kim adopts the fundamental principle of creating a working environment that encourages cooperation, requires mutual respect, avoids harassment and non-professional behaviours, and offers equal opportunities to employees. Each employee is responsible against associates and the company for preventing such behaviors and incidents.

At Ak-Kim, there are ethical policies in order to ensure that employees can work in a peaceful and environment with mutual respect free from non-professional behaviours in their work environment. Our employees, who cannot find a solution to their problems through open communication channels, have the chance to reach the company's ethical representative at any time and to use the search channels of the ethical line. In addition, our employees can share their opinions, suggestions, complaints and thoughts without specifying their names through the contact boxes placed in certain areas of the company. "Akkök

Ethics Line" was established for employees who do not prefer open communication method. In addition, in order to increase the awareness of ethics, the ethical mail is shared with the employees every month, and for our computer user employees, some questions automatically remind and adopt the ethical behaviour examples for employees. Additionally, the Ethics Board was established and commissioned in order to evaluate and conclude the complaints received.

Employees are notified of significant operational changes that might affect them by taking legal notification and notice periods into consideration before implementation. At Akkök Holding, operational decisions are implemented in accordance with the Personnel Directives prepared on the basis of the Labor Code and related regulations. The reasonable notice stated by the laws is performed within the manner and time given in the Personnel Directives. Significant changes such as salary change, workplace change, secondment, substitution, additional duty, temporary business relationships are declared in writing by the Human Resources Department and employees accept the receipt of these notifications.

Responsibilities and job descriptions of new employees are clearly defined. In case of changes in duties and responsibilities, the

employee is notified in writing and approval is obtained. All practices such as changing roles and rotations are implemented by the Directorate of Human Resources and Management Systems. There is no forced-labor practice at Ak-Kim and there are no related risks.

Anayasa'nın 51. Article 51 Paragraph C of the Constitution provides all employees with the right to establish trade unions. At Ak-Kim, there is full compliance with related laws and regulations and employees are fully involved in company practices and process and their opinions and suggestions are taken into consideration.

In addition to monthly wages, Ak-Kim offers benefits such as free transportation, lunch, four bonuses per year, private health insurance, advance payments for health, housing and education, and social aids (marriage, children, birth/death, fuel, food and clothing aids) as well as vehicles and mobile phones for senior executives in order to improve employee loyalty and productivity. Limited time (temporary) employees also benefit from the wages, meals, shuttle bus and workplace healthcare unit services but are not qualified for benefits paid in cash and personal health insurance provided to full time employees.

Parental Leave

Female (Number of Person)	2016	2017
Total number of employees granted parental leave	5	2
Total number of employees returning to work after the end of parental leave	5	2



We use contemporary assessment methods supporting objective decision making in the recruitment and hiring process and act in line with “Right Person for the Right Job” principle.

Equal Opportunities

Ak-Kim does not make any discrimination between candidates based on their language, race, gender, political view, belief, religion, or sect and provide them equal opportunities in exercising the recruitment, career planning, training, development etc. processes.

At recruitment and hiring stage, we try to engage with candidates possessing the education, knowledge, talents, competence, and experience required by the relevant job, compatible for our corporate culture and values and capable of carrying us to the future.

We use contemporary assessment methods supporting objective decision making in the recruitment and hiring process and act in line with “Right Person for the Right Job” principle. Human resource planning is done by taking Ak-Kim’s strategic plans and medium and long-term targets into consideration.

In addition, employees have private health insurance. Recruitment and placement process is performed by the Directorate of Human Resources and Management Systems. Candidates below the age of 18 are not invited for interviews. Ak-Kim’s contractors are required to avoid child labour as well. It is an essential ethical value for Ak-Kim to work with suppliers and subcontractors that refrain from violating human rights such as forced or child labour.

All vacancies are announced within the company and as a company policy, competent candidates recommended by employees are included in the recruitment process. Ak-Kim prefers candidates residing within the vicinity of the company’s location for filling the open job positions.

Ak-Kim applies the Hay Group Wage Management System in order to maintain competitive wage levels of employees, to give the same wages for identical positions in the market, and to be fair in wages. The company pays attention to making payments on time and avoiding any unrecorded payments. None of the employees throughout the company is paid below the minimum wage.

Ak-Kim has the salary average which is higher than the minimum wage determined by the state with cash and kind benefits. Wages do not vary depending on the gender of the employee.





Internship and Scholarship Opportunities in Ak-Kim

We offer intern positions to university students during summer time and high school students during winter time. Ak-Kim serves various industry groups due to its extensive product portfolio, including textile, metal, food, cleaning, water treatment, pulp & paper, pharmaceutical and construction industries, which is an excellent opportunity for these students to gain experience on many different fields. Students are given a chance to be interns in departments they selected during their applications and can find many processes from production to quality control, engineering and sales under the same roof. Thus, they can personally observe the working environment and the tasks performed in the fields where they would like to have their career development. This opportunity offered in drawing their career lines is a significant advantage for them. Interns are mainly selected among students from departments of target universities including particularly Chemical Engineering and Chemistry as well as Mechanical, Electrical, Electronic, Industrial, Environmental Engineering departments; and also from Economic and Administrative Sciences Department.

Human Resources and Management Systems Directorate participates in Career Fairs held by universities every year to prepare talented students for business life, to determine potential nominees who may work in Ak-Kim in the future and makes presentation to prepare students for business life.

As of 2018, Ak-Kim plans to prepare new graduates, who may enter into business life with the incentive of Turkish Employment Agency, for the business life with its on-the-job training program. Thanks to this program, new graduates determined in collaboration with the Turkish Employment Agency will have the right to receive on-the-job training for 3 months at Ak-Kim.

Ak-Kim Scholarship Program was established to contribute to the education of successful university students who had difficulty in living due to economic setbacks with the support of volunteers employees in 1996 within the scope of corporate citizenship approach. In 2016-2017, scholarship opportunity is provided to 38 students.

Career Planning and Talent Management



With Career Planning and Talent Management, Ak-Kim aims at determining the need for human resources capable of carrying the company to the future, determining at early stages the potential Group/Company employees which could meet these needs and providing them with the required professional know-how, skills and development opportunities. To this end, integral and systematic implementations at Group level coordinated by Akkök Group are in place, such as Assessment Centre, Leadership Potential Inventory, Personality Inventory, and 360 Degree Evaluation etc. Personal Development Plans are created for the relevant employees at the end of the above mentioned implementations and realization of these plans is monitored.

As of 2018, Ak-Kim will implement Ak-Kim Campus Project to develop first level managers both professionally and behaviourally. With this project, it is aimed to increase the technical competencies of the employees at the operational level. In addition, it is planned to perform the necessary trainings by measuring the behavioural competencies of potential first level manager candidates and identifying the points open to development by working with Formen Assessment Centre application.

Career Planning and Talent Management process helps us effectively provide back-ups for critical positions in Companies/ Group and ensure a sustainable performance.

Performance Management System

With the aim of improving efficiency and achieving continuous development, Ak-Kim applies a Performance Management System that effectively and objectively evaluates individual and team targets in a way that is integrated with the department, directorate and company goals. Performance Management System was cascaded throughout the company in 2013 and employee performance is evaluated regarding:

- Operational Level – Production Tonnage and Efficiency Target
- Other Positions – Company Targets or Individual Targets

üzerinden değerlendirilmektedir.

Results achieved through annual evaluation of individual targets and quarterly evaluation of sales and team targets with the Performance Management System form inputs for variable income system, bonus system, training and development, and career planning and talent management processes.

As of 2016, Ak-Kim launched the Target Based Super Sale Premium Program to reward the performances of the employees in the Sales Team.

Ak-Kim attaches importance to rotation and promotion/assignment to various functions and employees are given priority in new positions/vacancies.

In the reporting period, promotions and job rotations of 96 employees were carried out.

While the individual target card was 84.4% in 2017, and this value reached 100% as of the end of 2017.

Occupational Health and Safety

As Ak-Kim Kimya Sanayi A.S. Our fundamental priority is to take necessary precautions in order to remove health and safety risks or to minimize these risks for our employees and our stakeholders. Ak-Kim is developing its OHS performance day by day thanks to the practices such as performance measurement, training, drills, field controls, ROTA (Behaviour Oriented Occupational Safety Project) accordingly. With ROTA, it is aimed to improve behaviour oriented organizational culture, to increase safe behaviours, to reduce risky behaviours. The project covers all processes related to all activities and services starting from the primary process of Ak-Kim. The performance of the project is monitored regularly each month.

Ak-Kim continually conducts improvement works in order to remove all kinds of risks such as illness, wounding, the fire which threatens the safety of life and property and collaborates with all employees in this process. Also, Ak-Kim is conscious of that accidents and losses may only be prevented by the management approach and direct and joint responsibility of the employees. Thanks to this awareness, production and support departments carry out activities, design and operations of all facilities and equipment within the framework of policy. In addition, employees show the utmost effort and diligence to comply with existing occupational safety rules and processes.

Within the scope of ROTA (Behaviour oriented occupational safety project) Action Planning meetings are held every three months, a dangerous behaviour group is selected and various actions are taken in order to take precautions and raise awareness about the selected behaviour.

Employees who are exemplary in terms of Occupational Health and Safety are rewarded every month in order to increase the sensitivity of the personnel on Occupational Health and Safety; 24 personnel were rewarded Cumhuriyet gold together with the thank-you note in 2016 and 2017. In addition, “Model OHS Team” is selected among the units every three months.

In 2016 and 2017, a total of 26 emergency drills were performed mainly in cases such as fire, gas leakage and evacuation in Ak-Kim. In addition, “within an inch of accident incidents” which are determined by all employees are conveyed to the Occupational Health and Safety Unit and corrective and preventive activities are carried out annually by the related unit.

With the implementation of the Subcontractor Management System, which was developed in order to monitor subcontractors’ compliance with the company rules, legal regulations and the performance of the business, safer working environments were provided. Monthly meetings were organized to increase awareness of health, safety and environmental issues to ensure not only the safety of subcontractors but also the employees.

Automation systems and activities to reduce the risk of exposure to chemicals are carried out by following the international practices in the sector and by utilizing technological developments, periodic inspections and chemical exposure assessments carried out by the workplace health unit for the protection of employee health and preventive and protective services are provided.

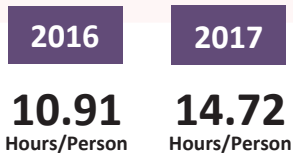


OHS Training Statistics

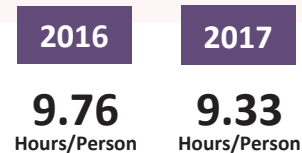
OHS Training	Unit	All Employees		Female Employees		Male Employees	
		2016	2017	2016	2017	2016	2017
Total Provided OHS Trainings	Hours	4724	6286	928	774	3796	5512
Persons received OHS Trainings	Persons	433	427	95	83	338	344

Average OHS training hours per person

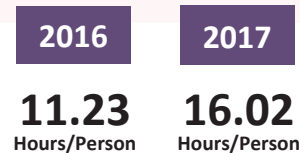
All Employees



Female Employees



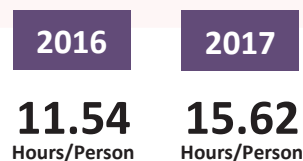
Male Employees



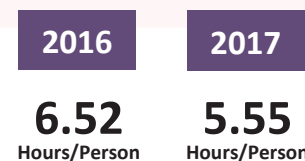
OHS Training	Unit	Yalova Workers		Istanbul Workers	
		2016	2017	2016	2017
Total Provided OHS Trainings	Hours	4372	6075	352	211
Persons received OHS Trainings	Persons	379	389	54	38

Average OHS training hours per person

Yalova Workers



Istanbul Workers



OHS Accident and Lost Days Statistics

All injuries except first aid level (per year)



Accidents requiring medical report (per year)



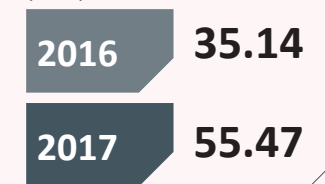
Accidents involving death (per year)



Accident frequency (rate)



Accident Severity (rate)



Lost Days

	Unit	2016	2017
Lost days due to workplace accidents	Day/Year	40	62
The frequency of occupational diseases	Per year	0	0
Absenteeism/due to health issues	Day/Year	3195	2062

Emergency Management

Emergency means collapse, breakdown, explosion, cleavage, split, fire and chemical leakage that may cause loss of life and property and that may result from natural disasters (earthquake, flood, storm, etc.), actions such as sabotage and attack, system and/or human errors, or any incident outside Ak-Kim.

Emergency actions are taken to return to normal operations by troubleshooting in case of collapse, breakdown, cleavage, split, explosion, storm, abnormal climate change, fire and chemical leakage. These actions may include emergency alarm-evacuation, firefighting, fighting dangerous gas leakages, combating flood, controlling chemical spills and leakages, measures taken before and after earthquakes, rescue and technical repair activities, first aid, social services, etc.

Ak-Kim's General Manager is also the Emergency Director of the Company. He is responsible for managing the emergency. In his absence, Production Director shall be responsible. In the absence of Production Director, Human Resources and Management Systems Director manages the emergency. Emergency Director assigned for Çerkezköy Plant is the Plant Manager and Financial Affairs Director for the Head Office.

At the beginning of 2016 and 2017, a total of 22 emergency drills were performed primarily in cases such as fire, gas leakage and evacuation in Ak-Kim. Employees working in emergency response team were sent for training in Kocaeli Metropolitan Municipality Fire Station Training Centre (KOBITEM).



Trainings



Ak-Kim aims to invest in people and encourage personal improvement by adopting practices based on continuous development in line with corporate strategies and targets. While preparing the annual training plan, training needs of employees are identified and these trainings are given throughout the year in accordance with the plan.

Professional and personal development of our employees is essential for us. Our directorates determine the training need each year to create a training plan according to which we ensure technical and skills development of our employees.

Training needs of employees are taken into consideration while preparing training plans. When any training requests are received from employees or managers of the employees, they are evaluated and employees are offered an unscheduled training apart from the scheduled training plan.

During preparation of this training plan, we mainly focus on the requests received from employees and we believe that this, together with our "Right Person for the Right Job" approach, provides motivation and ensures job satisfaction.



21,658 hours

While the total training period, which was 20,024 hours in 2016, was increased to 21,658 hours in 2017.

2016 Trainings

In 2016, a total of 20.024 hours of training was organized for employees, including internal and external trainings, by taking into account the training plan.

In 2016, the Company organized 6 Sigma Trainings with 7 groups in order to define, measure, ensure perfection and increase efficiency in the processes of Ak-Kim operations. In addition, "7 Splurge Training" was organized in order to eliminate the operations that do not add value to the production area of Ak-Kim.

A total of 114 employees received various trainings to improve their behavioural and managerial skills within the scope of Executive Development Programs.

Optimum Balance Model Training, initiated in 2013 for Company Managers and aimed to enable the employees to comprehend their own job identities and the work environment they are in, to change their habits, and to understand other peers and colleagues they meet throughout their business lives, was continued in 2016.

In addition to these, a total of 4,800 hours of training was provided to increase the awareness of the employees about occupational health and safety except for compulsory and legal training based on the value Ak-Kim has given to occupational health and safety.

Training Investments (hours)

	2016	2017
Technical trainings	14,705	18,267
Soft Skills Training	5,319	3,391

2017 Trainings

In 2017, a total of 21,658 hours of training was organized for employees, including internal and external trainings, by taking into account the training plan.

In 2017, many trainings were organized to improve the behavioural, managerial and professional skills of employees, as in 2016.

Some of the career and personal development trainings provided to employees in 2017 are as:

- CIPS Purchasing Certificate Program (All Supply Chain Management Employees)
- Market Orientation Training
- Entrepreneurship and Innovation
- Leadership in the Speed of Trust
- Training of Trainers
- Problem Solution Techniques
- Strategic Management
- Leadership & Coaching for High Performance Teams
- Multi Dimensional Leadership

Additionally, we support career and personal developments of our employees attending college for Master's and/or PhD degree by giving them paid leave for 1 day per week during their academic terms.

Employee Communication

Aiming to create open and transparent communication with all stakeholders, Ak-Kim launched the Open Door Policy in 1999 to ensure that employees can easily reach their managers about every issue. Ak-Kim transformed this policy into a corporate social responsibility project and opened its facilities to official institutions and organizations as well as students -from primary school to college- that would like to visit the company and get information. Numerous visitors were accepted to Ak-Kim facilities during 2016 and 2017 within the scope of our Open Door Policy.

Furthermore, we organise “Dialog with General Manager” once every three months meetings where employees discuss working conditions with a high level of transparency and also various other events. In addition to the preceding, a cocktail was started to be arranged every 6 months for new hires with the participation of the General Manager and the new hires’ managers.

Events gathering management and employees together and contributing to their amalgamation are organized by Ak-Kim Social Activities Club (ASEK). Such events include travels and trips, theater, meal organizations with the purpose of enhancing intradepartmental communication, picnics and New Year party and dinner for the retired organized each year for our retired employees.

Ak-Kim Portal containing information on employee birthdays, weddings, having new-borns, new employees, resigns, announcements, and useful links, etc. not only allows employees to have easy access to information, but also contributes to a higher level of internal communication within the company.



Ak-Kim Employee Rewards

Seniority Plate: Employees having served for 5 years and multiples of 5 years (5, 10, 15 etc. years) are rewarded with a seniority plate to show appreciation for their long service and work in Ak-Kim.

Retirement Plate: Employees leaving Ak-Kim by retirement after serving the company for long years are awarded a retirement plate to show appreciation for their long service and work.

Idea Factory Award: Employees select gifts from Ak-Kim Gift Catalogue by earning points as a result of their suggestions.

Invention Award: This is for rewarding employees developing ideas for a product and/or method with specific technical features for the solution of a specific technological problem.



Success Award: This is for rewarding employees contributing to Ebitda, increasing customer and/or employee satisfaction, raising company reputation, contributing to organizational values, ethical values and corporate culture and contributing to successes creating difference at a level worth of rewarding.

Instant Rewarding: This is for rewarding and appreciation of any behaviour, practice, a task completed, activity, suggestion (not entered in Suggestion System) etc. setting an example for other employees and not covered in other employee rewarding categories.

Ak-Kim Innovation Award: The company will create new markets and new technologies in line with its vision, mission and values and strategic targets, it includes all kinds of creative ideas that can be transformed into potential new products, with new features to be added to the existing products (new areas of use and new markets), value to be created in the system, products and processes, and to provide profitability to the institution.

Model OHS Employee: Each month, employee who meets the selection criteria in line with the opinion of workplace physician and approval of OHS Board are rewarded.

Model OHS Team: Model OHS Team is selected quarterly in case there is a group meeting the selection criteria. OHS Board

selects this Team in consideration of the following criteria:

- The team continuously and strictly follows the group's OHS rules within the worksite they are responsible for and sets an example to other employees and groups with their work,
- The team ensures other employees working at the site in their responsibility area continuously and strictly observe the OHS rules, no team member receives any warnings and/or have an occupational accident within the year,
- Team members contribute to the reporting of unsafe situations, conditions and acts,
- The team makes improvements to create a safe working environment at the site in their responsibility area,
- Team observes the hygiene rules and ensures that the common areas within worksite in their responsibility area are kept clean and in good order.

The group, meeting the selection criteria within the site for which they are responsible, are selected quarterly by Occupational Health & Safety Board.

Idea Factory

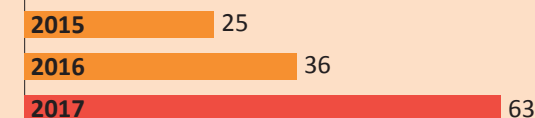
The "Idea Factory" covering all creative ideas and opinions of employees on issues such as facilitating/accelerating work performance, increasing capacity, improving efficiency (savings and cost reduction), reducing environmental impact, increasing customer satisfaction, and contributing to the vision, mission and values of the company was carried out in 2015. The system, which is based on gaining points from the suggestions realized and the choice of gifts with the points accumulated, provides value to the business processes with the participation of the employees.

In 2017, Idea Factory switched to electronic flow concerning employees' access and effective functioning of the process. The benefits of this improvement are;

- Improvement of employee suggestions,
- Improvement in the evaluation of suggestion, the realization of suggestions and suggestion feedbacks,
- Detailed monitoring of all recommendations by employees
- Convenience concerning monitoring suggestions.

Out of 158 suggestions received, 62 were put into practice in 2017.

Number of Suggestions Put into Practice by Years



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