



**Sustainability**  
Is Our Chemistry



2018-2019 SUSTAINABILITY REPORT

**Akkim**

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## ABOUT THE REPORT

This report is the 7th Communication of Progress and 5th Sustainability Report prepared 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.

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, 2018 and December 31st, 2019, at company's Headquarter in Istanbul, at the production facilities located in Yalova and at the operations conducted in Dilovası and Osmaniye. In addition, DINOX and GIZEMFRIT good practices incorporated through an inorganic growth in the previous period are also included in the report. This report excludes sub-contractors for logistics and subcontractors from which we receive support services at production sites.

Reporting frequency is biennial. Our next report will be issued in 2022, covering the sustainability performance in 2020 & 2021.

## INTERVIEW: ONUR KİPRI GENERAL MANAGER



period we are passing through. On the other hand, our goal is to attain organic growth by using our production capacity effectively in addition to our studies on product groups. One of our priority goals is to obtain growth in exportation through new products with high added values as a result of R&D studies. If we are to deliberate on subjects in this period, excellence in Occupational Health and Safety, digitalization in processes, risks on climate change and sustainability are of critical importance. These subjects and our goals towards these subjects will continue to play an effective role in the development of our company.

### What are your short-mid and long-term sustainability goals?

**Onur Kipri:** Sustainability is one of the issues we attach importance to as a company. We evaluated and reviewed our sustainability goals in line with the United Nations Sustainable Development Goals. At Ak-Kim, we have a roadmap that identifies how we did and how we shall give support to these goals. If I need to give an example to our targets that we prioritize in this period; To create our product index living in economic growth, to calculate our environmental water footprint, and to work to develop a social-based OHS culture. We consider these short, mid- and long-term goals as a crucial part of our strategy and we own them as the management.

### What are your general evaluations for the reporting period?

**Onur Kipri:** It was a period dominated by different dynamics and uncertainties. During this period, we experienced negative trade balance, decreasing demands and commodity prices that reach record levels. A crucial inertia took root in the world, especially in Europe. This uncertainty felt in every field impacted the world of business significantly. Despite this uncertainty, Ak-Kim has preserved its market share and profitability as of the end of 2019 thanks to the good results it achieved.

### As Ak-Kim, what are your targets for the upcoming period?

**Onur Kipri:** Among our plans, inorganic growth is our priority goal in the strategic

### What is the role of your stakeholders in regard to sustainability management and related applications?

**Onur Kipri:** We evaluate the expectations and satisfaction of our stakeholders, which are an important part of our way of doing business, in line with our goals and include them in our activities. We are aware that the more we can understand our stakeholders' expectations and are open to receiving their thoughts and suggestions, the more we can improve our sustainability activities. Our committees, which direct both policy development and setting targets in our sustainability efforts, are composed of our volunteer support employees. These high value-added works nourish our corporate culture and create a great synergy among all employees. On the other hand, our attempts to become the system partner of Bluesign, the authority of the textile industry, is an indicator of our stakeholder responsibility. We will continue our efforts in 2020 to register the sustainability and safe use of our products.

### What are the risks and opportunities climate change bring in regard to Ak-Kim activities?

**Onur Kipri:** We all have crucial responsibilities in combating climate change. In this total struggle, as Ak-Kim, we have a responsibility; We carry out our activities in the planning and implementation stages of the facility / product design process, ensuring both energy efficiency and low carbon emission

formation. In this context, our energy efficiency projects have an important share in our investment budget for many years. In order to prevent the drought risk, which is another important topic in this issue; desalination facility was established within the organized industrial zone, where our group is located. Also, we provide added value for our customers by ensuring less amount of use of natural resources through the environmentally friendly products we produce.

### Digitalization at business processes is a subject that is globally at the forefront, as you mentioned. Will you briefly talk about the practices you perform at Ak-Kim?

**Onur Kipri:** Digitalization is a crucial aspect that shapes the modern way of doing business and at the same time, it opens up too many innovations. Adaptation to digitalization brings in innovative products and services. We believe that digitalization will create significant opportunities for Ak-Kim. We perform prominently in our sector thanks to the crucial steps we take towards digitalization. Following the integration of digitalization into business processes, we achieve efficiency increase in all processes from innovation to investment, production to distribution.

With the Digital Transformation project in our R&D Processes, we applied a digital solution in which all departments enter data using a single platform in R&D and investment processes.

Thanks to this, we achieved a fast transformation of ideas into products and created a corporate memory. With Ak-Kim Customer Relations Management System, sales processes and processes such as order management and case management become more effective, faster, more systematic and easily manageable via digital channels.

We obtained transparency by carrying customer/supplier agreement processes to the digital platform with Ak-Kim e-transformation in Agreements project that we actualized in the reporting period. Again, we significantly improved our efficiency with the projects we initiated in this period including BIGDATA ABIS Project, DINOX Oracle Pass, e-transformation in printing receipts and e-payroll project.

**What are the contributions of Sustainability Reporting to Ak-Kim corporate culture?**

**Onur Kipri:** Reporting is qualified as a corporate memory we carried out in sustainability. We see our reports as the most transparent communication tool that we reflect our performance and our values, which are an integral part of the corporate culture. We prepare our reports in accordance with international standards and use them to identify both our strengths and issues with potential for improvement. We are decisive in using our sustainability report actively and to advance the performance we achieve further every period.



**What is the value you create in your stakeholders through this sustainability management?**

**Onur Kipri:** We prove the value and performance we created through our applications in environment, economy and social areas by passing from the evaluations of several platforms with international recognition and by obtaining better grades compared to that of the fellows in our sector. EcoVadis, Together for Sustainability and Bluesign are examples of this. The most critical subject in the developmental growth of the chemistry sector in Turkey is the failure to develop effective policies in platforms where actors of the sector get together.

“Sustainability projects and applications not only guarantee the future of the companies, but also impacts performance positively. I believe that the contribution

of new job opportunities that will be created by paying importance to sustainability with an aim to make the company work more effectively and actively is very crucial. While our future is taken under guarantee,

it is for sure that we will create values for our stakeholders thanks to these job opportunities. In this context, the duty of the companies is to identify business goals and indicators for these goals and to carry their performance further. At this point, United Nations Global Development Tools are crucial directives for our companies. Ak-Kim is a model company both for its sector and for our country thanks to the goals it identified based on these tools and the results it achieves.”

**Ahmet Cemal Dördüncü**  
**Akkök Holding Chief Executive Officer**  
**and Board Chairman of UN Global Compact Turkey**



## ABOUT AK-KİM

Ak-Kim, being the leader chemicals producer of Turkey, established in Yalova in 1977, has gradually broadened its production activities for 42 years. Ak-Kim is a global chemical company serving customers in six continents with its broad product portfolio including chlor-alkali and derivatives, peroxides, methylamines, persulphates, 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, 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 DINOX Handels GmbH, 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 about 1,000 employees, producing in 6 different locations with a structure offering various products for different sectors.

To watch Ak-Kim corporate video, please [click here](#).

### ABOUT AKKÖK HOLDING

Founded in 1952 by dear departed Raif Dinçök, 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. Ak-Kim Holding closely monitors overseas markets in the sectors participated in and aims to achieve global competition conditions and reach world standards with all of its companies.

## MISSION, VISION, VALUES AND KEY QUALIFICATIONS

### OUR MISSION

We add value to life with chemistry.

### OUR VISION

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

### VALUES

- » Innovation » Code Of Ethics » Team Spirit
- » Respect For People
- » Sustainability

## MILESTONES

### OUR VALUES

We develop new products, services and processes with different and new ideas that provide added value by questioning the present in all processes of our business. We evaluate and encourage innovation as a natural part of our business life.

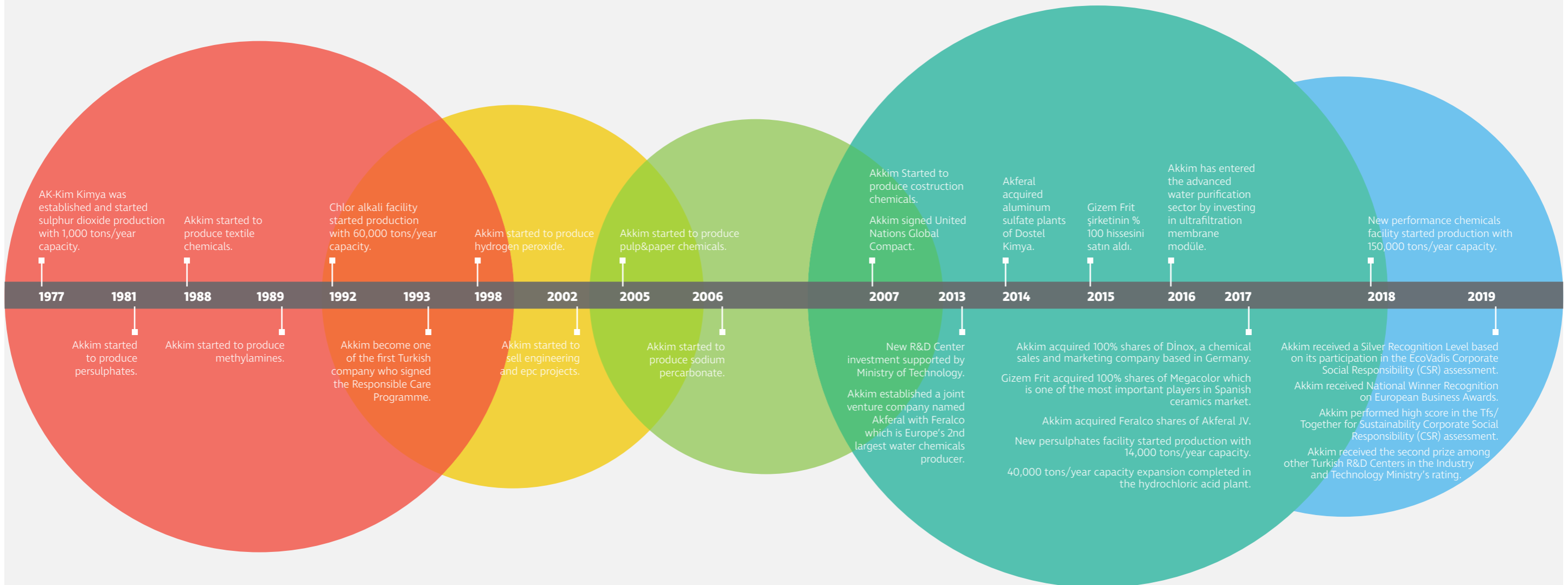
We consider the effects of our business decisions on our employees. We respect the rights of our employees to learn, develop, acquire information, express themselves and work in the proper environment without any discrimination.

In all relations with stakeholders, in our decisions and actions; We act with responsibility, honesty, trust, equality, confidentiality and compliance with the law.

We care about us, not me. We overcome difficulties by supporting each other, we achieve and celebrate success together.

We respect life and the environment in all our business processes. We do not compromise on "Quality and "Occupational Health and Safety".

For the values video, please [click here](#).



## VALUE WE CREATE THROUGH OUR PRODUCTS AND SERVICES

### BASIC CHEMICALS

» Sodium Bisulphite » Sodium Metabisulphite » Acetic Acid  
 » Dimethylamine Dimethylacetamide Dimethylformamide  
 Monomethylamine Trimethylamine » Ammonium Persulphate » Hydrogen Peroxide » Potassium Persulphate  
 » Sodium Percarbonate » Sodium Persulphate » Ferric III Chloride  
 » Hydrochloric Acid » Chlorine » Polyaluminium Chloride » Hydroxide (Liquid) » Sodium Hypochlorite » Trimethylamine Hydrochloride

### TEXTILE CHEMICALS

» Spinning And Conning Oils  
 » Dyeing Auxiliaries  
 » Dyeing & Printing Auxiliaries  
 » Washing Agents  
 » Finishing Agents  
 » Pretreatment Auxiliaries  
 » Softeners

### PAPER & WATER TREATMENT CHEMICALS

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

### WATER SOLUTIONS

» Ferric Iii Chloride  
 » Polyaluminium Chloride  
 » Aluminium Sulphate  
 » Ultrafiltration Membrans

### CONSTRUCTION CHEMICALS

» Shotcrete Admixtures  
 » Concrete Admixtures Polymers  
 » Asphalt Additives  
 » Cement Grinding Aids  
 » Water Based System Additives

### PLASTIC ADDITIVES

» ESBO (Epoxidized Soybean Oil)  
 » Sliders for PVC Industry  
 » Antifog



DESIGN	PRODUCTION	STORAGE AND SHIPPING	PURCHASING	CUSTOMERS AND DEALERS	END-USERS
<ul style="list-style-type: none"> <li>Innovation</li> <li>R&amp;D</li> <li>Environmental products</li> </ul>	<ul style="list-style-type: none"> <li>Production in integrated and global standards</li> <li>Project engineering</li> <li>Regulatory compliance</li> </ul>	<ul style="list-style-type: none"> <li>Risk management</li> <li>Legal compliance</li> <li>Shipment in accordance with ADR with ISO tanks</li> </ul>	<ul style="list-style-type: none"> <li>Contribution to the local economy with local procurement</li> <li>Alternative resources</li> <li>Environmental performance and working conditions assessment in supplier selection and evaluation</li> </ul>	<ul style="list-style-type: none"> <li>Active evaluation of customer feedbacks</li> <li>Product information through labeling compatible with International Standards</li> </ul>	<ul style="list-style-type: none"> <li>Products of high quality standards used as raw materials in over 40 uses</li> </ul>

ECONOMIC VALUE CREATED	TAX PAID TO THE STATE	TOTAL EMPLOYEES FEES
<b>IN 2018</b> <b>188,550,730</b> USD	<b>IN 2018</b> <b>7,984,245</b> USD	<b>IN 2018</b> <b>10,633,295</b> USD
<b>IN 2019</b> <b>177,711,820</b> USD	<b>IN 2019</b> <b>8,754,938</b> USD	<b>IN 2019</b> <b>11,124,248</b> USD

### IN THE REPORTING PERIOD 55 NEW PRODUCTS ADDED

	2015	2016	2017	2018	2019
Number of Employees	516	488	509	557	561
The share of exports in total sale volume (%)	18	19	21	22	22
Number of main product groups	30	29	30	27	28
Total Sales (tons)	394,685	395,277	414,818	479,107	496,059



## OUR INTERNATIONAL SALES NETWORK



## Ak-Kim AMONG THE BIGGEST 500

Ak-Kim raised its ranking at First Big ISO 500 list which is announced every year by Istanbul Chamber of Industry from 320 which was in 2017 to 266 in 2018.

Fortune 500 List which specifies the biggest 500 companies of Turkey is announced. 11<sup>th</sup> of the research is published in the July 2018 edition of Fortune Turkey magazine. Ak-Kim took its position in the list by ranking as the 422<sup>nd</sup>. In 2019, Ak-Kim jumped over 84 steps compared to the previous year and ranked 338<sup>th</sup>.

**FORTUNE  
500**



## Investments in the Reporting Period

- We changed the process technology of caustic evaporation unit to achieve capacity increase. The current capacity which is 50 tons/day increased to 100 tons/day (100% NaOH).
- We increased the capacity of the existing SPS (Sodium PerSulphate) facility. The capacity of 1,000 tons/year is increased to 2,400 tons/year through replenishment of technologies of critical equipment and the maintenance investments.
- The capacity of the existing APS (Ammonium PerSulphate) facility is increased. The existing capacity of 10,200 tons/year increased to 13,600 tons/year through the replenishment of technologies of critical equipment and the maintenance investments.
- "Exaquantum" platform in which all kinds of information regarding production steps under the name of the facility information management system can be kept and analyzed was established and put into use.
- Versions of all DCS systems within Ak-Kim are raised to the highest level of technology (from Windows XP to Windows 10) and are put into use.
- The energy monitoring system is established and put into use.
- "MOC (Management of Change)" system in which investment and maintenance activities performed within Ak-Kim are recorded is established and actualized.
- In regard to seismic security, actions regarding the strengthening of buildings that are getting old according to the legislations and their replenishment if necessary are initiated and continues as planned.
- Modernization and efficiency studies in facilities at Dilovası and Osmaniye continue.
- In regard to energy efficiency, all lighting armatures at Ak-Akim are changed to halve the consumption values.
- In regard to the environmental management system, modernization of rain and wastewater collection systems that are currently available is completed and put into use.
- An investment worth approximately 16,778,833 mio USD is done and put into use for the aim of increasing efficiency and capacities of Ak-Kim facilities, eliminating bottlenecks and obtaining process optimizations.
- At the end of 2018, we signed an EP contract with "SEE SEN" company to establish a PAC facility in Malaysia. Engineering and commissioning studies were completed in the same year and the facility was commissioned successfully.
- The engineering studies of the project which was initiated to double the capacity of Adwan Chlorine Alkali Facility in Algeria are completed and the equipment deliveries continue. The plan was to commission the project in 2020-2021.



Raiffeisen Investment is assigned for inorganic growth project which constitutes one of the main parts of Ak-Kim's global growth. A target company scanning was done in Europe and Asia for this purpose and over 100 companies were analyzed. We have completed the steps that may be considered as critical milestones such as questions & answers, on-site visits, manager presentations after passing to the next steps through targets that may create the rightest integrity, add pace with

growth and profitability profile and that may expand horizons with its new product range. During all these times, the project team dedicated to Ak-Kim and all financial and operational team, primarily General Manager Onur Kipri and Chief Financial Officer Taç Kılavuz Öktem. "As professionalism, transparency and sustainability run seamlessly at Ak-Kim, Raiffeisen Investment had the opportunity to work as if a part of the company and this directly and positively impacted its performance."

**Aydın Özol**  
Raiffeisen Investment Managing Director





# GOVERNANCE AT AK-KİM

Sustainability of our operations is possible with a strong governance structure. Thus, our governance structure that embodies transparency, accountability and modern governance principles is one of the key building blocks of our success. Our senior management established in accordance with the criteria specified in Turkish Commercial Code and the related legislation. Our board of directors consists of 1 executive and 1 independent member.

Our company has Investment Committee, Early Risk Mitigation Committee, Audit Committee, Ethics Board, KVKK (Personal Data Protection Authority) Committee, Rewarding Committee, OHS Committee and Sustainability Committee that report to the senior management.

The Board of Directors reviews the management of risks the committee established for risk management reports regarding economic, environmental and social aspects at every stage. Moreover, risks are evaluated in the board meetings and action plans are formed.

**RISK MANAGEMENT**

Risks are classified, scored and evaluated according to the impacts they may create in our company. As a result of the studies we conducted, we created action plans for high degree risks. Such risks are reviewed by "Early Risk Mitigation Committee" on a bimonthly basis and this committee submits the risks that are critical in the risk inventory and the precautions and actions taken regarding these risks.

During process management, risks are reviewed at all functions both regarding compliance to standards and legal compliance and meeting the requirements of customers in order to develop quality, environmental aspects, occupational health and safety and to detect the potential dangers and to provide energy efficiency and information safety. During these risk analyses, operational, reputation, stakeholder impact and strategic and compliance risks in addition to financial

risks are included in the risk inventory. Thus, aspects that are preliminary both for our strategy and for sustainability are evaluated according to the existing risk conditions and the necessary action plans and applications are carried out.

**BUSINESS ETHICS**

One of the leading directives for the continuity of Ak-Kim operations is the Business Ethics approach. We assure our employees for working in a peaceful environment that embraces mutual respect and that does not let any unprofessional attitude through Ethics Policy. Our employees who are not able to find any solutions to their problems using open communication channels can reach to the company's ethics representatives any time or call the ethics line. The ethics line is managed totally by an independent institution and the name of the person who reports remains unanimous. Individuals can share their opinions, suggestions, complaints and ideas without specifying their names



using communication boxes placed at certain regions of the company.

In order to increase awareness on ethics, we periodically share "ethics post" with employees. In this context, we remind our employees automatically at certain intervals about the exemplary codes of ethics and we share with them the questions that reinforce the subject

We evaluate and conclude the complaints of our employees by the Ethics Board. Ethics Board consists of at least 3 members. The assignment and exchanging of the Ethics Board is in the responsibility of Akkök Board of Directors. Akkök Human Resources Director, Akkök Law Director, Akkök Audit Director are the permanent members of the Ethics Board. Ethics Representative is included to the Ethics Board while company related issues are discussed.

Our employees receive ethics training to expand ethics culture and increase the level of awareness in related issues. An ethics booklet that describes the code

of ethics of our company to newly hired employees is delivered during the orientation process after signing. During the reporting period, our employees received a total of 197 person\*hour training, including 120 person\*hour in 2018, 77 person\*hour in 2019. In 2019, internal audits were conducted to evaluate notifications to the ethics line; 75% of those related with employees and 66% of those related with stakeholders were completed. Evaluations are ongoing.

**ANTI-CORRUPTION**

The internal control system of our company is the most crucial structure in anti-corruption. The internal control system, primarily increasing the activity and efficiency of our actions, ensuring reliability in financial reporting and compliance to laws and regulations, is audited by the Directorate of Internal Audit within the framework of the internal audit plan and the results of the audit are reported. The said annual internal audit plan is prepared with a risk-based approach, risks that are prominent in regard to corporate risk management are prioritized. The results of internal audit activities are reviewed with meetings organized during the year, and internal auditors, external auditors or other managers of the Company are consulted when necessary. Based on the annual audit plan, 6 audits each for 2018 and 2019 were conducted in the same year.

Our directives in anti-corruption and related applications are the Codes of Ethics. All employees received an ethics booklet and codes of ethics trainings. We declare that we work in loyalty to the codes of ethics every year regularly and any contradictory conditions, if any. We provide ethics trainings for new hires and those who do not receive this training before twice a year. Since 2014 when Ethics Principles were set, 630 different employees received 1,976 person\*hour of ethics training. In addition to Ak-Kim employees, 109 different supplier employees received 218 person\*hour training.

"Behind the investment decisions of a corporation, lies the economical values. At Ak-Kim, we pay importance to ethical values as much as we value economic aspects. Namely, we strive to do everything we do with passion, and meanwhile to be honest and act with awareness. Achievement lies in the chemistry of our company. For us, how we succeed is as important as to succeed."

**Fatih Dikyurt**  
Internal Audit Manager

**SUSTAINABILITY AT AK-KİM**

For us, sustainability is a way of doing business. Our goal is to preserve the quality of life and increase economic growth and level of welfare. In the light of this approach, we work to provide solutions that can be useful both for the human and the environment through innovative products we have been producing since our foundation.

We have become one of the exemplary companies that lead sustainable development by signing the United Nations Global Compact in 2007. While leading the expansion of universal principles, we reinforce our commitment to developing our performance based on these principles.

In regard to United Nations Global Compact, we biannually submit our compliance with principles defined in economic, environmental and social aspects with the related performance criteria transparently in compliance with international standards.

We define our corporate target to contribute to Sustainable Development Goals that aim to find solutions to global problems. We benefit from the feedback we receive from both internal and external stakeholders as key inputs to reach our goals.

At Ak-Kim, our goal is to continue to be a sustainable company that ceaselessly increases its added value we created for our stakeholders by carrying the performance we achieve by adding leading applications to our company forward.



**SUSTAINABILITY MANAGEMENT AT AK-KİM**

Based on the goal of "making sustainability management more productive" available in our strategic goals, we performed "Ak-Kim Sustainability Committee" under the Presidency of Management Systems Directorate as of the end of 2018. As affiliated to the Committee Presidency, we established committees on economy, environment and social aspects which are the three main headlines of sustainability. These committees consist of team leaders that will steer teams and team members that

**Sustainability Organization**



will provide voluntary support to studies. We manage holistically all components of sustainability aspects through different perspectives as members of our teams have different functions and disciplines such as sales, R&D, production, planning, purchasing, finance, human resources, health, safety and environment.

Committee leaders and teams are responsible for developing and monitoring goals and sustainability performances in compliance with Ak-Kim strategies and policies that are related to the United Nations Sustainable Development Goals, and preparing the reports.

In addition to the activities of the committee, developments regarding our sustainability aspects are submitted to senior management at internal management meetings; the Board of Directors is informed during Board meetings.

There are many sustainability goals in our company. Our environment, the economical sustainability of our company, the water we use and energy resources are, each, parameters for us. This is a struggle of balance between nature and human. Making good planning for resources and to use them at purposeful places at purposeful times are the duties of us all. Sustainability is an indispensable factor for us.

**Emre Tekol**  
Factory and Investment Director

**MATERIAL SUSTAINABILITY ISSUES**

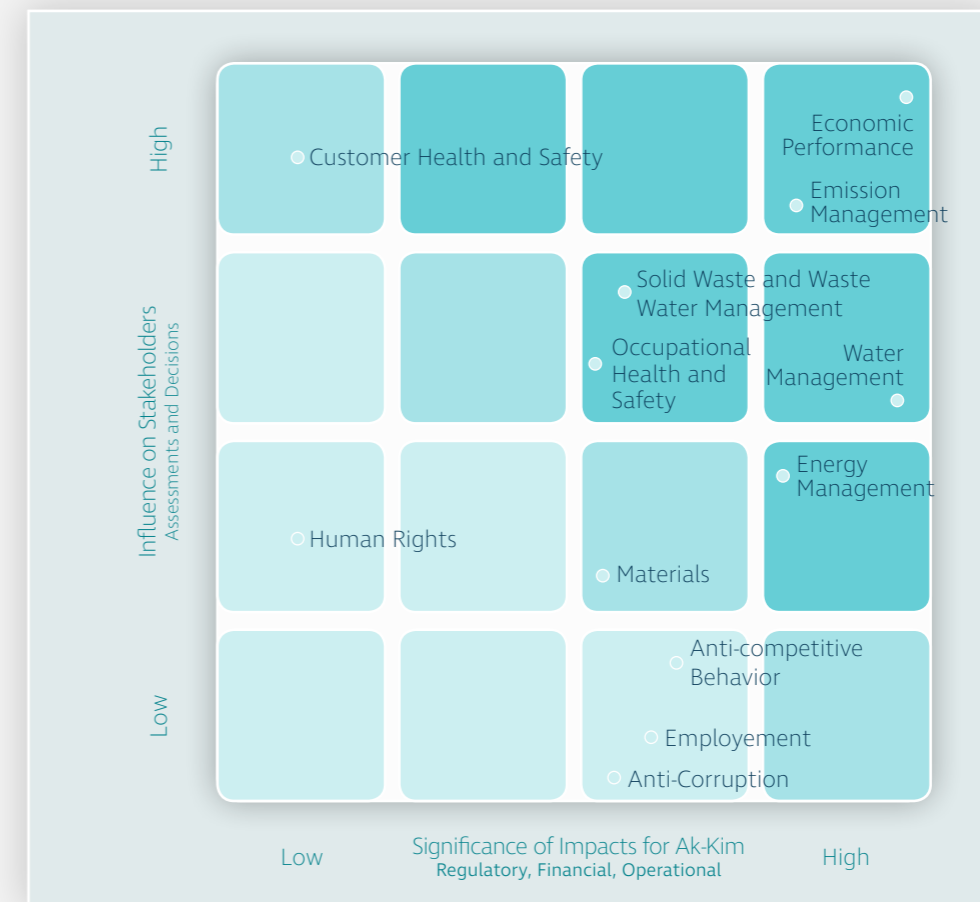
We actively evaluate our contribution to sustainable development and solving global issues based on our primary sustainability aspects. We define our business strategies based on this fact and specify our goals accordingly.

Our primary aspects are those that significantly affect both our stakeholders and the way we do business. Our material sustainable aspects are defined as the universe of issues consisting of aspects that are preliminary in our sector, mega-trends and cyclical aspects. The prioritizing of the aspects defined are

built according to methods suggested by the standards we use to prepare our report.

We annually review our material aspects which we finalized in the workshop we organized in 2017. In addition to the studies and evaluations the committees we established based on our sustainable management structure perform throughout the year, we actively use the feedback we received from external stakeholders to update the goals and strategies we define for our material aspects. You may find information regarding the subjects submitted to us during the reporting period in section "Communication with Stakeholders."

"Ak-Kim Sustainability Issues Matrix" we established as a result of all these studies is as follows:



When we evaluated our material issues, we specified that the level of importance for the issues of economic performance, emission management, wastewater and solid waste management, occupational health and safety and water management are higher compared to other issues. While these subjects dominate our report, information and performance regarding the other issues that are included to materiality were also offered to the opinions of our stakeholders.

### Goals and Compliance with Sustainable Development Goals

We aim to contribute to the Sustainable Development Goals that aim to find solutions to global problems through goals we defined according to our primary aspects. In this context, we performed the alignment of all functions with local and global goals, taking into account the priorities of internal and external stakeholders in the frame of workshops we organize within the company to define our sustainability strategy.

Based on the sustainability aspects we defined, we aim to develop and apply projects based on the primary issues in the four-year mid-term period for 2019-2023.

### Economic Goals

Economic Development and Innovation



### SDG 7: Projects will be prepared for the continuation, development and dissemination of energy efficiency enhancing works in all processes.

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.

### SDG 9: The effectiveness of the platforms such as the suggestion system supporting innovative studies within the organization will be increased.

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.

### SDG 8: Active and pioneering participation in sectoral platforms will be increased by following the activities to support sectoral development.

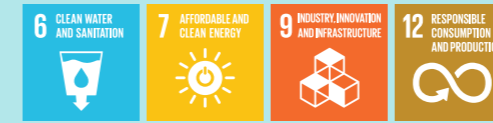
The chemical industry has an important status in Turkey's development. The chemical industry is a field of operation that provides competitive advantage and development in local development thanks to both its final goods and intermediates products which are supplied to other branches of industry. The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

### SDG 12: 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.

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 that they understand the chemistry as a solution partner has 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.

### Environmental Goals

Protection of Clean Water and Energy Efficiency



### SDG 6-7: Efforts related to 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 wastewater and efficient use of energy. 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.

### SDG 9: 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.

Informative inspirer studies should be performed which will enable our suppliers of goods and services to increase their commitment to 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.

### SDG 12: For responsible consumption, Ak-Kim will participate in active projects. Studies will be conducted to develop a responsible production approach in a way to include suppliers.

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.

### Social Goals

The Place of Chemistry in Life, Business Ethics



### SDG 12: Future-oriented innovative studies will be conducted thus improving the chemistry in life by increasing the contribution of the chemical industry to the health of individuals.

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 the reporting period, we also determined our short-term targets for the issues that are among our main sustainability priorities, which are also owned by our senior management. In this context, we also determined which SDG each target serves, which priority issue is related, and the actions we will take in the next reporting period for each target. Through our sustainability report, we will transparently share the results we achieved towards these goals with our stakeholders in our next sustainability report.

MATERIAL ISSUES	RELATED SDG	GOALS	2019 DEVELOPMENT	ACTION FOR THE NEXT REPORTING PERIOD
Innovation Culture		Expanding innovation culture	The Ambassador system process is improved.	Putting into force the innovation ambassador system
Product Management		Establishing Living Product Index	Process criteria and process flow are studied. Data for planning and sales for KPI measurement is being gathered.	Reviewing the existing product portfolio, revising segmentation for efficiency at portfolio, stock efficiency study
Supply Management		Developing local suppliers	Revision infrastructure for supplier selection and evaluation system is prepared.	A more effective training planning for raising the awareness of shippers and to obtain improvements
Water Footprint		Calculation of water footprint	ISO 14046 Standard water flows are being drawn.	Establishing water footprint map and identification of KPIs
Energy Efficiency		Monitoring increasing energy efficiency projects	4,682,000 kWh energy is saved in the reporting period	Increasing energy efficiency
Product Management		To have a sustainable product safety	Bluesign audit accomplished	To be included in BlueSign system for textile chemicals
Waste Management		Waste reduction	Decreased by 20% during the reporting period	Monitoring the amount and improvement of hazardous wastes on the basis of facilities
		Increasing recycling rate	54% of packages of products that are totally sold are recycled in the	Monitoring the amount and improvement of recycling rate
		Decreasing the pollution load of wastewater	Pollution loads decreased by 23% in Chemical Oxygen Need (CON) and 55% in Total Nitrogen (TN)	Monitoring the amount and improvement of wastewater
Emission Management		Including scope 3 to scope 14064	Ongoing	Analyzing transportation, service vehicles, offices and business trip data
Occupational Health and Safety		Putting into practice new hiring and learning technique that will help develop OHS culture	Test application and methodology arranged. Activity concept set.	Engaging OHS test application that measures the risk potential for the existing employees and those that will be newly hired Putting into practice plays, games, training etc. that will help develop OHS culture
		Minimizing accident frequency rate / accident severity rate	3D (Stop, Think, Act - STA) project initiated, observers received trainings	Increasing behavioral OHS observance interaction % and observance quality
		Increasing applications that raise awareness such as OHS audits conducted by different facilities	OHS index set.	Organizing and targeting safety tours under the sponsorship of senior management to embrace on-site audit programs
Training		Improving orientation process within the scope of Ak-Kim Campus application	Ak-Kim Campus is opened. Training plans are now being applied within the faculties.	Standardizing and activating the process to cover all newly hired employees, developing re-skill qualifications of the existing employees
		Increasing awareness regarding Ak-Kim products		Adding consumer awareness-raising trainings for sales functions and product recognition trainings for employees into Ak-Kim Campus application

MATERIAL ISSUES	RELATED SDG	GOALS	2019 DEVELOPMENT	ACTION FOR THE NEXT REPORTING PERIOD
Innovation Culture		Developing internal recognition / appreciation and rewarding system	Rewarding process is reviewed to address all departments and Ak-Kim's Employees on Top Award Process is initiated.	Monitoring the program
Digitalization		Digitalization of workflow records	Infrastructure for EBA program is created. Introductory meetings are organized.	Transferring to EBA at workflows (Subcontractors and agreement etc.)
		Establishing Infrastructure for Big Data Storeroom	The architecture for smart data storeroom that constantly learns and develops from production to sales and the infrastructure for ABIS architecture that will feed all departments is completed.	Tracking data coming from work units
Employee Loyalty		Increasing employee loyalty rate	Ak-Kim is My Home approach is initiated and development action plan has begun.	Applying Ak-Kim is My Home action plan

**COMMUNICATION WITH STAKEHOLDERS**

We define "our 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. We identified and prioritize our stakeholders during the sustainability workshop in which we defined our primary aspects. 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.

Through our sustainability committees, we actively follow the feedbacks we receive from our stakeholder groups through several methods in regards not only to our performance we announced in our sustainability report and also the feedbacks addressed to relevant units. We communicate with our stakeholders at different intervals using different methods every time whenever needed; we regard our stakeholders as a key component of our sustainability management.

Here are our key stakeholders defined according to the results we obtained:

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

Stakeholders	Communication Method	Frequency	Expectations in the Reporting Period	Outputs of the Expectations in the Reporting Period
Employees	GPTW (Great Place to Work) Surveys, conversation meetings with CEO, Ak-Kim Social Activities Club(ASEK), Internal department dinners and meetings, Dinner chat meetings attended by HR Director and General Manager, Year-end Gala Dinner, Iftar and Picnic Activities With All Employees, Football Team, Sailing Team, Sponsorships for Professional Individual Sports Enthusiasts	Regularly	<ul style="list-style-type: none"> <li>- Authorization of employees at a level that can fulfill its duties.</li> <li>- Ensuring participation in processes</li> <li>- Providing a safe working environment in terms of environment and occupational health</li> <li>- Ensuring continuity of production processes</li> <li>- Ensuring horizontal and vertical communication channels are open</li> </ul>	<ul style="list-style-type: none"> <li>- Employee participation in all processes (Feedback survey, satisfaction survey, etc. surveys)</li> <li>- Ensuring that employees communicate with each function through horizontal and vertical communication meetings</li> </ul>
Public Institutions	Visits	Regularly	<ul style="list-style-type: none"> <li>- Necessary coordination on issues concerning state administrative units</li> <li>- Making declarations to the relevant Ministries in a timely manner</li> </ul>	<ul style="list-style-type: none"> <li>- Standardization of the R&amp;D centers with the incentives of the General Directorate of the Ministry of Industry and Technology of the Republic of Turkey(R&amp;D Incentives) in the reporting period</li> <li>- Standardization of tankers,equipment and coatings with the Ministry of Transport General Directorate of Dangerous Goods and Combined Transport Regulation in the reporting period (for corrosive chemicals group,for the first time in Turkey)</li> </ul>
Shareholders	Board Meetings	Once per 3 months	<ul style="list-style-type: none"> <li>- Compliance with the requirements specified in the law and legislation</li> <li>- Working in accordance with strategic goals</li> <li>- Ensuring sustainable growth</li> </ul>	<ul style="list-style-type: none"> <li>- In the reporting period, Ak-Kim ranked 338<sup>th</sup> by jumping over 84 steps in the Fortune 500 list; also it ranked 266<sup>th</sup> in the First Big ISO 500 list announced annually by the Istanbul Chamber of Industry, by jumping over 54 steps in 2018.</li> </ul>
Local Authorities	Visits	Regularly	<ul style="list-style-type: none"> <li>- Necessary coordination on issues concerning state administrative units</li> <li>- Making declarations to the relevant Ministries in a timely manner</li> </ul>	<ul style="list-style-type: none"> <li>- The cooperation with Special Provincial Administration on free distribution to villages in need of chlorine for use in drinking water tanks(under the request and control of the Special Provincial Administration regarding its use as required) within the scope of the social responsibility and public health support project</li> </ul>

Stakeholders	Communication Method	Frequency	Expectations in the Reporting Period	Outputs of the Expectations in the Reporting Period
Customers	Customer Satisfaction Survey (CSS), fairs, product launches, customer visits,Journal of Gündem	CSS: domestic and abroad; Biennially	<ul style="list-style-type: none"> <li>- Ensuring the flow of goods and services without interrupting their business goals and plans</li> <li>- Taking necessary measures for environmental protection</li> <li>- Managing the services offered related information security, quality and environmental risks in line with the procedures</li> <li>- Timely and effective meeting of complaints, requests and suggestions forwarded to Ak-Kim.</li> </ul>	<ul style="list-style-type: none"> <li>- Success with sustainability performance on international platforms such as EcoVadis,TFS</li> </ul>
Local Communities	Open Door visits, social responsibility projects, chlorine, salt and laundry bleach donation, water tank construction, computer class construction, aid to the eastern schools, distributing Ramadan packages to those in need with lists received from the headmen every year through volunteer employees	Open Door: Upon request; Annually	<ul style="list-style-type: none"> <li>- Environmentally friendly production</li> <li>- Employment</li> <li>- Preference in procurement activities, where possible</li> <li>- Social responsibility activities</li> </ul>	<ul style="list-style-type: none"> <li>- Local employment for 23 people through İşkur during the reporting period</li> <li>- Sponsorship to the 2019 Republic Football Cup with the participation of amateur clubs</li> <li>- New Year celebration gift sponsorship for children in Yalova Rotary Club</li> </ul>
Suppliers	Supplier visits and audits	Regularly	<ul style="list-style-type: none"> <li>- Taking necessary measures for environmental protection</li> <li>- Fulfilling the requirements of management systems</li> <li>- Providing a safe working environment for the personnel providing maintenance, repair and service services</li> </ul>	<ul style="list-style-type: none"> <li>- Revision infrastructure studies of supplier selection and evaluation system</li> <li>- Tender procedure order management</li> <li>- Tanker kooperatifi</li> <li>- Providing technical support for the compliance of the equipment that can be purchased to the tanker cooperative with ADR, negotiating with all suppliers regarding the availability of suitable equipment for them, and then transmitting the equipment and suppliers that can be purchased in ADR to them in a short list. 1/3 of the fleet is made compatible with ADR through supplier evaluations.</li> </ul>



Breentag Kimya Visit

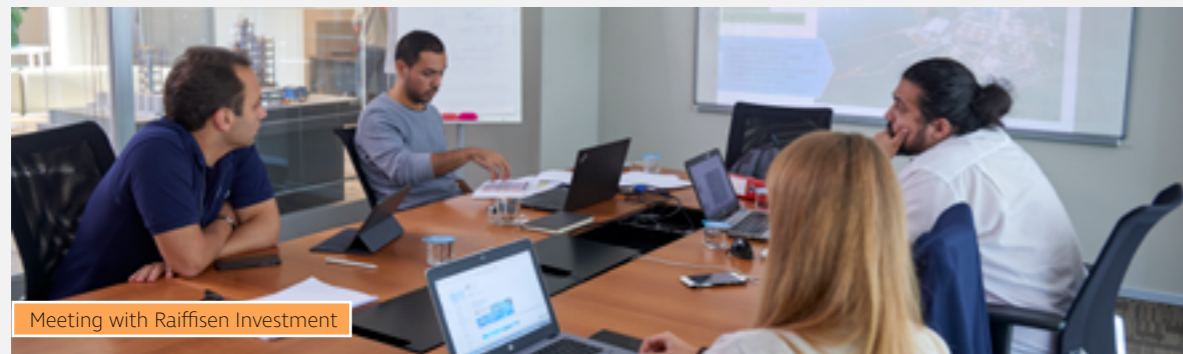


Sailing Team



Yalova amateur harpoon fishermen cleaning activity

Non-Profit Organizations	Visits, participation in events	Regularly	- Participation to activities - Joint collaborations - Sponsorship	- Sponsorship to the "Türkiye Kimya Sanayiinin Güvenli Geleceği" event of Turkish Chemical Manufacturers Association (TKSD)
Universities	Career Days, Open Door visits, university seminars	Regularly	- Participation in Career Days - Participation in panels and seminars as a speaker - Sponsorship of university events	- Participation in ITU, METU, YTU and BOU events during the reporting period - Sponsorship to the events such as METU Chemical Society, 5th Biochemistry Conference and Yıldız Technical University Chemistry Technologies Club "KIMSEK" event - YTU and Yalova University Open Door event - Providing long-term internship opportunities to 9 university students with the Akkim İyi Gelecek program
Group Companies	Joint sporting activities (Dragon Rowing Team), KidZania (Ak-Kim Science Lab.), managing the Yıldız Akköklüler process together, visits, meetings	Regularly	- Participation in sponsorship activities - Contribution to the communication of events - Joint collaborations	- Sponsorship to the Akbatı Run event - KidZania Akkim Science and Chemistry Laboratory - sponsorship - Mammoth Art Project (Akkök)
Media	Bulletin, interviews and news, TV programs	Regularly	- Accurate and transparent information sharing - Information on developments	- Creating awareness by drawing attention to the Turkey's future water problems with the title of Ak-Kim- World Water Day warning letter in national press
Financial Institutions	Project based meetings, market researchs, national and international visits	Regularly	- Cooperation - Transparency - Easy access - Companionship	- In order to make accurate analysis and interpretation within inorganic growth projects, necessary sharing is done on time and as a whole for the same purpose, demonstrating companionship



Meeting with Raiffisen Investment

We aim to have an open and transparent communication with all institutions and individuals we cooperate with. In this context, a key communication tool we adopted at Ak-Kim is Open Door Policy approach. Converting this policy into a

corporate social responsibility project, our company opened its facilities to official institutions and organizations that want to get informed. In the reporting period, Ak-Kim accepted almost 200 visitors in its facilities in regard to "Open Door Policy."

“In our school I have been working for 25 years, we work in collaboration with Ak-Kim. Ak-Kim provided employment to our students, gave them the opportunity to be interns. This company completed our deficiencies in regard to equipment. You supplied the chemical required for our laboratories although you were not using them. You have always supported us. I wish all institutions can support schools as you do.”

**Arzu Gürtekin**  
Aksa Vocational and Technical Anatolian High School, Vice President - Chemistry Teacher

CORPORATE MEMBERSHIPS	
<b>International Memberships</b>	<b>Environmental Associations</b>
• CEFIC (The European Chemical Industry Council) - ESA Association	Environmental Working Group of İstanbul Chamber of Industry
BSC (British Safety Council)	Environmental Working Group of the Turkish Chemical Manufacturers Association
<b>Economic Associations</b>	Turkish Association of Chemical Tanker Cleaning
Sectoral Assembly of the Union of Chambers and Commodity Exchanges of Turkey	Quality Association of Turkey
Sectoral Assembly of İstanbul Chamber of Industry	Turkish Marine Environment Protection Association (Deniztemiz Turmepa)
Turkish Chemical Manufacturers Association	TUSIAD Environment and Climate Change Working Group
Yalova Association of Industrialists	TUSIAD Energy Efficiency Working Group
İstanbul Chamber of Commerce	<b>Partnerships in Social Responsibility Projects</b>
İstanbul Commodity Exchange	Global Compact Local Network
İstanbul Union of Mine and Metal Exporters	Corporate Social Responsibility Association of Turkey
İstanbul Chemicals and Chemical Products Exporters' Association	Community Volunteers Foundation
Federation of Industrial Associations	Educational Volunteers Foundation of Turkey
Sectoral Associations Federation	Turkish Association for People Management
Supply Chain Management Association	Quality Association of Turkey
YALKİM Organized Industrial Zone	Yanındayiz Association
Carbon Association	
Chemport	
Argemip	



### SUSTAINABILITY COOPERATION

Here are the sustainability initiatives to which Ak-Kim is included, putting sustainability into its focus as a way of doing business:

- 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 Global Compact Local Network.

### Responsible Care

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.

To learn about our responsible care commitment: [click here](#).

### Safe Future of Turkish Chemical Industry

Turkish Chemical Manufacturers Association; on November 8th, 2019, Cefic's General Manager Marco Mensink and the Chair of TUSIAD Simone Kaslowski attended as speakers to the event "Safe Future of Turkish Chemical Industry" in which senior managers and technical experts of the members that represent the leading companies of Turkish chemistry sector and sponsored by Ak-Kim. Moreover, a plate ceremony was organized for the representatives of companies that have been active for more than 50 years in chemistry sector and the up-to-date applications in the legislation of chemicals management were discussed.



### Private Sector - University Collaborations

With an aim to put forward the sustainability performance of the world of business in Turkey and to suggest sectoral policies for sustainable development by Ozyegin University - TUSIAD Sustainable Development Forum (SDF), nationally and internationally acknowledged sustainability criteria and methodologies are examined and a study is initiated to develop a sustainable evaluation methodology for BIST companies. At the first step of the investigation, the

objective is to analyze the sector for sustainability by gathering the data of the companies in selected sectors and to develop policy suggestions by discussing the methodology and results with sector representatives. At this step, the Chemistry sector was primarily discussed; Ak-Kim Chemistry was invited to sectoral evaluation panel of the seminar and Management Systems Manager Çiğdem Arpat has also attended.



### Young SDG Innovators Program

New products and services with young professionals working in companies that are members of the UN Global Compact, UN Global Compact Young SDG Innovators Program; and activate Sustainable Development Goals (SDG) as a motive. Each team works for 10 months (September 2019 - June 2020) on a problem unique to their company with an aim to design more sustainable business models, initiatives and products that not only carry sustainability studies of a company forward but also produce

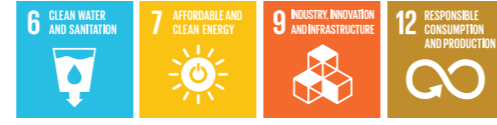
solid results with a potential market value by strengthening the innovation. Local networks that attend to this program are the USA, Bangladesh, Brazil, Denmark, South Africa, England, Lebanon, Mexico, Turkey and Ukraine. To represent Ak-Kim, our Management Systems Manager and R&D Project Innovation Manager attend to Young SDG Innovators Program for the 2019-2020 period initiated globally by UN Global Compact; Turkish network attended with 18 companies and 48 participants in total.





**RESPECT FOR NATURE IS OUR CHEMISTRY**

Material issues: Environmental performance



A key component of our sustainability approach is to continue our operations paying regard to their environmental impacts. In this context, Ak-Kim puts into practice the applications that will carry our environmental performance to advanced levels both in process design and production phases, making use of environmentally-friendly technologies. We conduct studies to minimize the environmental impacts of not only in production processes, but also of product utilization.



We consider our environmental protection activities as an indispensable part of our work. Our goal is to have a performance beyond legal obligations in all of our activities. In this regard, in 1993, we signed the Responsible Care Commitment which is a voluntary-based program emphasizing the awareness of institutions operating in the chemistry sector on the environment, human health and technical safety; and we are among the leading institutions that implement this program in Turkey. For more information on our Responsible Care Commitment, please [click](#).

Directorates for Health, Safety, Environment and Management Systems manage our environmental impact resulting from our activities and all environmental processes of our operations. Structures such as Idea Workshop, Energy Management, Working Group for odour minimization are other bodies that actively work to evaluate and improve environmental performance. In addition to these corporate bodies, all employees take the responsibility to improve environmental performance and attend actively to such studies.

Ak-Kim pays special importance to increasing and constantly developing the environmental awareness of our employees.

In this context, our employees received a total of 649 hours of environmental training in the reporting period. Another crucial responsibility of our company is to expand the environmental training facilities we offer to our employees to other stakeholders as well. Thus, we provided 584 hours of environmental training to the employees of contractor companies in the reporting period.

We also continued our investments on environmental protection to carry our environmental performance higher. In this regard, in the reporting period, the total sum is 1,690,020 USD for wastewater refinement, waste disposal; and this sum was 985,054 USD in 2018 and 704,946 USD in 2019.

We pay attention to environmental issues during selecting and evaluating the suppliers. Suppliers receive notifications in cases of inconveniences; and purchasing stops until this inconvenience is corrected. In the reporting period, no supplier's contract is terminated due to any violation of environmental criteria.

We did not receive any penalty due to failure to comply with environmental laws and regulations in the reporting period.

**OUR CLIMATE CHANGE APPROACH**

Combating climate change is the mutual responsibility of the whole business world, independent of any sector. Climate change has a very significant impact that may affect and change the operations of the whole business world if the necessary precautions will not be taken. Thus, it is required to review active risks and conduct operations paying attention to these risks, to include risks of climate change into company strategies and to take emergency precautions by establishing joint platforms.

At Ak-Kim, we perform our operations, being aware of our responsibilities on climate change. We put into practice studies and investments that will minimize the environmental impacts of both of our existing operations and our future activities.

We closely monitor all national and international developments in combating climate change and apply these practices

in our management systems. In this context, we established ISO 50001:2011 Energy Management System in our company in 2015 and again, the same year, we accomplished to receive ISO 14064 Greenhouse Gas Inventory Certificate. Energy monitoring system is established and put into use in the reporting period.

Our climate change approach solidifies with the effective application of energy and emission management practices. Our preliminary studies include efficient use of energy, selection of technological equipment and process improvements, calculations for greenhouse gas emissions, weather modelling studies, odour measurements and internal monitoring measurement studies and filter systems to enhance the air quality.

As a member of TUSIAD - Environment and Climate Change and Energy Efficiency Working Groups, Environmental Working Group of the Turkish Chemical Manufacturers Association and the European Chemical Industry Council CEFIC, we work in collaboration in preliminary aspects including combating climate change, sustainable financing, occupational health and safety, quality, product safety, waste management and energy and resource efficiency, considering the fact that economy, environment and energy policies in our country shall be consistent and support each other. We participate in the studies conducted in the frame of this fact and share the developments with our stakeholders.

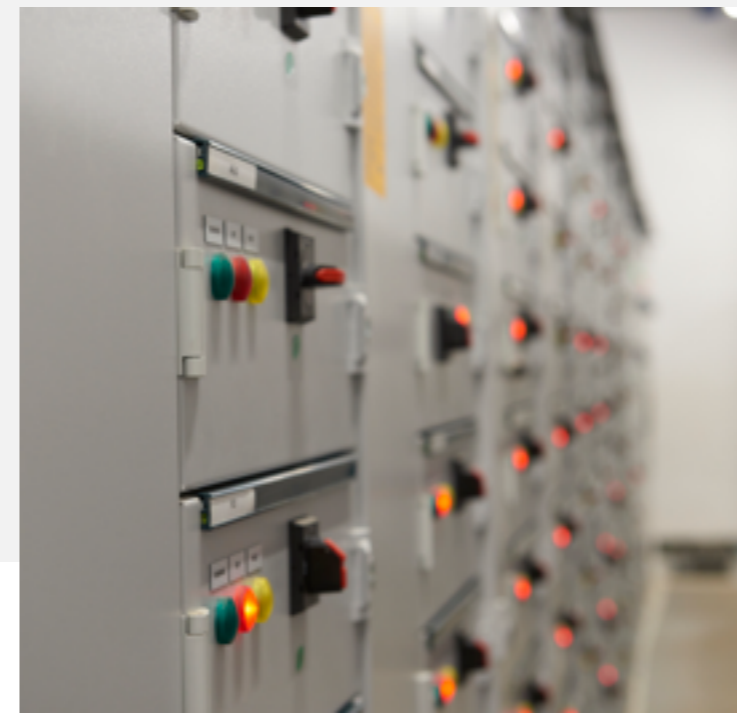


**ENERGY EFFICIENCY**

At Ak-Kim, our main goal in energy management is to improve our activities in line with all national and international legislations and make them environmentally and economically sustainable. Thus, ceaseless monitoring of our operations in regard to energy efficiency and carrying our performance forward can be possible through practices we employ with our Energy Policy.

As the efficient use of energy reduces our environmental footprint, the cost advantage it creates increases our competition advantage as well. The management of such an important subject is performed by the Directorate of Health, Safety, Environment and Management Systems in Ak-Kim and improvement studies to increase efficiency are conducted in Production, Maintenance and Investment Directorates. One of the crucial evaluation criteria in purchasing step is the energy efficiency of newly bought equipment, in addition to these studies on the use of energy in our processes.

The energy consumption of Ak-Kim is based on natural gas, vapor and electricity.



We supply a part of electricity and vapor we consume from our sister company, Aksa Akrilik. Thus, our energy consumption for 2018 was 1,746,959.6 GJ and it was 1,784,603.9 GJ for 2019.

The key reason why the increase in energy consumption is lower than equivalent levels despite the increase in production is the energy efficiency projects we put into practice throughout the reporting period.

According to our 2019 Cumulative electricity levels, improvements in Persulfate plant and efficiency due to the activation of double phases in SPC (Sodium PerCarbonate) plant took place compared to last year.

According to our 2019 Cumulative vapor levels, the vapor is used in Methylamines plant although there was no production due to a halt in January-February and there is an increase at the relevant source in Performance Chemicals as the furnaces where natural gas is used were removed and the vapor is now used.

According to 2019 Cumulative natural gas use, there is a reduction in SPC (Sodium PerCarbonate) plant due to double-phase activation and a reduction in Performance Chemicals plant due to the use of resources.

A total of 4,682,000 kWh energy is saved as such: 800,000 kWh is saved by exchanging the cooling water pump used in Organic Plants with a drive pump; 900,000 kWh is saved by exchanging chiller units in HP (Hydrogen Peroxide) and SPC (Sodium Percarbonate) Plants with more efficient chiller units; 542,000 kWh is saved by exchanging air compressor in SPC (Sodium Percarbonate) Plant with a more efficient air compressor; 100,000 kWh is saved by adjusting instrument

ventilation system at North Ak-Kim to 6 bars; and 2,340,000 kWh is saved due to new technology catalyst and the tube exchange in CO&H2 (Carbon Monoxide and Hydrogen) Plant. In regard to these practices, all lighting armatures at Ak-Kim are exchanged to halve the consumption values.

**EMISSION MANAGEMENT**

At Ak-Kim, emission management is a crucial part of combating climate change. In line with our goal to keep our environmental footprint at minimum levels and as a result of our climate change approach, we initiated the internal monitoring plan of greenhouse gas emissions in 2014 through the necessary studies by notifying the Ministry of Environment and Urban Planning. The existing emissions were measured when we received "ISO 14064 Greenhouse Gas Inventory" Certificate in 2015 and as a result, these measurements were approved by an independent institution. Emission management is conducted in our company elegantly under the leadership of our environment, energy and sustainability policies based on the national and international quality standards by the Directorate of Health, Safety and Environment.

In combating climate change, we ceaselessly monitor our greenhouse gas emissions and put into practice the efficiency studies for minimization. We actively evaluate the developments in climate change and emission management and participate actively in the activities conducted on all platforms.

The reason for the increase compared to the previous year is the increase in energy factor levels of the institutions we supply energy to, the increase in our production volume and thus the increase in electricity and on-road vehicles.

We aim to calculate and include Scope 3 emissions in the report beginning from the next reporting period.

We perform internal measurements at specified intervals using the measurement devices we have. We strive to prevent pollution by using this application at emergencies. We preserve the ventilation quality by keeping the emissions occurred in our facilities at absorbing levels before release and by recirculating it.

The distribution of air pollutants in the atmosphere based on air pollution distribution model study is simulated mathematically. Emission measurements are conducted according to TSE standards and EPA standards. Preventive practices for dusting and emission in regard to improvement studies are performed every period. According to this, there is no material in our operations that may diluent the ozone layer. According to the results obtained in the reporting period, there is no significant NOx, SO2 and other apparent air emission result.

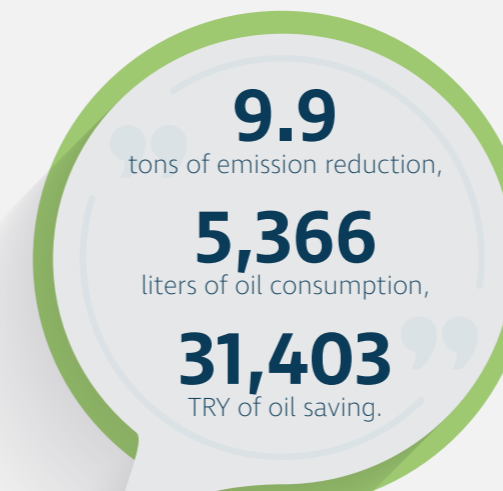
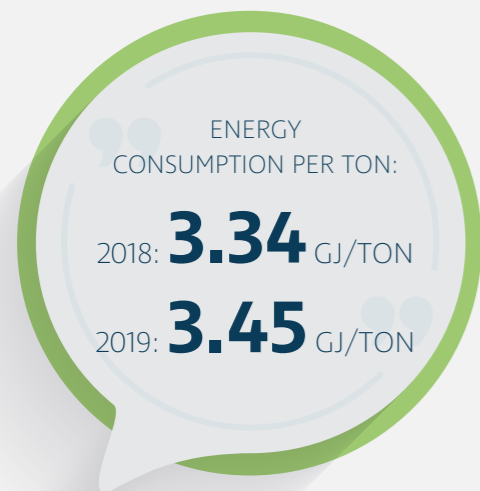
**Emission Density (tCO<sub>2</sub>e/ton)**

	Scope 1	Scope 2	Total
2017	0.040	0.240	0.280
2018	0.035	0.260	0.295

We aim to decrease in the use of natural resources, CO<sub>2</sub> release with the project of the gradual release of Hybrid vehicle technology we initiated in the reporting period. According to this, in 2019, we obtained;

Gizemfrit Oxy-Blast System project aims to exchange air-oil (natural gas) burner technology which is the energy source of melting furnaces available in the plant with burners that can burn pure oxygen-oil mixture. The aim with this project that is planned to be initiated in 2020 is to obtain 40% decrease in natural gas consumption, and nullification of flue gas NOx emissions.

Wastewater surfacing due to flushing in North Ak-Kim DMAC (Dimethylacetamide) plant in 2019 was sent directly to a joint wastewater treatment facility in a closed line before being pumped into promotion station, thus preventing odour emissions occurred due to flushing from spreading.



**WATER MANAGEMENT**

Risks related to water which is our fundamental source of life are increasing every day. In the near future, our world will face significant crises as the water resources are decreasing. For this, everyone shall assume crucial responsibilities. The efficient use of water is now a much more important issue that needs to be dealt with sensitively. The efficient use of water and water resources is one of the subjects we, at Ak-Kim, pay special attention to.



Water Utilization and Density by Year			
	2017	2018	2019
m <sup>3</sup> /yıl	767,712	774,615	811,070
m <sup>3</sup> /ton	1.85	1.48	1.58

We procure the utility water used in its two factories in Yalova from the Gökçe Dam and from Aksa Akrilik, which is a sister company. The water used in the process is softened in the Southern Ak-Kim facilities before usage, whereas in the Northern Ak-Kim facilities water is received from Aksa Akrilik. The amount of utility water may change in parallel to the increase in operational activities.

Almost 60-65% of water used in the process becomes product component and the rest becomes wastewater. Cooling water is a closed-circuit system and is taken from the dam and Aksa Akrilik. Thus, water is added only when there is a 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.

### Building Water Tanks

There was no water source to be used in case of any water cut due to any malfunction etc. in Full General Selahattin Risalet Demircioğlu Secondary School that host 400 students. The construction of the water tank demanded by the school has been completed in 3 days on 6<sup>th</sup> - 9<sup>th</sup> April 2019 including hydrophore, switch, electric wiring and fencing in for protection. Following the construction, we distributed the book "Water" which Ak-Kim specially published for students in our visit on April 3<sup>rd</sup>, World Water Day and we conducted a study on raising awareness on water consumption.

**Tuğçe Arslanoğlu**  
Corporate Communications Executive

### WASTEWATER RECOVERY

Reuse of wastewater is very crucial both in regard to the sustainability of our operations and the efficient use of resources. Each of the two factories in Yalova, which makes production, has its own wastewater 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. In the reporting periods 856 m<sup>3</sup>/day wastewater in 2018 and 904 m<sup>3</sup>/day wastewater in 2019 was formed in Ak-Kim Yalova factories; these waters were sent to YALKİM Organized Industrial Zone facility.

Aim of this project that is implemented to simplify treatment processes by using the synergic effect of wastewater 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.

180,500 m<sup>3</sup>/year wastewater generated in the SPC (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 wastewater is prevented. Similarly, the water regained from cooling water is used in watering green areas, thus enabling approximately 6,000 m<sup>3</sup> /year water saving in the summer.

In the reporting period, we continued to obtain new achievements by putting into practice recycling projects. We recycled jacket water sent to wastewater with the project T-120 Return Line. We saved 180 m<sup>3</sup>/month with this project conducted in 2019. In addition to this application, we saved 15% of water in the FSL machine that makes continuous production using FSL (Finer Spinning Line Machine) machine refractometer application, and obtained 80 m<sup>3</sup>/month acquisition.

### Wastewater and Rainwater Infrastructure Modernization Project

Our aim in this project conducted in the reporting period was to improve the current condition, to meet infrastructure needs by paying attention to future requirements, to reduce maintenance amount and time, to resolve any malfunctioning, and to prevent potential pollution.

1. Intermingling of rainwater and industrial wastewater is completely resolved. Thus, this resulted in the reduction of flow load on the wastewater treatment facility.
2. Environmental accidents due to wastewater and rainwater are prevented.
3. While wastewater and rainwater are pumped from every point it is sourced, water is transmitted with attraction based on the ground levels in this project; we saved 32 kWh electricity by aborting wastewater and rainwater promotion stations available in the facilities in the old system.
4. Maintenance costs decrease in parallel to the reduction in the number of equipment.
5. Wastewater and rainwater infrastructure system for future use for the investment field is now ready.
6. An additional 300 m<sup>3</sup> volume is generated to be used in case of an emergency.
7. We contributed to sustainability by releasing rainwater which has no risk of pollution any more into nature.

### Waste Amount by Type (kg/year)

	2018		2019	
	Hazardous	Non-hazardous	Hazardous	Non-hazardous
Recycled	345,037	808,202	337,058	965,390
Disposal	1,455,710	716,430	979,550	696,200
TOTAL	1,800,747	1,524,632	1,316,608	1,661,590

**SOLID WASTE MANAGEMENT**

We are actively putting into practice the projects on waste reduction. In addition to projects we employ, we assign personal scorecards to our employees to increase the awareness on waste reduction. Besides these waste projects and management studies we conduct within the company, we contribute to the waste management processes of our customers.



**Our Contribution to Circular Economy**

We aim to sustain our contribution to the circular economy in increasing amounts by recycling products and packaging materials produced during our operations. In this regard, the recycling of all recycled products and packaging materials in the reporting period are as follows:

Recycled	2018	2019
Paper Waste (kg)	94,504	94,570
Plastic Waste (kg)	28,708	31,650
Wood Waste (kg)	160,740	163,540
<b>TOTAL</b>	<b>283,952</b>	<b>289,760</b>

Products at Ak-Kim are produced in integrated production facilities. In other words, an output from a facility is used as raw material in another facility.

Moreover, HCl (Hydrochloric Acid), one of the chemicals we produce, is sold to the galvanizing sector and becomes a waste as a result of metal surface cleaning processes. This waste is called FeCl<sub>2</sub> (Iron(II) Chloride solution) or "rotten acid." The waste taken from customers through licensed tools of the Ministry of Environment and Urban Planning is recycled by processing in Ak-Kim FeCl<sub>2</sub> (Iron(II) Chloride) production facility which is again licensed by the Ministry of Environment and Urban Planning. Following the process, this waste becomes FeCl<sub>3</sub> (Iron (III) Chloride) product. FeCl<sub>3</sub> (Iron (III) Chloride) is one of the chemicals used in wastewater treatment. Thus, we not only prevent "rotten acid" release and harm on the environment, but also wastewater is cleaned with the new product produced. The amount of rotten acid / FeCl<sub>2</sub> (Iron (II) Chloride solution) that is recycled is a mean of 6,000 tons per year. Ak-Kim not only performs water management studies within the company, but contributes to the waste management processes of its customers as well.

**ENVIRONMENTAL PRODUCTS**

One of the critical aspects of its R&D practices is enabling customers to save resources by improving processes through environmentally-friendly chemicals. Some of the environmentally-friendly chemicals developed at the R&D Center and offered to customers during the reporting period are listed below:

**AKAP CFO 456** - This product, which is a special textile finish, is used as one of the main materials used in producing carbon fiber and the carbon filters produced as such form the composite structure on the wings of wind turbines. Wind turbines produce renewable, green and sustainable energy and do not harm the environment.

**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 DİMER 120, AKDİMER and AKDİMER 220** – It gives a 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.

**AKUA END 3210, AKUA END 6133 and AKUA END 6140** - Used as decolorant and for sedimentation in treatment of particularly textile wastewater and also for paint, pulp and paper, printing ink and similar industrial wastewaters. Thus, it contributes to water saving by enabling reuse of treated water at suitable processes 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.

**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.

**AKSOFT CSK** - Used as a 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 helps save energy since it enables preparation of solutions with cold water, eliminating the heating and post-process cooling operations entirely.

**AKSOFT CNS** - Used as a 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 helps save energy since it enables preparation of solutions with cold water, eliminating the heating and post-process cooling operations entirely.





**INNOVATION IS OUR CHEMISTRY**



**R&D AND INNOVATION**

At Ak-Kim, we consider innovation as an indispensable part of our business model and we encourage our employees and business partners in this regard. Innovation in our company is a strategic priority managed in line with the goals in the frame of long-term plans, through a multi-participatory and multi-layered organization. We continue to produce new products, services and processes that produce added value with our advanced management culture.

We move forward with the motto: "innovation starts with the customer, ends with the customer." All products generated from the projects in our R&D portfolio has a real market. We decide all activities of these projects from ideas to products including customer trials, feedbacks, etc. with the customers. Our projects can become commercialized only after the final approval of our customers.

Our R&D Center, registered by the Ministry of Science, Industry and Technology in 2013 and founded with an aim to produce products with high added value, to perform technology and product development studies in subjects that will possibly gain importance in future, and to increase quality in existing technologies and processes, is the center for innovation studies.

We started to see the positive results of the Innovation Culture Project which we initiated in 2016 and aimed to make innovation a way of doing business, in the reporting period as well. The various number of awards and an increasing number of patents we gained at national and international levels help us increase and sustain our efforts. In the reporting period, we have 18 national and 8 international PCT patent applications awaiting.

**INNOVATION CULTURE PROJECT**

With Ak-Kim Innovation Culture Project initiated in 2016, we aimed to transform our corporate culture into an environment that embraces and supports innovation and to facilitate the development of new products and processes.

Each application in total corporate innovation at Ak-Kim has its own unique name. Each process is managed by a multi-disciplinary implementer team that embraces all hierarchical grades and under the supervision of our General Manager.

"Innovation Council" consisting of senior management gathers periodically and, when necessary, performs the updates in its innovation strategy by considering the global changes such as economy, markets, techniques and regulations. This council evaluates "Innovation Board" outputs and participate in new product processes. New products are managed by a team and system, called Innovation Board which is again an interdisciplinary one.

Our new products are monitored with software whose stages including ideas to products comply with international usage and standards and that is continually-updated according to user feedback. The process is divided into parts from ideas to launching and managed with a stage/gate strategy.

There are many additional applications to make all employees understand the innovative technologies the company identified and to increase their capabilities regarding innovation, and to establish an innovation atmosphere.

We evaluate the ideas, opinions and projects of employees who work in the Innovation Culture Project, enhance internal and external communication regarding teamwork and cooperation projects, and create products and services that offer higher added value as a result of a more participatory corporate culture.

**Innovation Management at Ak-Kim**



There are some companies that are not known adequately by individuals who are not close to that sector despite their big-volume and significant works. I think Ak-Kim Kimya Sanayi ve Ticaret A.Ş. is such a company. I have just recently learned that they are the chemical products manufacturer with the highest number of products in their portfolio. In order to sustain such a leadership, of course, technology and innovation are always on their agenda.

Today, we had a conversation full of energy with Ak-Kim employees at Yalova production facilities.

While chatting with dear Dr. Semih Durmuş and Tanju Okurgan before the event, I learned some of the details which we do not even recognize while using. For instance, chemicals have many specific sub-branches such as performance chemicals, tunnel chemicals, asphalt chemicals, textile chemicals, etc.

I heard that they are world leaders in some areas, which made my day. I feel very good to witness global-scale works performed by trained local brainpower with local capital.

However, there is a special sense in Ak-Kim that I need to voice. Everybody I meet is very courteous, cheerful and full of energy. I think, the common ground for an employee working at the reception, a person serving us tea, directors and general managers is that they are happy to work in that company.

**Innovation Week speaker  
Dr.Sertaç Doğanay**

"Ak-Kim is a company where you may feel innovation deep inside. When putting into practice a new idea, one gets encouraged from the bottom to the top level at Ak-Kim."

**Nafiz OKER**  
**Electricity and Instrument Maintenance Engineer**



At Ak-Kim, there is a multidisciplinary innovation ambassador commission based on voluntary participation that aims to expand the innovation culture to all teams, to recognize and put into practice the innovation ideas offered by different teams. This commission gathers periodically, discusses all subjects related to innovation such as organization to perform, improving innovation processes and communication with all departments and reports them to other committees.

There is an open innovation module at Ak-Kim's website which aims to gather external ideas and reward the owners of those ideas.

An Ak-Kim training and innovation campus is opened where newly hired personnel and the existing personnel are trained and can pass time in the social facilities.



**InovaLIG award to Ak-Kim**

We became a finalist at InovaLIG 2018, Turkey's first innovation development program, organized in collaboration with IMP3rove Academy of Turkish Exporters Assembly. InovaLIG program aims to raise awareness on innovation in public and private sector institutions in our country.

Companies that attended this program competed for their innovation capabilities and Ak-Kim rose to be a finalist in "Innovation Strategy" category among 1,216 companies and took its place in the first 5 leader companies at innovation.

**National Winner Award to Ak-Kim**

In 2019, we were awarded the "National Winner" award at European Business Awards which is among the most prestigious awards of European Business World and won the right to compete at Innovation category.

Ak-Kim was selected among 120,000 companies all around Europe and almost 4,000 companies from Turkey, competed with 364 companies from 33 European countries and became the only Turkish chemistry company that made its mark on the finals.

**Ones to Watch Turkey Award**

In the European Business Awards 2019 in which the best companies of Europe have been evaluated since 2007, we won Ones to Watch Turkey certificate in success, innovation and ethics.



**National Award to Ak-Kim R&D Center**

In 2019, we were awarded the "National Winner" award at European Business Awards which is among the most prestigious awards of European Business World and won the right to compete at Innovation category.

Ak-Kim was selected among 120,000 companies all around Europe and almost 4,000 companies from Turkey, competed with 364 companies from 33 European countries and became the only Turkish chemistry company that made its mark on the finals.





**DIGITALIZATION**

While digitalization changes the business processes and the ways of doing business, it enables many innovations through the opportunities it offers. Companies that adapt to and develop themselves according to these changes in digitalization are able to sign under innovative products and services. We believe that digitalization which is a very significant part of today's world will create crucial opportunities for Ak-Kim. We perform prominently in our sector thanks to the crucial steps we take towards digitalization. Following the integration of digitalization into business processes, we obtain an efficiency increase in all processes from innovation to investment, production to distribution.

With the Digital Transformation project in R&D Processes, we applied a digital solution in which all departments enter data using a single platform in R&D and investment processes. Thanks to this, we aimed at the fast transformation of ideas into products and created a corporate memory.

With Ak-Kim Customer Relations Management System we initiated based on our 4th Generation Industrial Revolution, sales processes and processes such as order management and case management become more effective, faster, more systematic and easily manageable via digital channels.

In the reporting period, "Exaquantum" platform in which all kinds of information



regarding production steps under the name of the facility information management system can be kept and analyzed was established and put into use. Versions of all DCS systems have been raised to the highest-level technology reached so far and are now being used. "MOC (Management of Change)" system in which investment and maintenance activities are recorded is established and actualized. In addition to these applications, we established and

"We develop new products by internalizing the changing world and technology dynamics. We open a new window every new day while performing all of these processes in cooperation."

**Tuğhan Akbaşak**  
R&D Textile Chemicals Manager

**Information, Technologies Class**

Computers whose economic life has ended and which have different breakdowns were overhauled, repaired and rendered functional. While the computer needs of a computer laboratory in a school were met with these computers, and this laboratory was later on called "Ak-Kim Information Technologies Class." This project received an official thanks from the Ministry of National Education.

started to use the Energy Monitoring System in the same period.

We obtained transparency by carrying customer/supplier agreement processes to the digital platform with Ak-Kim e-transformation in Agreements project we actualized in the reporting period. While we increase our efficiency through projects such as e-transformation at agreements, e-transformation in printing receipts, e-payroll project we initiated in this period,

we contributed to paperless office goals.

The protection and safety of information have become one of the crucial subjects in digitalization. Preventing all risks that may hinder safe and ceaseless service such as cyber-attacks and to protect information assets of our stakeholders are very significant for Ak-Kim. In this context, we have been applying ISO 27001 Safety of Information Management System requirements since 2015.

**BIGDATA ABIS Project**

We established a continually-learning and developing smart data center through modeling data available on different systems on the ABIS platform and by making them meaningful. Our near-future goal is to process the data that can be gathered when different technologies are integrated into this center and to support the processes in regard to cost and performance.

**Transition to DINOX Oracle**

Our company that serves to all Europe over Germany is transited from the local ERP solution to Oracle ERP which offers central management at our data center. This enabled inter-system integration and data created on ERP is now processed over the ABIS platform.

**E-transformation in Accounting Processes**

In regard to studies on E-transformation in Accounting Processes, accounting slips which are regularly printed on a monthly basis and agreement processes we are performing with our customers and suppliers via e-mails, fax or phones every month are now managed on the digital platform. This enabled us to save approximately 180,000 papers.

**E-payroll Transformation Project**

Employee payrolls which were printed regularly every month are now carried on to the digital platform, enabling our employees to access to their payrolls any time anywhere, and helped us save a significant amount of paper.





**CREATING VALUE IS OUR CHEMISTRY**



**SUPPLY CHAIN MANAGEMENT**

We have been conducting our supply chain activities under four stages; namely customer services, planning, purchasing and logistics.

The planning function is responsible for preparing effective and efficient production plans, considering the existing conditions of the facilities, to make customer orders on time and at the desired volume.

The purchasing function supplies the materials and services required for our activities. We work to increase the contribution we make to the national economy by preferring local suppliers when purchasing. We work with suppliers who

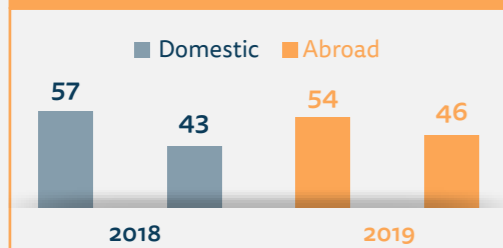
meet our selection criteria only. We evaluate environmental performance and working conditions when selecting and evaluating the supplier. We include in all purchasing agreements a clause on child labor and illegal workers. We send notifications to suppliers when we detect any noncompliance and we halt the purchasing until this noncompliance is corrected. We terminated our business contracts with two suppliers who employed illegal workers and did not comply with Ak-Kim HSE rules as detected in the audits we made in the reporting period. We organize several training programs to contribute to the corporate development of our suppliers.



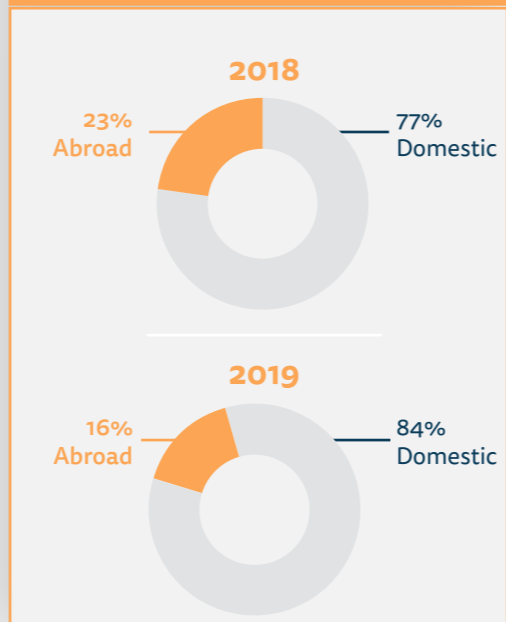
**Transportation of Erosive Products with ADR Tankers**

We received the first design approval certificate from TSE (Turkish Standards Institution) by producing ISO Tank that is Metal on the outside and covered in the inside which has never been produced before in Turkey under the control of TSE, with an aim to enhance safety in the transportation of the products we produce. Thanks to ISO Tanks whose production has been completed by the end of 2019 and is now being used, our products are transported with vehicles suitable to ADR. With this pioneering application we developed, we have the justified pride of the contribution we made to our country.

**RAW MATERIAL PURCHASING RATES (%)**



**LOCAL SUPPLY RATES IN INDIRECT PURCHASING ORDERS**



We conduct regular optimization studies in our logistic operations. Thus, this enables us to deliver our products to customers on time and with the least amount of environmental impact. We pay respect to the business continuity of our customers and help goods, services and information be efficient, safe and compliant with the legislation in our production and consumption points.

**CUSTOMER SATISFACTION AND PRODUCT INFORMATION**

Our primary aspect is to offer customer satisfaction. Customer satisfaction surveys, we organize every 2 years, is one of our key guides in this area. We aim to renew this survey study, which enables our customers to evaluate our performance in many areas from environmental performance to product information, in 2020.

We embrace any feedback we receive during the Customer Relations Management process performed by the Customer Services Directorate as an opportunity for constant development, examine them eloquently and offer solutions. Regarding all complaints, we notify our customer within 24 hours regarding that we received his/her demand and it will be evaluated. We share monthly customer complaint reports with the management and related departments and evaluate the return speed to complaints and subjects that cause complaints through quality meetings organized on a monthly basis.

We work to help our customers receive the right and understandable information about our products. All of our products have labels on them, proving that they comply with both local and international standards. Before sales, we deliver a TDS that contains product information, product specifications and an MSDS (Safety Information Form) to

our customer. You may access TDS and MSDS documentation through our website: [www.akkim.com.tr](http://www.akkim.com.tr) Moreover, we send an analysis report for the product and Safety Information Card in every delivery.

**COMPLIANCE WITH INTERNATIONAL AND LOCAL REGULATIONS**

While planning our production processes and products at Ak-Kim, we comply with all legal regulations that are in force in the regions we operate, and meticulously follow all local and global sectoral standards.

With our subsidiary, Dincox Handels GmbH, we completed all REACH records of all of our products exported to Europe according to the European Union REACH Chemicals Regulation. We provide supply chain information flow according to SVCH (Substance Very High Concern) as demanded by our customers.

We initiated the preparations to monitor the records of our raw materials and our products that we produced within legal time frames following the transition to Turkish REACH KKDİK - Evaluation and Monitoring of Chemicals Reports, HK Regulation. We will complete our obligation process within the legal time frame.

Dincox Handels GmbH has an "F" status AEO (Certified Obligator) Certificate. This certificate proves that all supply chain complies with the safety conditions from factory field to the delivery to the end-user.

Based on the European Agreement Concerning the International Carriage of Dangerous Goods by Road that was put into force in 2013, we received Dangerous Goods Certificate of Activity in 2014. We control the compliance of the transporters we are working with, with the regulation through audits we make.

We have been implementing ADR's rules of the European Agreement concerning the International Carriage of Dangerous Goods by Road as early as 1997, whereas many articles of the Directive started to be implemented in Turkey in 2014.



Certifications / compliance regarding our products:

Sector	Certification / Compliances
Textile	   
Water Treatment & Paper Chemicals	    
Inorganic Coagulants	    
Construction Chemicals	 
Basic Chemicals Organic Chemicals Sulfur Compounds Per Chemicals Chlorinated Compounds	     
Ultrafiltration Membrane	  

**Together for Sustainability**

TfS (Together for Sustainability) founded in 2011 is a 23-member initiative that operates in the chemistry sector. Evaluations and audits at TfS, which focuses on sustainability practices in the supply chain of the chemistry industry, are managed according to a series of criteria. The results of evaluation and audits are shared among all TfS members.

TfS Sustainable Supplier Audit conducted in 2019 with a demand

from a customer has been completed in every location at Ak-Kim. Findings revealed during this process found their place in our strategic business plans.

TfS members: Akzonobel, Arkema, Azelis, BASF, Bayer, Borealis, Brenntag, Clariant, Corteva, Covestro, DSM, Eastman, Evonik, Henkel, ICL, IFF, Lanxess, Merck, Sanofi, Sika, Solvay, Syngenta, UPM, Wacker, Wan-Hua



**Award from Ecovadis!**

We are awarded the Silver Recognition Level in global supply chain sustainability evaluation conducted by Ecovadis. We ranked in the 22% among the suppliers in all categories and in the top 10% in the chemistry sector.

**What is Ecovadis?**

EcoVadis is an international platform that evaluates sustainable suppliers. EcoVadis evaluation includes 21 criteria under the captions of Environment, Social, Ethical and Sustainable Purchasing. These criteria are based on UN Global Compact, Labor Organization (ILO) Contract, Global Reporting Initiative (GRI) Standards, ISO 26000 Social Responsibility Standard, Coalition for Economically Responsible Economies (CERES) Roadmap and the UN Guiding Principles on Business and Human Right.



**We Obtained Ts 13723 - Ultrafiltration Modules Certificate**

Using its existence and synergy in the water treatment sector, Ak-Kim received Turkey's the one and only "TS 13723 - Ultrafiltration Models certificate" as of August 7th, 2018 for its ultrafiltration membrane module it initiated in 2016 and in which it is again Turkey's one and only producer.

**BlueSign System Partner**

Bluesign® that includes chemical suppliers, textile manufacturers and big brands and retailers with a holistic approach is one of the standards that help the textile industry move truly towards sustainability goals. It encompasses sustainability parameters such as environment and resource efficiency, product synthesis processes and life cycles, in addition to consumer safety. We successfully completed the Bluesign audit in December 2019. We received the approval to be a system partner.

**What is its difference from other standards?**

Different from other standards, it encompasses sustainability parameters such as environment and resource efficiency, product synthesis processes and life cycles, in addition to consumer safety. It accepts that to do more with less resources are a key to make sustainability real.





**RESPECT FOR HUMAN IS OUR CHEMISTRY**



Respect for human beings is a fundamental principle that shapes the attitudes of Ak-Kim at all human resources processes. We bestow working rights practices that are beyond the requirements of laws and international standards. We aim to attract and keep talented employees that embrace common values. We contribute to the constant development of employees through career planning and talent management practices designed based on their needs. We encourage the participation of our employees to decision making processes, support the productivity and creativity talent of our employees and protect employee commitment and motivation.

**EMPLOYEE PROFILE**

Employees by Location	2018	2019
Yalova	481	488
İstanbul	50	49
Dilovası	18	16
Osmaniye	8	8

Employees by Age Group	2018	2019
18-30	160	148
31-45	328	343
46-65	68	69
65+	1	1

**EQUAL OPPORTUNITIES AND DIVERSITY**

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. Ak-Kim employees are responsible for sustaining a respectful, fair and equal business environment.

Ak-Kim prevents any child labor and forced and compulsory labor practices. 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. At the same time, we pay respect to the right of being a member of organizations and to do collective bargaining agreements.

Ak-Kim acts in compliance with human rights, and in accordance it does not discriminate on the basis of race, gender, political tendencies, religion or sect in human resources processes, nor does it engage in acts that might be considered discriminating. We pay equal fees to all employees who perform the same duties, regardless of their personal characteristics. There are no differences based on gender in remuneration.

We believe that equal participation to employment is one of the determinants in the progress of a society and encourage women employees to participate in work force. We focus on increasing the female employment rate in recruitments.

"There are, for sure, individuals in a group that have different perspectives. The way of making these differences an advantage is to adopt the awareness of "us" and act from that awareness. Showing a real example to team spirit, we created Ak-Kim Campus project which offers two training, one practicing, one innovation and one resting areas."

**Seda Yılmaz Uyar**  
Indirect Purchasing Senior Officer

**CAREER PLANNING AND TALENT MANAGEMENT**

Human Resources and Management Systems Directorate manages employment and occupation processes. We use objective tools and methods in the employment process and act according to "the Right Person for the Right Job" principle. During employment and occupation process, our goal is to attract nominees that are compliant to the corporate culture and values, having the necessary knowledge, talent, experience and qualifications required for the job and position, and those that will carry Ak-Kim to the future, and to reach the company strategies and objectives.

There is a business family and a grading system available at Ak-Kim which aims to invest in human beings and monitor personal development. The qualifications of employees working in each business family are defined as technical and behavioral. Professional level at employees are identified, keeping in mind the career planning of the person, organizational requirements of the company and the potentials of employees. In order to identify the development areas of individuals, we benefit from holistic and systematic evaluation tools such as Assessment Center practices, Leadership Potential Inventory, Personality Inventory and 360° Evaluation coordinated by Akkök Group in general. An annual training plan is established in line with the needs of employees identified according to these evaluations.

While planning the training, demands received from employees remain in the center of these studies. Training demands received from employees or executives except for the training plan during the year are also considered. When necessary, it is possible to organize unplanned trainings. In order to contribute to the strengthening of the occupational and personal qualifications of our employees, we performed 22,295 hours of training in 2018 and 24,856 hours of training in 2019.

Employee Trainings - Number of Participants	2018	2019
Operational Level	330	329
Professional Level	252	254
Female	113	123
Male	470	460
Employee Trainings - Total Hour	22,295	24,856
Operational Level	10,007	11,436
Professional Level	12,287	13,421
Female	5,537	6,138
Male	16,757	18,719

We aim to be an employer that is preferred not only to work in but also for the development opportunities it offers. In this context, we initiated Ak-Kim Campus application in 2019. Over 100 trainings were offered in Technical Faculty, Sales and Leadership Faculties established under the umbrella of Campus.

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. Results achieved through the Performance Management System in which goals are identified through quarterly evaluation form inputs for remuneration, bonus system, training and development, and career planning and talent management processes. In the reporting period, all Ak-Kim employees are subject to a performance evaluation system.

"Respect for human at Ak-Kim means to care about the work-life balance of employees, to give value to and to support the opinions and demands of employees."

**Gizem Gürgür**  
Process Design Engineer

We increased our female employment rate to

**27%**  
in 2019 which was

**22%** in 2017.

### Ak-Kim's Brand-New Ak-Kim Campus

Taking its root from the idea of constant development, our main goal is to help our employees recognize their knowledge and talents, to identify their areas open to development and to meet these requirements through suitable development programs. Based on this goal, in 2019, we initiated Ak-Kim Campus physical building under the motto: "to be the best workplace not only to work in, but also to improve oneself."

Through its faculties, Ak-Kim Campus gives the opportunity to employees to enhance their visions and strengthen their personal and occupational talents, and serves to the goal of

making their qualifications suitable to the strategic goals of Ak-Kim.

We prepare the contents of the trainings and announce them with a campus training program on a monthly basis, considering the personal development areas of professional- and operational-level employees. We also include into the training plans we prepare the ethical, management systems and HSE trainings that employees should receive both legally and according to the procedures. We take support from external trainers and almost 50 internal trainers we trained in these trainings. Internal trainings we trained under the idea of "those who know the best tells" contribute to our employees especially in technical fields.



### Internship and Scholarship Opportunities at Ak-Kim

Ak-Kim is offering intern positions and scholars to university students. 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. In this context, Ak-Kim offered intern positions to 158 students in the reporting period. Moreover, a 9-month program called "Ak-Kim Good Future" Long-Term Intern Program that gives opportunity to university students that are young potential talents to work at partial-term in the company was initiated in 2019. 9 long-term university interns were employed in 2019 with this program.

Ak-Kim Scholarship Program has been conducted to contribute to the education of successful university students who had difficulty in living due to economic setbacks with the support of volunteer employees since 1996 within the scope of corporate citizenship approach. Based on this program, in 2018-2019, scholarship opportunity is provided to 97 students.



### EMPLOYEE ENGAGEMENT

The "Idea Workshop" application that encompasses all kinds of creative ideas is managed at Ak-Kim, with an aim to facilitate/ accelerate the business, develop quality, increase capacity, enhance efficiency, reduce environmental impact, increase customer satisfaction, and to contribute to company's vision, mission and values. This system based on gaining scores from the suggestions put into practice and selecting a gift with the points accumulated, works to add value to the business processes with the participation of employees. Within this Idea Workshop practice, we evaluated 524 suggestions and put into practice 216 of them during the reporting period. We saved a total of 51,000 USD thanks to the good practices we put into force thanks to the ideas of our employees during the reporting system.

Employee Suggestions	2018	2019
Number of suggestions submitted	140	384
Number of suggestions put into practice	76	140

### First Prize to Ak-Kim by PERYÖN

In PERYÖN Human Value Awards which supports and shares innovative, creative and successful practices in human resources management, Ak-Kim ranked 1st in the "Distinctive HR Projects Innovation Culture Development" category. PERYÖN Human Value Awards has been organized for a decade with an aim to introduce innovative, creative and successful practices in human resources, to win studies that can be set as an example to the sector, and to encourage and support learning from one another process.



## Ak-Kim Employee Rewarding Practices

At Ak-Kim, there is plenty of rewarding processes applied to ensure employees participate in management processes with their ideas, to encourage them to reveal their creative ideas and to increase their motivation by doing so. All rewarding processes were reviewed in order to generalize the rewarding and appreciation culture and gathered under a single umbrella, called Ak-Kim's Employees on Top. Award categories for Ak-Kim Employees on Top:

- Developing Cooperation Sustainability
- Operational Excellence
- Innovation
- Idea Workshop Champions
- OHS Personnel of the Year
- Special Prize

**Plates:** It includes the appreciation of employees who have been serving in Ak-Kim for long years. Employees who have been working for 5 years and more are rewarded with a seniority plate every 5 years. Moreover, Ak-Kim presents a plate for leaving by organizing a thank-you organization for employees who retire and all employees who leave except for exceptional conditions.

**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:** It aims to reward employees who contribute to enhance profitability and customer and employee satisfaction, to the corporate culture, ethical values and culture, and through achievements that differentiate and are worthy of awards.

**Executive's Appreciation Basket Award:** Employees in a team can reward their manager with an appreciation basket because of his/her strives, a work he/she had done or any contribution to the institution, thus reinforcing these attitudes. An appreciation basket of a manager includes monetary and moral awards. Executives can select among awards such as a paid leave, working from home, flexible work based on the interest of employees.

**R&D Success Award:** In order to encourage academic studies conducted in the R&D, every national notification, article and poster published by the employee is awarded as follows:

**OHS Personnel of the Month:** OHS Personnel of the Month is selected every month by balloting among employees after filling and submitting the "OHS Personnel of the Month Suggestion Form" of employees.



## Idea Workshop

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

**Model OHS Group:** Model OHS Group is selected once in every 3 months. Compliance of the group with OHS rules in the field they are responsible for is identified by the OHS Committee according to the criteria such as participation in OHS activities.



**OHS Personnel of the Year:** He/she is selected among OHS Personnel of the Month selected every month at OHS Committee at the end of the year.

**Thank-you Cards:** This is a system of appreciation formed to encourage managers to thank their employees. Executives can thanks to employees digitally or through a printed card.

**New Baby Gift:** Ak-Kim presents a baby blanket and Bonnyfood as a new baby gift to employees who have newborns.



## EMPLOYEE SATISFACTION AND COMMITMENT

We consider employee satisfaction and commitment as one of the fundamental factors that carry our company forward. Based on our competent and committed employees' strategy, we perform many activities to increase employee satisfaction and commitment to make Ak-Kim "Great Place to Work" and to be included in the best employers' list. In this context, we are applying the "Great Place to Work" survey model to measure employee satisfaction. Great Place to Work is an independent management tool that takes the picture of the current condition with "Trust Index" by focusing on "Reliability," "Respect," "Equity," "Pride," and "Team Spirit" of work life. It expresses a working environment where employees are committed, they feel proud

to work and they work in complete harmony and cooperation.

In the frame of Great Place to Work performed in 2018, all of our HR practices are compared with "Top 27 employers of 2018 and those participated in benchmarking among other participatory companies" in Culture Audit Survey to which we are entitled to participate thanks to our Trust Index score. According to the results of this comparison study, Ak-Kim is entitled to receive certification by Great Place to Work Assessment Commission. We aim to continue improving and developing these certified HR practices as part of Ak-Kim's innovation culture.

An employee satisfaction survey is conducted once in two years regularly. In the beginnings of 2019 "Ak-Kim is My Home Project Group" is established with the participation of volunteer employees



from different departments after the survey in order to carry Ak-Kim among the top employers by increasing employee satisfaction; the survey results were examined with the group, the questions that have scores were analysed, root causes for low scoring were investigated and the necessary action plans for improvement were created. The group submitted this action plan to senior management, received the necessary approvals and the actions were taken with the support of senior management. Action plans mainly include the clarification and development of equality, communication and some HR practices (remuneration management, appreciation and rewarding system, promotion and assignment criteria, talent management, premium systems, performance assessment, processes such as overtime and work leave, training, leadership development) of employees and creating standardization. The necessary actions were taken considering these expectations of employees and improvements were conducted throughout 2019. A volunteer team and all employees monitored this action plan periodically. The action plan will continue in 2020.

Employees who have been working for 5 years and the multiples are rewarded with a seniority plaque with an aim to appreciate employees who have been serving in Ak-Kim for long years. A retirement plaque is offered to employees who retire and have been serving for long years in order to thank and appreciate them.

Ak-Kim offers additional facilities to all employees such private health insurance, advance payment for health and education needs, social aids to enhance employee satisfaction, commitment and productivity. Social aids include marriage, children, birth/death, fuel, food and clothing aids.

**EMPLOYEE COMMUNICATION**

We organize "Conversation with the General Manager" meetings and events every 3 months where the working conditions of employees are discussed transparently. In addition, we arrange cocktails 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). A team consisting of 20 employees consisting of ASEK volunteers is conducting events according to ASEK Annual Event Survey. 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.

Another internal communication tool is Ak-Kim Portal. Ak-Kim Portal containing information on employee birthdays,

weddings, births, new employees, resignations, 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.

**EMPLOYEE HAPPINESS**

We believe in the importance of creating environments and activities in which employees can experience joyful moments during the time left out of their business life. In parallel, we pay interest to the activities where we can come together with all employees. In these activities, we prepare happy environments where our employees can have joyful moments with their colleagues and families. In this context, we organize New Year dinner parties, Ramadan dinners and picnics. Moreover, we organize a Family Day event so that spouses, children, parents of our employees experience his/her working environment. In addition to all these applications, we support activities related to the area of interests of our employees, and encourage them in this regard.

**AkMotel Sports Hall and Aksera**

In the reporting period, sports equipment available in a sports hall at AkMotel are increased in number and renewed so that more people can benefit. Through this application, we created a greenhouse environment within the borders of AkMotel and started to grow plants from seeds, saplings and steel. We anticipate 3,000 - 3,500 items of plant production per year in this greenhouse which offers both to our employees and their families the opportunity to produce voluntarily.

**Face to Face**

Face to Face application is put into practice with an aim to strengthen cooperation, to enable structured feedback and to develop a feedback culture. This application helps employees and executives better know each other.



"Team spirit always brings in a reliable environment, a peaceful environment and success. I truly experience this both with my sales team in the sales department which is my own area of expertise and in our sailing team which I am captain for. I believe team work will always bring success."

**Can İğdeli**  
Sales Specialist (Basic Chemicals)



### Sponsorship to Employees

We give equipment support to our employees for the races they attend and trainings and offer them financial support to attend the races. Thus, we encourage other employees to act similarly.

Olçay Batu Coşkuner who signed under many achievements in the races he attended under the sponsorship of Ak-Kim is entitled to get a special "Oscar" participation certificate due to his type-1 diabetes with insulin injection and celiac disease he has been living with for 26 years.

İtir Uysal is entitled to wear national team jersey in the Balkan Championship that is organized in Istanbul on August 4th after becoming a champion in the 25-29 age group in Eğirdir Triathlon organized by Turkish Triathlon Federation on July 14th. Ranking second at Kartal Balkan Triathlon Championship she attended under national team jersey, İtir Uysal completed Ironman 70.3 race (1,9 km of swimming, 90 km of cycling, 21 km of running) she attended in Poland in 5 hours 30 minutes.



### Ak-Kim Sailing Team

As yacht sailing is a team sport, its contribution to internal communication and teamwork is great. Thus, as Ak-Kim, we started sailing sports in April 2017 and received basic training throughout the year. Our sailing team consists of 8 members and those who wish are welcome to join the exercises. Our sailing team ranked 1st in Naval Academy Yacht Race in season 2018, 3rd in Olympos Regatta Yacht Race, 3rd in 33rd Year Admiral Cup Yacht Race and 3rd in Navy Cup Yacht Race in season 2019.



### Ak-Kim Football Team

Our football team established after the elections among volunteer participants in 2019 is competing at Yalova Businesses League.



### OCCUPATIONAL HEALTH AND SAFETY

Our fundamental priority is to take necessary precautions in order to eliminate health and safety risks or to minimize these risks for our employees and our stakeholders. We ceaselessly improve our OHS performance through active practices such as trainings, drills and on-site audits to raise awareness on health and safety.

We are conscious of that accidents and losses may only be prevented by the management approach and direct and joint responsibility of the employees. Thus, we include our employees

Occupational Health and Safety Trainings	2018	2019
OHS training hour (hour)	11,327	11,720
Number of employees who received training (person)	502	519

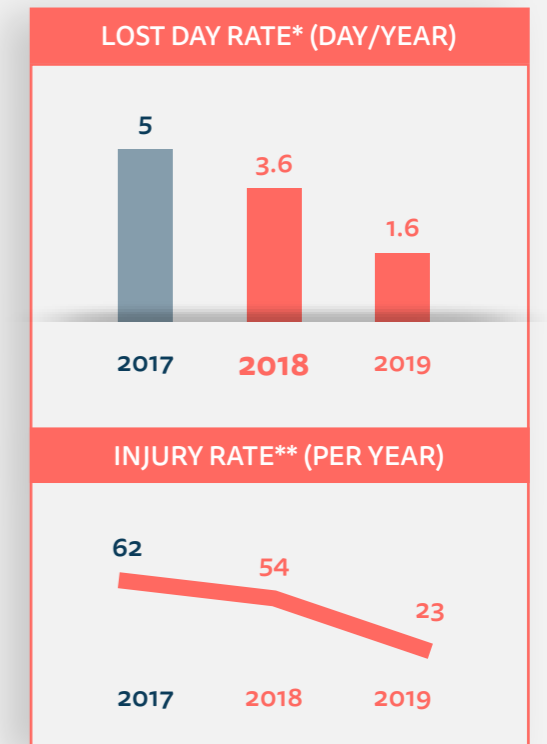
With the implementation of the Subcontractor Management System, which was developed in order to monitor subcontractors' compliance with the company rules, legal regulations and the performance of the business, safer working environments were provided. Monthly meetings were organized to increase awareness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

OHS Committees work with the purpose of reducing occupational health and safety risks at operation sites and improving the performance in this area. 24 members, 2 of which are employee representatives, are assigned in 12 OHS Committees at Ak-Kim. The committees carry out their activities in compliance with the requirements determined by relevant laws.

In order to raise awareness of the personnel on Occupational Health and Safety, employees who meet the selection criteria through on-site doctor view and OHS Committee decision are rewarded every month. In addition, the "Model OHS Team" is selected among the units every three months.

The protection of employees' health is one of the leading subjects Ak-Kim monitor sensitively as required for the sector it operates in. 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.

to ceaseless improvement studies we perform in order to eliminate risks that pose a threat to occupational health and safety. Employees show the utmost effort and diligence to comply with existing occupational safety rules and processes. We perform OHS training activities to keep OHS information up to date and to raise awareness. Our training activities include not only Ak-Kim employees but contractors' employees as well. In this context, we have offered a total of over 20,000 hours of OHS training to Ak-Kim employees in the reporting period.



\* Lost Day Rate (LDR) Accident Severity Rate (per 1,000,000 working hours)

\*\* Injury Rate Lost Time Injury Frequency Rate (per 1,000,000 work hours)

Ak-Kim pays attention to the health and safety of subcontractors' employees as well, as much as that of its own employees. Subcontractor Management System is applied in order to monitor subcontractors' compliance with the company rules, legal regulations and the performance of the business. In this context, monthly meetings were organized to increase awareness of health, safety and environmental issues.

In order to generalize OHS awareness in subcontractors, OHS trainings are performed to encompass subcontractor employees as well. In the reporting period, 539 subcontractor employees received 8,624 hours of OHS training.

Thanks to Ak-Kim's diligent and preventive approach in occupational health and safety, its performance is in an improvement trend. The lost day rate which was 62 days/year as of the end of the previous reporting period retreated to 23 days/year by the end of 2019. The injury rate which was 3.6 in 2018 retreated to 1.6 in 2019.

**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.

Ak-Kim's General Manager is responsible for managing the emergency. In his absence, Factory and Investment Director shall be responsible. In the absence of a Factory and Investment Director, Human Resources and Management Systems Director manages the emergency.

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.

In 2018 and 2019, a total of 30 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.



**BSC Membership**

We are now a member of the London-based British Safety Council (BSC) which offers several services such as training, consultancy and auditing that supports the best practices in different countries and plays an active role in the development and approval processes of regulations and standards related to health and safety.

**BSC Five Star Audit**

We are now subject to BSC Five Star audit in order to compare ourselves with the best practices in the world, enhance the trust of our stakeholders in us and to identify the areas open to improvement for a sustainable management system.

**What is the BSC Five Star Audit?**

BSC 5 Star Occupational Health and Safety Audit System that covers 5 main captions including policy and organization, strategy and planning, on-site practices, performance management and assessment and review, and 66 sub-captions includes the detailed analyses of management system and practices of organizations. In addition to these captions, evaluation criteria include leadership, senior management commitment and sustainability as well.

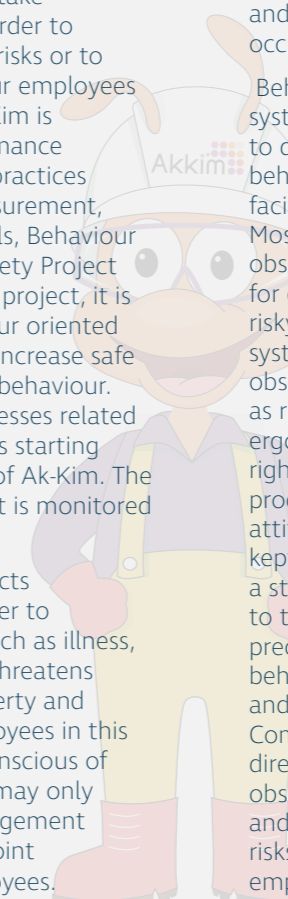
**3D: STOP, THINK, ACT Behaviour-oriented Occupational Safety Project**

At 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, Behaviour Oriented Occupational Safety Project (3D) accordingly. With this project, it is aimed to improve behaviour oriented organizational culture, to increase safe behaviour, to reduce risky behaviour. 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.

Behaviour oriented accident prevention system (3D) is developed with an aim to detect noncompliance to prevent behaviour-oriented accidents in the facility and put into practice in 2019. Most of the employees received observer training and are responsible for observing other employees, detect risky behaviours and report to the system. During these observations, observers observed behaviours such as risk avoidance, acting in line with ergonomics, selecting and using the right tools, applying the necessary procedures, PPE utilization, and attitudes in cleaning and order. Records kept in the system are assessed through a statistical analysis, forming an input to take technical and organizational precautions to correct significant behavioural mistakes. 3D Coordinator and Eliminating the Obstacles Committee consisting of related directorates perform studies to lead the observers, examine the observations, and to produce solutions to minimize risks by identifying risky areas for employees through analysing the data.



The products we produce at Ak-Kim by keeping in mind the highest quality standards are used as raw materials in over 40 products in different sectors from agriculture to textile, construction to husbandry and cosmetics. Our goal is to create value for the whole value chain from suppliers to end-users while producing our products and services. Bearing in mind the wide spheres of influence we have, we work to offer sustainable benefit to all stakeholders.



Our products and final areas of use	Chlorine	Hydroxide	Sodium Hypochlorite	Hydrochloric Acid	Ferric III Chloride	Polyaluminium Chloride	Aluminium Sulphate	Sodium Metabisulphite	Dimethylamine Hydrochloride	Trimethylamine Hydrochloride	Hydrogen Peroxide	Sodium Percarbonate	Ammonium Persulphate	Potassium Persulphate	Sodium Persulphate	Dimethylacetamide	Dimethylformamide	Methylamines	Acetic Acid	Ammonia	Akesbo	Plaslab	Textile Chemicals	Paper Chemicals	Water Chemicals	Inorganic Coagulants	Construction Chemicals	Membran	
Wooden furniture		✓																						✓	✓	✓			
Gold,silver,copper jewelry	✓		✓	✓			✓																		✓	✓	✓		
Antibiotic																✓									✓	✓	✓		
Automotive (itself, tires, seats)	✓	✓	✓	✓	✓	✓	✓	✓									✓								✓	✓	✓		
Elevator			✓																						✓	✓	✓		
Asphalt																									✓	✓	✓	✓	
Sunflower oil,olive oil		✓																							✓	✓	✓		
Bathroom - kitchen cleaners	✓	✓	✓								✓														✓	✓	✓		
Petrol,diesel oil																									✓	✓	✓		
All standard concretes and Shotcrete	✓						✓																		✓	✓	✓	✓	
Plant, vegetable (fertilizer and pesticide)																✓	✓	✓							✓	✓	✓		
Paint and Coatings	✓															✓	✓								✓	✓	✓	✓	
Cement																									✓	✓	✓	✓	
Mine and Tunnel Infrastructure Applications																									✓	✓	✓	✓	
Glassware, glasses, pitchers ...	✓	✓																							✓	✓	✓		
White goods	✓		✓	✓	✓	✓																			✓	✓	✓		
Laundry Bleach	✓	✓																							✓	✓	✓		
Laundry-dishwasher detergent	✓	✓									✓	✓													✓	✓	✓		
Bags, shoes, belts																	✓								✓	✓	✓		
Electricity	✓	✓	✓	✓	✓	✓																			✓	✓	✓		
Electricity poles			✓																						✓	✓	✓		
Ship rope, anchor			✓																						✓	✓	✓		
Pool	✓	✓	✓	✓	✓	✓	✓	✓			✓														✓	✓	✓		
All kinds of paper products		✓	✓				✓				✓		✓	✓											✓	✓	✓	✓	

Our products and final areas of use	Chlorine	Hydroxide	Sodium Hypochlorite	Hydrochloric Acid	Ferric III Chloride	Polyaluminium Chloride	Aluminium Sulphate	Sodium Metabisulphite	Dimethylamine Hydrochloride	Trimethylamine Hydrochloride	Hydrogen Peroxide	Sodium Percarbonate	Ammonium Persulphate	Potassium Persulphate	Sodium Persulphate	Dimethylacetamide	Dimethylformamide	Methylamines	Acetic Acid	Ammonia	Akesbo	Plaslab	Textile Chemicals	Paper Chemicals	Water Chemicals	Inorganic Coagulants	Construction Chemicals	Membran	
All kinds of textile products		✓	✓					✓			✓							✓						✓	✓	✓	✓		
Hose																					✓				✓	✓	✓		
Match																									✓	✓	✓		
Chemical intermediates																									✓	✓	✓		
Sun-dried tomatoes, tomatoes, cherries								✓																	✓	✓	✓		
Can drinks		✓											✓												✓	✓	✓		
Fruit juices		✓						✓			✓														✓	✓	✓		
Parquet		✓		✓																					✓	✓	✓		
Soap		✓																							✓	✓	✓		
Hair dye, lightening													✓	✓	✓										✓	✓	✓		
Spandex knee brace, wristband, corset																✓									✓	✓	✓		
Stretch film																					✓				✓	✓	✓		
Water		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓												✓	✓	✓		
Faux leather sofa, jacket																		✓							✓	✓	✓		
Milk		✓																							✓	✓	✓		
Dairy products (cheese, milk powder, buttermilk)		✓						✓																	✓	✓	✓		
Sugar medicine									✓																✓	✓	✓		
Sugar, starch, bakery products		✓	✓	✓				✓			✓														✓	✓	✓		
Chicken					✓	✓	✓																		✓	✓	✓		
Wire, cable				✓																					✓	✓	✓		
Pickles, vinegar, canned food																			✓						✓	✓	✓		
Glue, adhesive		✓																	✓						✓	✓	✓		
Bed				✓													✓							✓	✓	✓			
Roadside barriers				✓																					✓	✓	✓		
Olive		✓																							✓	✓	✓		

# GRI CONTENT INDEX



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102-46	About the Report p.3
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102-48	There are no restatements of information.
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102-52	Annually.
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102-56	No external assurance.

\*For the Materiality Disclosure Service, GRI Services reviewed that the GRI content index clearly presented and the references for Disclosures 102-40 to 102-49 align with the appropriate sections in the body of the report.\*

<b>Material Issues</b>		
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GRI 203: Indirect Economic Impacts 2018	203-1 Infrastructure investments and services supported	Water Management p.39
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<b>Anti-corruption</b>		
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GRI 205: Anti-corruption 2018	205-1 Operations assessed for risks related to corruption	Anti-corruption p.19
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<b>Anti-competitive Behavior</b>		
GRI 103: Management Approach 2018	103-1 Explanation of the material topic and its boundary	Sustainability at Ak-Kim p.20; Governance at Ak-Kim p.18
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GRI 206: Anti-competitive Behavior 2018	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	No legal actions pending or completed during the reporting period.
<b>Energy Management</b>		
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<b>Materials</b>		
GRI 103: Management Approach 2018	103-1 Explanation of the material topic and its boundary	Sustainability at Ak-Kim p.20; Solid Waste Management p.40
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GRI 301: Materials 2018	301-3 Reclaimed products and their packaging materials	Our Contribution to Circular Economy p.40
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GRI 103: Management Approach 2018	103-1 Explanation of the material topic and its boundary	Sustainability at Ak-Kim p.20; Water Management p.37-38; Waste Water Recovery p.38-39
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GRI 303: Water 2018	303-1 Water withdrawal by source	Water Management p.37-38
	303-3 Water recycled and reused	Waste Water Recovery p.38-39

Material Issues		
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<b>Solid Waste and Waste Water Management</b>		
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	103-3 Evaluation of the management approach	Waste Water Recovery p.38-39; Solid Waste Management p.40
GRI 306: Effluents and Waste 2018	306-1 Water discharge by quality and destination	Waste Water Recovery p.39
	306-2 Waste by type and disposal method	Solid Waste Management p.39
<b>Employment</b>		
GRI 103: Management Approach 2018	103-1 Explanation of the material topic and its boundary	Sustainability at Ak-Kim p.20; Respect for Human lies in our Chemistry p.58
	103-2 The management approach and its components	Respect for Human lies in our Chemistry p.58
	103-3 Evaluation of the management approach	Respect for Human lies in our Chemistry p.58
GRI 401: Employment 2018	401-1 New employee hires and employee turnover	143 employees hired during the reporting period. Employee turnover rates are 8.4% and 8% for years 2018 and 2019 respectively.
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	We have additional payments such as bonuses, fuel aid, holiday money, annual leave allowance, social assistance payments, premium and private health insurance applications.
	401-3 Parental leave	9 female and 26 male employees in 2018; 6 female and 28 male employees used parental leave in 2018 and 2019 respectively. Return to work rates are 100% for male employees; 67% and 83.3% for years 2018 and 2019.
<b>Occupational Health and Safety</b>		
GRI 103: Management Approach 2018	103-1 Explanation of the material topic and its boundary	Sustainability at Ak-Kim p.20; Occupational Health and Safety p.67
	103-2 The management approach and its components	Occupational Health and Safety p.67
	103-3 Evaluation of the management approach	Occupational Health and Safety p.67
GRI 403: Occupational Health and Safety 2018	403-1 Workers representation in formal joint management-worker health and safety committees	Occupational Health and Safety p.69
	403-2 Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	Occupational Health and Safety p.69
<b>Human Rights Assessment</b>		
GRI 103: Management Approach 2018	103-1 Explanation of the material topic and its boundary	Sustainability at Ak-Kim p.20; Equal Opportunities and Diversity p.58
	103-2 The management approach and its components	Equal Opportunities and Diversity p.58
	103-3 Evaluation of the management approach	Equal Opportunities and Diversity p.58
GRI 412: Human Rights 2018	412-2 Employee training on human rights policies or procedures	Equal Opportunities and Diversity p.58
<b>Customer Health and Safety</b>		
GRI 103: Management Approach 2018	103-1 Explanation of the material topic and its boundary	Sustainability at Ak-Kim p.20; Compliance with International and Local Regulations p.53-54
	103-2 The management approach and its components	Compliance with International and Local Regulations p.53-54
	103-3 Evaluation of the management approach	Compliance with International and Local Regulations p.53-54
GRI 416: Customer Health and Safety 2018	416-1 Assessment of the health and safety impacts of product and service categories	Compliance with International and Local Regulations p.53-54

**United Nations Global Compact Communication on Progress**

Human Rights	
Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights.	p.18, 58
Principle 2: Businesses should make sure that they are not complicit in human rights abuses.	p.18, 58
Labor Standards	
Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	p.58
Principle 4: Businesses should uphold the elimination of all forms of forced and compulsory labor.	p.58
Principle 5: Businesses should uphold the effective abolition of child labor.	p.58
Principle 6: Businesses should uphold the elimination of discrimination in respect of employment and occupation.	p.58
Environment	
Principle 7: Businesses should support a precautionary approach to environmental challenges.	p.36-41
Principle 8: Businesses should undertake initiatives to promote greater environmental responsibility.	p.36-41
Principle 9: Businesses should encourage the development and diffusion of environmentally friendly technologies.	p.36-41
Anti-Corruptio	
Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.	p.19


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