



AKADEMİ  
ÇEVRE



# 2020 **INTEGRATED** REPORT



# Table of Contents

ABOUT THE REPORT      Page 5  
THE MESSAGE OF THE  
SENIOR MANAGEMENT      Page 6



01  
About  
Akademi Çevre  
Page 10

02  
Akademi Çevre  
Business Model  
  
Page 30

03  
Natural Capital  
  
Page 48

04  
Manufactured  
Capital  
  
Page 80

05  
Intellectual  
Capital  
  
Page 88

06  
Human Capital  
  
Page 98

07  
Social Capital  
  
Page 106

08  
Financial  
Capital  
  
Page 122

09  
Appendix  
  
Page 126





# ABOUT THE REPORT

**A**s Akademi Çevre, we present our performance in economic, environmental and social areas in an integrated manner with our Integrated Report covering the period from January 1, 2018 to December 31, 2020.

With this report, we address, analyze and report to our stakeholders the current outputs of our activities, our future plans and targets, within the scope of the capital classification

proposed by the International Integrated Reporting Council (IIRC) with an integrated perspective. We plan to publish our Integrated Report, which we have prepared in accordance with the International Integrated Reporting Framework recommended by the IIRC and the Core Option of GRI Reporting Guidelines published by the Global Reporting Initiative (GRI), annually in the coming years.



# THE MESSAGE OF THE SENIOR MANAGEMENT

## Message from the Chairman of the Board of Directors of Akademi Çevre

Due to its contribution to sustainable development and circular economy, Waste Management has become an indispensable part of today's business models and our individual lives. Akademi Çevre considers its responsibility to the environment, to produce solutions, to increase its business volume and to create social value among its sustainability goals. I am happy to present these goals to you, our esteemed stakeholders, through our Integrated Report, in which we explain our sustainability approach, value creation model and capitals of our company based on international standards.

2020 was a year when social and economic structures were shaken by the pandemic. As Akademi Çevre, we are proud to have successfully passed through this challenging process. Another awareness created by the pandemic in our lives has been the precautions to be taken in the context of Waste Management throughout the climate crisis. These days, when we are confined to homes, more waste generation is observed and the disposal of these wastes has started to become an important issue. Waste Management, which forms the basis of our business

model, has been an issue we have been trying to raise awareness about for many years. In line with the increasing awareness, the Waste Management approach and practices have become an important part of the infrastructures that support the environment and societies.

As Akademi Çevre, we produce circular economy solutions, contribute to the protection of natural resources, and support the low-carbon economy. In line with our sustainability approach, we will continue to carry out these activities with an effort to create social, economic and environmental value. In this process, we are aware that the contribution of Akademi Çevre employees, our stakeholders and all our business partners is important in the success of our activities. In this report, you will witness the operational activities, business model and sustainability journey of our company. I would like to thank all our stakeholders who contributed to all these processes for their contributions.

Kind regards,  
Uğur IŞIK  
Chairman of the Board





## The Message of the CEO

Dear Stakeholders,

In today's world, where the negative impacts of the climate change are increasing and turned out to be crisis that requires action, sustainability and sustainable growth have become one of the priority issues of the businesses and individuals. The awareness on Waste Management and circular economy, the significance of which has not been sufficiently comprehended in the past years, has increased considerably with the wind of change experienced globally today. As a corporation with this awareness for many years, we respond to the service and consultancy requirements in Waste Management with our pioneering position in the sector and the solutions we have developed.

With the decision we made before the pandemic period, we shifted from a circular economy focused sustainable company to a circular economy focused holding structure integrated with sustainable business processes. We operate in an innovative manner that will prevent the use of resources with all of our subsidiaries.

With our vision of designing processes that will enable sustainable life by using less resources, we contribute to the reduction of the environmental impacts of industrial organizations that might play a negative part in climate change in our sustainable business model. Within the scope of our corporation's operations, we measure our carbon footprint every year and share our latest report with our stakeholders together with our Integrated Report.

As Akademi Çevre, we believe that the most significant value in the growth of a corporation is its contribution to the solution of environmental and social issues that affect its stakeholders. Therefore, while we continue to lead the circular economy with our solutions on Waste Management, we pursue to operate in a manner that create social value.

We continued to create value by maintaining close contact with our employees and our industry in an environment of uncertainty caused by the pandemic. In order to deepen our strong bond with the industry, we launched our Youtube project called Sustainable Conversations and through the comprehensive live broadcasts, we came together with all our stakeholders, especially with those from operating in the same industry, and talked about the changing and transforming Waste Management processes, current regulations, circular economy practices and corporate social responsibility projects in our so-called new normal living standards. We carried out awareness raising activities on environmental issues with our project, which attracted high interest and participation, and we launched the Akademi Çevre KidZania Recycling Center to create awareness among the children and have them internalize the concepts such as circular economy, zero waste, and sustainability since they are our future. By means of this facility, children aged 6-14 learn how to transform Waste Management into value by experiencing it and bringing it into the circular economy. We carried out a research study in Turkey with the Mind Your Waste Foundation and revealed how the pandemic process



affects the perception and habits of garbage and recycling. As the leader of the Waste Management industry, we will realize many projects that continue to add value to the environment and the society we operate as a part of in the coming period.

As Akademi Çevre, we have always attached importance to use the latest technologies and digitalization in Waste Management. With our mission of being an innovative company that integrates our business processes with the digital structure, we had the infrastructure to work from home during the pandemic and we were able to manage our processes from home for a long time, except for our operational processes.

In a difficult period, we continued to create sustainable solutions for our country and our environment, and we will continue the values we have set with this perspective in the coming period. I am pleased to present our first Integrated Report, a product of this effort, to our esteemed stakeholders. I would like to take this opportunity to express my gratitude to our customers, suppliers and all our stakeholders, especially our employees who have always provided their valuable support.

Sincerely Yours,  
Ufuk IŞIK  
CEO



About  
Akademi Çevre

01





# 01

## About Akademi Çevre

As Akademi Çevre, we started our activities in 2005 with noise and vibration measurements. In 2009, we expanded our field of activity and got involved in the recycling industry and obtained our Electronic Waste Processing permit from the Ministry of Environment, Urbanization and Climate Change.

In 2011, we took a giant step towards growth by establishing an Integrated Waste Management Facility in Tuzla. By obtaining the Environmental Permit License after the Temporary Activity Certificate, we started to provide integrated services to corporate companies in different fields of activity with a holistic approach in Waste Management since 2013. While continuing to provide Integrated Waste Management services to the leading national and international corporate companies of our country, we made an investment in WEEE and Refrigerator-

Large White Goods Recycling Facility in 2016, and a Polychlorinated Biphenyl (PCB) Purification Facility in 2017 within the scope of the Stockholm Agreement. After expanding the facility area in 2018, it has become the Integrated Recycling Facility with largest indoor and outdoor area in Turkey. Then, we opened our liaison office in Manisa and started to provide Integrated Waste Management service for the management of all hazardous and non-hazardous wastes as well as packaging wastes generated by taking the operation of the Solid Waste Collection Separation Facility of Istanbul Airport. Also, 2019 and 2020 were the years in which our investments continued very intensively. In 2019, we invested in a consultancy office in Ankara, and Environmental Measurement and Analysis Laboratories in İstanbul and Manisa. In 2020, our investments in İzmir Recycling Facility, Adana Recycling Facility, Head Office in Ataşehir and Kocaeli Refuse

Derived Fuel (RDF) Facility continued. As Akademi Çevre, we provide an end-to-end service with processes that are completely tailored to the customer in accordance with the requirements of our corporate customers. We carry out our activities with the vision of designing processes to combat climate change and support environmentally friendly activities with less resource use, in a variety of services ranging from Environmental Consultancy to Environmental Laboratory services, Logistics Operations, Recycling and Recovery activities and especially Integrated Waste Management services with a licensed vehicle fleet. Within the scope of the licenses we have, we accept more than 700 waste codes at our facility

and manage them in accordance with environmental legislation and process them in our facilities.

As Akademi Çevre, in addition to holding documents and licenses such as Environmental Permit License, Non-Hazardous Waste Collection Separation Certificate, Waste Accumulator and Battery Temporary Storage Permit, Temporary Storage Permit for End-of-Life Tires, we observe integrated quality, occupational safety, data security and environmental standards. We are also a member of the British Safety Council, an international accreditation body in the field of Occupational Health and Safety (OHS).



Istanbul Integrated Waste Management Facility





We create added value by providing Integrated Waste Management services to our corporate customers, through our Zero Waste Philosophy and Circular Resource Management, which we have adopted to prevent unnecessary resource use, and our visionary approach, in which we position sustainability as the focus.



We aim to design processes that will enable to hand down a sustainable life for the future generations by reducing the use of resources.



As Akademi Çevre, we carry out our activities in the light of uncompromising values.

We act with the awareness of feeling responsible towards the environment, living things and future generations, and we reflect this sense of responsibility in all our works.

Being aware of the fact that there is no room for the slightest mistake in the works we carry out for the future of the planet, we advance our works with the principle of perfectionism with a high level of meticulousness.

As Akademi Çevre, we use the latest technology in all our operations, carry out R&D studies, follow the developments in the world with the vision of being innovative and keep our business processes up to date.

We differentiate ourselves from our competitors with the breakthroughs we have accomplished in the industry, we expand our innovative working area and inspire the industry in line with our goal of maintaining our pioneering position.

As Akademi Çevre, we believe that waste is not ordinary garbage and we attach importance to sustainability. Acting with this approach, we contribute significantly to Turkey's circular economy.



## The Milestones

### 2005

- Activities have been initiated with Noise and Vibration Measurements.



### 2009

- Started operations in the Recycling Sector. E-Waste conformity certificate has been obtained in the same year.



### 2011

- Facility infrastructure investment for an Integrated Waste Management has been performed in Tuzla, Istanbul.



### 2013

- Environmental Permit License was obtained after Provisional Operating Certificate.



### 2016

- WEEE and Refrigerator -Big Domestic Appliances Recycling Plant Investment has been performed.



### 2018

- By expanding the facility area, it has become the Integrated Recycling Facility with the largest indoor and outdoor area in Turkey.
- Manisa branch was opened.
- Istanbul Airport Solid Waste Collection Facility operation has been undertaken.



### 2019

- Consulting office opened in Ankara.
- SF6 Recovery Plant investment has been performed to reduce Fluorinated Greenhouse Gas Emissions.
- Environmental Measurement and Analysis laboratory investment has been performed.

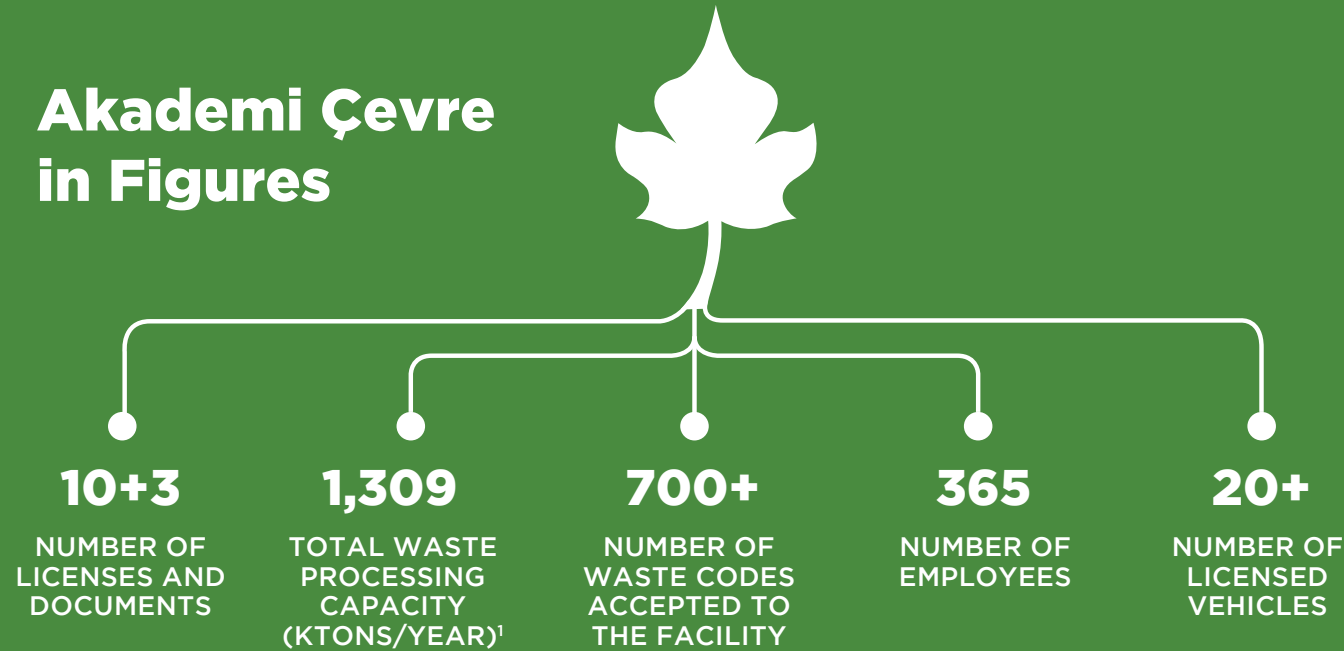


### 2020

- Izmir Recycling Plant has been established.
- Adana Recycling Plant has been established.
- The Refuse Derived Fuel (RDF) Facility investment has been performed in Kocaeli, which contributes to the country's economy in terms of being an alternative source to fossil fuels.
- Environmental Measurement and Analysis Laboratory started its operations.
- Ataşehir Nidakule Head Office was opened.
- Invested in end-of-life vehicle (ELV) processing facility
- Cable breaking facility investment has been performed.



## Akademi Çevre in Figures



## Services

As Akademi Çevre, our main field of activity is Integrated Waste Management. Under the title of Integrated Waste Management; we provide services in the fields of Waste Recycling, Recovery and Environmental Consultancy services, especially Waste Management service.

As Akademi Çevre, our activities for the collection, sorting, intermediate storage, purification, processing and recycling of many hazardous and non-hazardous types of waste within the scope of the Integrated Waste Management service we provide to our corporate customers within the framework of quality standards and legal regulations;

<sup>1</sup> ktons: kilotons



We manage in accordance with the relevant regulations, circulars, communiqués and relevant legal regulations published pursuant to the Environmental Law. We carry out the following activities within the scope of Integrated Waste Management:

- Integrated Waste Management
- Waste from Electrical and Electronic Equipment Processing
- Scrap Metal and ELV (End of Life Vehicles) Processing
- PCB (Polychlorinated Biphenyl) Purification
- SF6 Recovery
- Collection, Sorting and Recycling of Packaging Waste
- Cable Recycling
- Product Destruction
- Secure Data Destruction
- Refuse Derived Fuel (RDF) Production
- Consultancy Service
- Environmental Analysis and Measurement Laboratory
- Storage Service
- Sludge Drying
- Sludge Dewatering

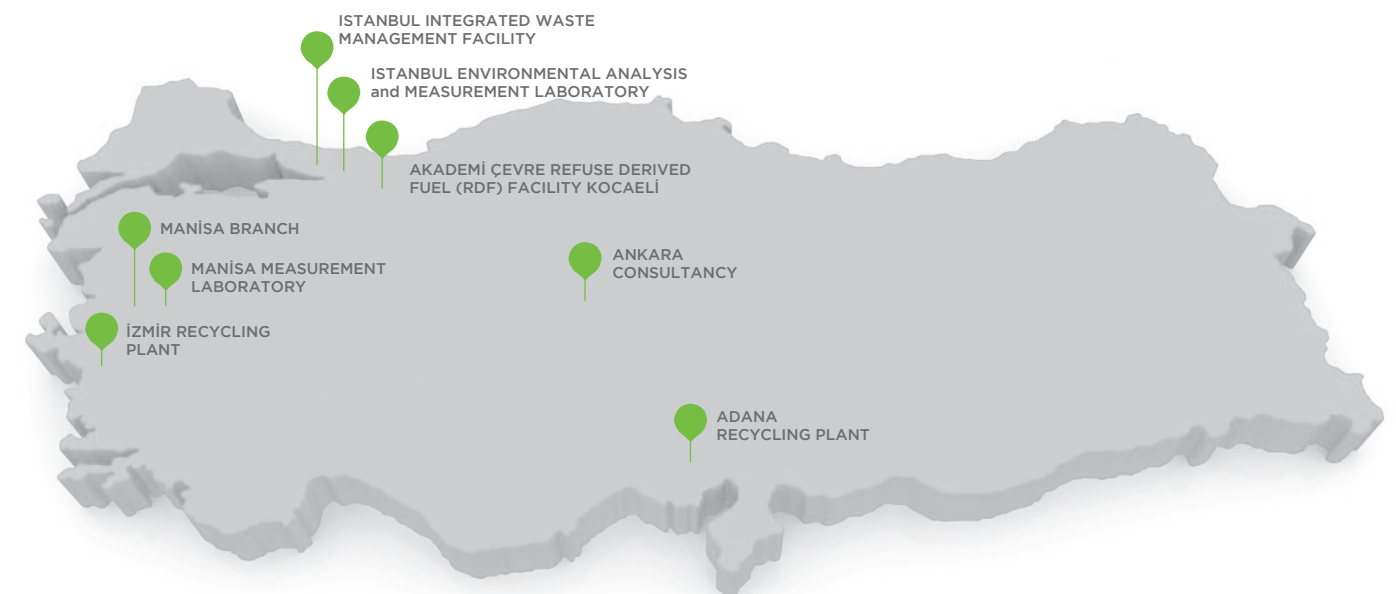


We were entitled to receive the 2018 Sustainable Business Awards (Sustainability Academy), 2018 Low Carbon Hero (SÜT-D), and 2020 International Business Awards-Gold Stevie (Stevie Awards) thanks to our

Integrated Waste Management, which we serve by using environmentally friendly technologies that support the fight against climate change.



## Our Facilities and Branches





## Corporate Governance

With the awareness of the impact of a solid corporate governance structure in managing business activities with high efficiency, we attach importance to complying with national and international business conduct rules. We carry out our operations in order to act in the interests of all our stakeholders and to create sustainable value, and we have the vision of being a reliable, transparent and exemplary corporate citizen.

At Akademi Çevre, the positions of the Board of Directors and the General Manager are executed separately from each other.

Addressing corporate governance with an approach that is compatible with legal regulations and international standards is important in terms of increasing transparency and positively reflecting on operational activities. Management Review reports contain articles related to the fulfillment of legal requirements, and compliance with the law is evaluated and followed up annually. The list of laws to be complied with is available in our company and it is followed up on a weekly basis by the relevant officials. In case of any update, the changes are notified to the relevant units via e-mail.

There are OHS, Environment and Internal Audit Committee structures in Akademi

Çevre. Internal audits are planned and conducted at least once a year. As a result, a regulatory and remedial action form is opened and a report is presented to the relevant units, action plans are requested from the units regarding how and in what manner the issue will be resolved, and the necessary follow-ups are made and closed. Our environmental consultant, on the other hand, reports monthly internal audits to the Environment and Waste Management Unit.

Our OHS Board regularly convenes every month. Board members consist of Assistant General Manager, Facility Manager, OHS Manager, Maintenance Specialist, Human Resources Specialist, Environmental Unit Representative, Administrative Affairs Specialist, Workplace Physician and Chief Employee Representative. In addition, we hold OHS and Environment meetings to evaluate the weekly situation. Assistant General Manager, Facility Manager, Environment and Waste Manager, OHS Manager, Production Manager, Quality Manager, HR Manager, Maintenance Specialist attend these meetings. With these regular meetings, we ensure the continuity of the system and report to the senior management.

## Anti-Bribery and Anti-Corruption

In line with the aim of being an exemplary corporate citizen, compliance with national and international laws is of critical importance for our company. In addition to this, we, as Akademi Çevre, are committed to the principle of zero tolerance to all kinds of bribery and corruption. In this sense, by embodying our struggle on the issue related to our Anti-Bribery and Anti-Corruption Policy, we pay regard compliance with the law in all our activities and act with the aim of being a reliable institution for all our stakeholders.

As Akademi Çevre, our main duties and objectives regarding the fight against corruption, our process stakeholders, together with the duties, authorities and responsibilities of our stakeholders, we have defined the basic principles of the anti-corruption system, including our relations with third parties, individuals, legal entities, official organizations and representatives. Our employees' compliance with other compliance procedures and ethical rules, as well as the continuous and faultless fulfillment of their anti-corruption duties; We also consider it in personnel performance evaluations.

As Akademi Çevre, we have defined the basic principles of the anti-corruption system, including our main duties and purposes, our process stakeholders, the duties, authorities and responsibilities of our stakeholders, as well as our relations with third parties, including individuals,

legal entities, official institutions and representatives. In addition to the compliance of our employees with other compliance procedures and ethical rules, we also consider the fact that they fulfill their anti-corruption duties continuously and without errors in personnel performance evaluations.

As Akademi Çevre, we establish the necessary control mechanisms, procedures and take action regarding the control results in order to effectively identify, evaluate and reduce corruption risks. In this context, we determine important functions, types of activities, business processes and positions in the fight against corruption, take measures to prevent conflicts of interest, and determine the rules regarding gifts and entertainment expenses and all other areas that may be subject to corruption.

Within the scope of our Anti-Corruption Policy, not only our employees, who are among our internal stakeholders, but also all our suppliers, contractors and customers operating in the value chain, and other relevant third parties must fully comply with the principles and principles we have determined. In addition, we organize periodic trainings for employees on business ethics, anti-fraud and anti-corruption. In this context, we provide 8-hour training to all employees at least once a year, and we communicate the issue via e-mail before and after the training.

## Risk Management

Akademi Çevre attaches importance to the information risks of all its stakeholders within the scope of risk management. In this context, it uses the ISO 27001:2013 Information Security Management System in all its processes. It has adopted information security as a policy. Based on the principle of customer focus, it aims to protect the intellectual capital of its stakeholders.

The riskiest process of Akademi Çevre, which is vulnerable to abuse, is the destruction processes. For these destruction processes, we evaluate the risks and present them to our customers within the scope of the Safe Disposal Certificate of Confidential Materials within the scope of TSEN 15713. In this context, we record all destruction processes with video and share them with our customers. At the same time, until the material is received and reaches the facility to be destroyed, it is followed up with the vehicle tracking system, and we share the data received through this system with our customers.

The service pricing policy is among the riskiest issues in the industry, and the pricing given without considering the profit-loss balance can easily disrupt the market dynamics. As Akademi Çevre, we minimize this risk with our service quality

and our Shared Value Projects with our customers. We make a difference in the sector by producing projects that will strengthen our cooperation through our intellectual and manufactured capital. With the vision of designing processes that will enable sustainable life by reducing the use of resources, we provide maximum contribution to our customers' sustainability efforts by doing more than waste management. We produce sustainability solutions by serving leading global brands in Turkey. In this sense, a possible decrease in service quality or not being able to keep up with the developing technology is another risk that we, as Akademi Çevre, considers important. With the responsibility of always being up-to-date and always providing quality service for our customers, we are constantly working to minimize the risks that may be experienced, and we change and transform all our processes



with new technologies. We offer trainings to our employees in a way that adapts to the competencies of the age, and we carry out innovation projects with our stakeholders.

As Akademi Çevre, we receive comprehensive services from independent auditors in order to manage our financial risks and we are audited once a year. In addition, we carry out planned audits with our internal audit team once a year.

Cyber security risks within the company are managed by the Information Technologies (IT) department, and studies are carried out with IT, IT Audit, Security and Consultancy services for all kinds of security elements. In our external connections, the ports are constantly updated and the logins are passed through mobile approval processes with 2-step verification. We follow the necessary innovations in terms of cyber security and thus turn them into benefits both inside and outside the company.



## Sustainability Approach

The undeniable impact of climate change on our lives and the rapid depletion of resources on our planet make the recovery of raw materials used in production extremely important. The international community and stakeholders are also taking concrete steps to coordinate climate change management. As Akademi Çevre, we know that climate change will be one of the most important problems of the future; we carry out all our activities with the belief that the circular economy model, which is based on the use of raw materials, resources and renewable energy, would not be possible without the right waste management approach.

We believe that waste has the potential to create great value by being aware of the necessity of bringing waste into the economy as a valuable raw material. In this sense, we support the Turkish economy and sustainable development with our investments in technological facilities at the best standards regarding Waste Management and make significant contributions to the protection of nature and the environment in every investment made with good practices that will set an example in the sector.

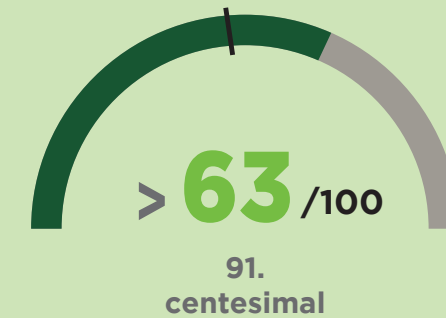
As Akademi Çevre, we follow a strategy of continuous improvement of our operations simultaneously with the achievement we have reached and the high service quality we have accomplished in line with our Zero Waste target, which we focus on to prevent and reduce the use of resources in our facilities. Therefore,

we regularly monitor the carbon footprint and carry out studies to reduce it. In addition, we provide energy savings with developments that increase the efficiency of the automation systems we use, by taking technological developments and digitalization among their priority issues.

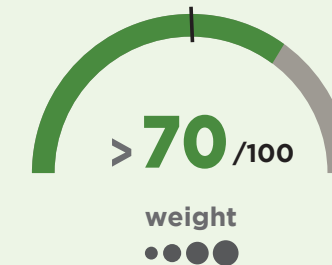
As Akademi Çevre, we have made sustainability a part of our way of doing business with the awareness of our responsibility to our planet and our stakeholders. In this sense, since 2017, we have had the Ecovadis independent audit firm conduct a sustainability rating on a regular basis. In the Ecovadis rating process, our activities are assessed in four criteria: environment, employee and human rights, sustainable procurement and ethics. As Akademi Çevre, we were entitled to be awarded with a silver medal within the scope of our activities in 2020.



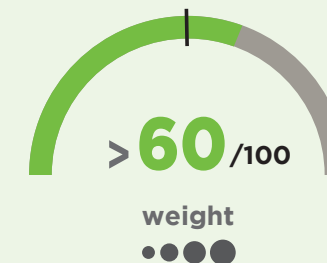
### OVERALL SCORE



### ENVIRONMENT



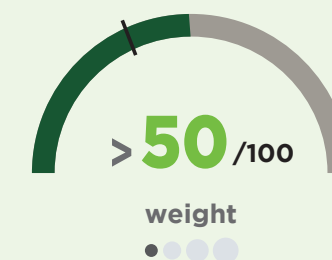
### EMPLOYEE AND HUMAN RIGHTS



### ETHICS



### SUSTAINABLE PROCUREMENT

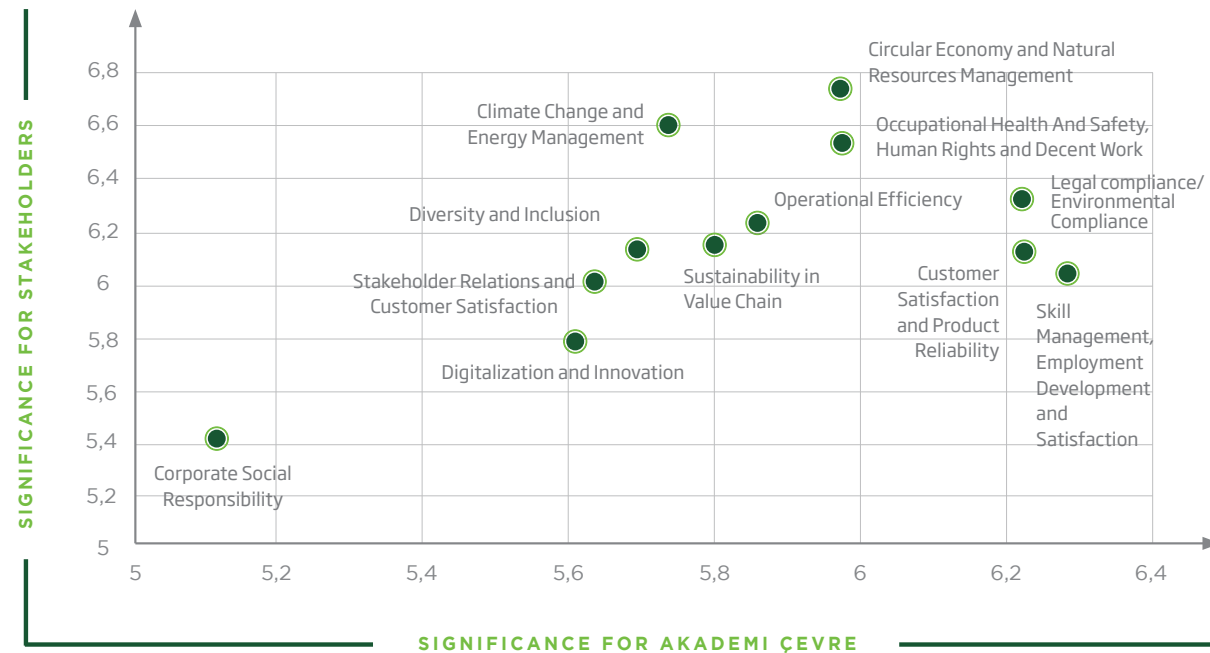




## Materiality Analysis

As a pioneer, we closely monitor the requirements of the Waste Management industry in which we operate and develop and implement good practices by considering the sustainability potential of the industry. By closely following many economic, social and environmental developments, we integrate all these developments into

our business operations and create our sustainability strategy accordingly. As Akademi Çevre, we have grouped the issues that are directly related to the activities we carry out, that are of priority for our stakeholders and that may affect our operations, in the focus of sustainability. This grouping is included in the materiality matrix of Akademi Çevre.



According to the results of the materiality analysis, before our stakeholders, the high priority issues of Akademi Çevre regarding sustainability are as follows;

- Circular economy and natural resource management
- Occupational Health and Safety

(OHS), human rights and decent work.

- Legal and environmental compliance
- Customer satisfaction and product reliability
- Talent management, employee training and development and satisfaction

## The Relation Between Our Material Issues and Capitals and UN Sustainable Development Goals

MATERIAL ISSUES	THE RELEVANT UN SUSTAINABLE DEVELOPMENT GOAL	RELATED CAPITALS
Circular Economy and Natural Resource Management	  	Natural Capital, Financial Capital, Social Capital, Manufactured Capital
Occupational Health and Safety, Human Rights and Decent Work	   	Human Capital
Legal Compliance/ Environmental Compliance	 	Natural Capital, Intellectual Capital, Manufactured Capital, Social Capital
Talent Management, Employee Development and Satisfaction	   	Human Capital, Intellectual Capital
Customer Satisfaction and Product Reliability	  	Intellectual Capital, Manufactured Capital, Social Capital
Climate Change and Energy Management	  	Natural Capital, Financial Capital, Social Capital
Sustainability in the Value Chain	     	Intellectual Capital, Natural Capital, Manufactured Capital
Operational Efficiency	     	Intellectual Capital, Natural Capital, Manufactured Capital
Diversity and Inclusion	  	Human Capital
Digitalization and Innovation	    	Intellectual Capital, Manufactured Capital, Social Capital, Financial Capital
Corporate Social Responsibility		Social Capital
Stakeholder Relations	  	Intellectual Capital, Manufactured Capital, Social Capital



## Sustainability Governance

At Akademi Çevre, we included the Corporate Sustainability Department among our existing units in 2019, in line with the aim of economic growth and respect for the society and the environment. Our corporate communication activities also operate as a unit of this department. Our Corporate Sustainability Department, which has a Corporate Sustainability Manager and two experts, reports directly to the Board of Directors.

With the conglomeration of our company in 2020, our Corporate Sustainability Department joined the Holding and started to be responsible for the sustainable business processes and corporate communication of all subsidiaries within the holding, especially our company.

Our company has a publicly available **Corporate Sustainability and Responsibility Policy**.<sup>2</sup> Within the scope of this policy, we have fundamental commitments such as:

- Complying with applicable national and international legal requirements, our company's commitments with relevant parties and reference norms

- An absolute prohibition on child labor from our suppliers in our value chain and obtaining a guarantee of rejection of such work
- Rejecting any work conditions found to be inhuman, exploitative, discriminatory or unhealthy
- Guaranteeing reasonable wages, which in any case should be sufficient to satisfy the basic requirements of all employees
- Ensuring compliance with applicable laws and industry standards regarding working hours, public holidays and holidays
- Rejecting any form of discrimination in the hiring, compensation, access to training, promotion, dismissal or retirement of our employees
- Taking all necessary precautions regarding Occupational Health and Safety
- Ensuring the peace of the working environment and the happiness of our employees
- Respecting the dignity and personality of our employees and not allowing any kind of harassment, pressure, threat or coercion.







Akademi Çevre  
Business Model

02

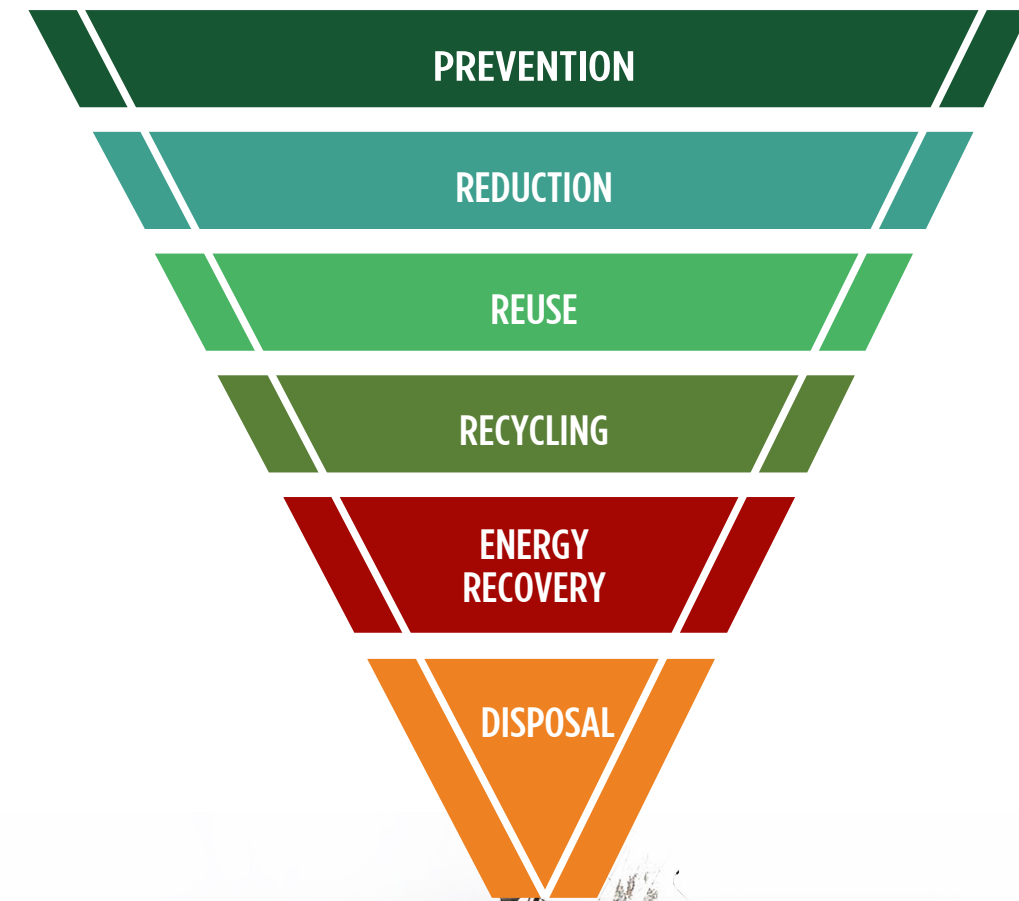


## 02

# Our Approach to Waste Management

In a globalizing world in every sense, natural resources are consumed more unconsciously due to industrialization and population growth, and as a result, an increase in the amount of waste emerges. Wastes that lose their value for their users have numerous negative impacts on both the environment and human health. In order to eliminate and minimize these negative impacts, the importance of good management of waste, the amount of which is increasing day by day, becomes more critical every passing day. Waste, which was often called “garbage” in the past, is now seen as an asset and is processed accordingly. The prominent phenomenon in this approach is the Waste Management hierarchy.

Waste Management hierarchy consists of the titles of Prevention, Reduction, Reuse, Recycling, Energy Recovery and Disposal, in order of priority. The first generation of wastes that need to be managed within the scope of a certain procedure should be tried to be prevented. If waste generation cannot be prevented, the amount of waste should be reduced. The resulting waste should be reused as much as possible. Waste that can be recycled should be collected separately at the source and recycled to become raw materials again. Wastes that cannot be recycled should be subjected to energy recovery. According to the waste hierarchy, the least preferred method is the disposal of wastes in sanitary landfill.





Recycling, which is in the fourth step of the waste management hierarchy, is the main field of activity of our company, and in addition to our vision, we produce solutions for the first three steps of prevention, reduction and reuse, which are the first three steps, within the scope of the consultancy services we provide on waste prevention. We manage wastes with more than 700 waste codes within the framework of quality standards and we produce raw materials by recycling recyclable wastes in our waste processing facilities under our current licenses and ensuring Material Recovery. Raw materials produced

from recycled products in this way are called secondary raw materials. Thus, as Akademi Çevre, we help economy to regain the recycled raw materials produced by various recycling methods.

By processing different types of waste with cutting edge Recycling technology, we supply new raw materials such as copper, aluminum, iron, plastic for use in a wide variety of sectors. Our company also contributes to the sustainability activities of its customers by providing secondary raw materials to its customers.

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



Inappropriate collection and uncontrolled storage of waste cause the rapid spread of diseases, soil and water pollution. Health problems may occur in humans due to exposure to hazardous wastes. The leachate, which is formed as a result of the leaching of the soluble components formed in the unsanitary landfills together with the water, can cause pollution in the surrounding water resources and soil, thus reducing the biodiversity. In addition, wastes spoil the aesthetic appearance of nature due to their bad odor and negative appearance. The gas released in unsanitary landfills causes air pollution. Combustion products released as a result of burning wastes are greenhouse gases with negative environmental impacts. These gases, which directly affect climate change, cause adverse impact in terms of public health in the settlements around the incineration plants.

In the mid-2000s, in the process of harmonization with the EU waste legislation of the Ministry of Environment, Urbanization and Climate Change (with its new name), legislation on waste management has accelerated and regulations, communiqués and circulars have been published for the management of many types of waste. The obligations brought by the new legislation on waste management to waste producers and waste management companies have brought the concept of integrated waste management to the agenda, and companies that have been carrying out their activities in the waste management sector for certain types of waste until this date, decided to make serious administrative, technical and institutional structural changes in order to provide Integrated Waste Management services to waste producers.



## Business Model

The business model of Akademi Çevre includes waste supply, product recycling with an Integrated Waste Management perspective, and delivering the recycled products to customers at the end of this

process. As Akademi Çevre, we produce circular economy solutions, contribute to the protection of natural resources, and support the low-carbon economy, thanks to the current business model.



## What is Circular Economy?





The increase in environmental pollution and the world's climate crisis force governments to seek new solutions. At the forefront of these solutions is the circular economy, which is a sustainable production model in which the wastes generated in the production system are re-evaluated, thus minimizing the raw material cost and keeping the resource efficiency at the highest level. With the emergence of the concept of sustainability, the linear economy approach leaves its place to the circular economy. The circular economy concept, which aims to end the fast consumption habit and to produce recyclable products,


aims to close the cycle by changing the old “take-use-dispose” model, and deals with the re-evaluation of discarded materials after use. Each recycled waste contributes to minimizing the raw material cost and maximizing resource efficiency and environmental benefits. On the other hand, circular economy aims to operate the resource loop in a closed-loop model by establishing a system that aims to remove waste from the system at the design stage of the products, completely avoids landfill sites and incineration, and continues to use the resources as long as possible by reusing or renewing the products.





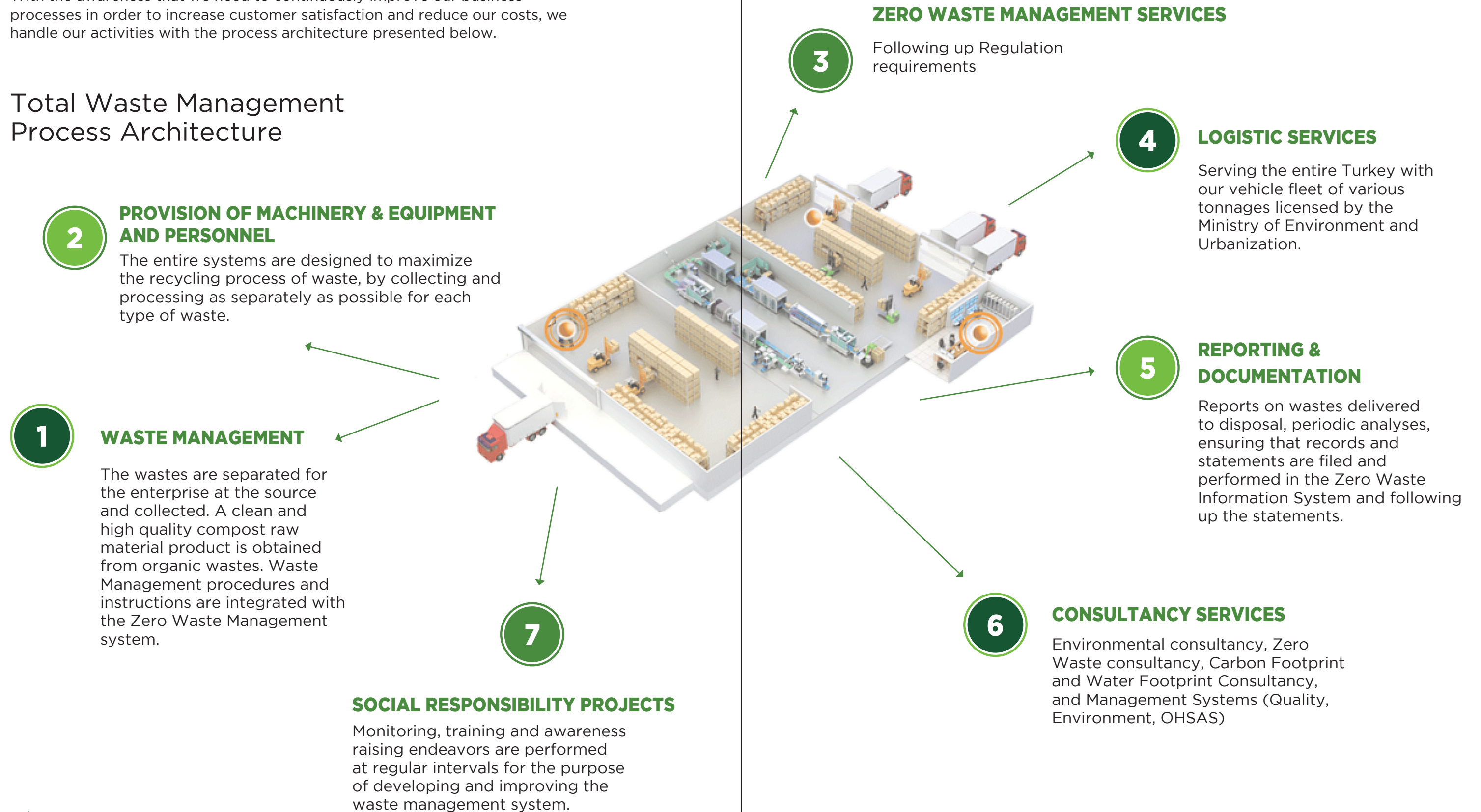
The activities we serve as Akademi Çevre are listed below.

 <b>Integrated Waste Management</b> <p>It includes the operation of the temporary storage area of the companies, transportation of hazardous/non-hazardous wastes, intermediate storage, recycling, recovery and disposal.</p>	 <b>Storage Service</b> <p>It is the storage of hazardous and non-hazardous wastes to be sent to licensed disposal/recovery facilities.</p>	 <b>Sludge Drying</b> <p>The process applied in order to increase the solid matter content of the treatment sludge formed as a result of the treatment of wastewater.</p>	 <b>Sludge Dewatering</b> <p>The physical methods applied to reduce the moisture content of the sludge.</p>
 <b>SF6 Recovery</b> <p>It is to carry out the necessary purification processes in order to reuse Sulfur hexafluoride (SF6).</p>	 <b>Collection, Sorting and Recycling of Packaging Waste</b> <p>Recycling activities of plastic, glass, metal and paper cardboard packaging wastes are carried out.</p>	 <b>Cable Recycling</b> <p>The copper, aluminum and plastic materials in the cable are recycled without loss of quality to produce raw materials for industry.</p>	 <b>Product Destruction</b> <p>Product Destruction is the physical destruction of the products that the companies do not want to be put back on the market due to reasons such as production errors, defective branded products, surplus products, out-of-use raw materials. After acceptance of these products, they are disposed safely to be not used again.</p>

 <b>Building Demolition and Dismantling Operations</b> <p>It is a mobile system for demolition/dismantling of buildings, shredding concrete blocks, concrete pillars, asphalt.</p>	 <b>Waste Electrical and Electronic Equipment Processing</b> <p>Small household goods, lighting equipment, information and telecommunication equipment, refrigerators and air conditioning devices are recycled.</p>	 <b>Scrap Metal and ELV Processing</b> <p>It is divided into types such as copper, bronze, brass, aluminum, lead, zinc, iron, steel, tin and other mixed metals by shredding and reducing the size of scrap metals such as end-of-life vehicle (ELV) bodies, engine blocks, aluminum wheels.</p>	 <b>PCB Purification</b> <p>The PCB content of equipment such as transformers containing PCBs are reduced with the help of chemical reactors.</p>
 <b>Secure Data Destruction</b> <p>It is the destruction of IT Equipment, which contains information of companies, by magnetic (Degaussing) and physical methods in order to prevent them from being put on the market as a re-product.</p>	 <b>Refuse Derived Fuel (RDF) Production</b> <p>RDF production, which is an alternative energy source used especially in the cement sector and needed to reduce fossil fuel consumption, is produced.</p>	 <b>Consultancy Service</b> <p>Environmental consultancy services are provided to ensure that institutions, organizations and businesses operate in accordance with the Environmental Legislation.</p>	 <b>Environmental Analysis and Measurement Laboratory</b> <p>There is a Türkak accredited and comprehensive Environmental Analysis and Measurement Laboratory. In our laboratory; Flue Gas Measurement, Immission and Air Quality Measurement, Acoustic/Noise Measurement, Water/Waste Water Analysis, Treatment Sludge Analysis, Waste Oil Analysis, Waste Analysis, Precious Metal Analysis, Occupational Hygiene Test and Analysis, Sampling Services are provided.</p>

With the awareness that we need to continuously improve our business processes in order to increase customer satisfaction and reduce our costs, we handle our activities with the process architecture presented below.

## Total Waste Management Process Architecture





## Value Creation Model

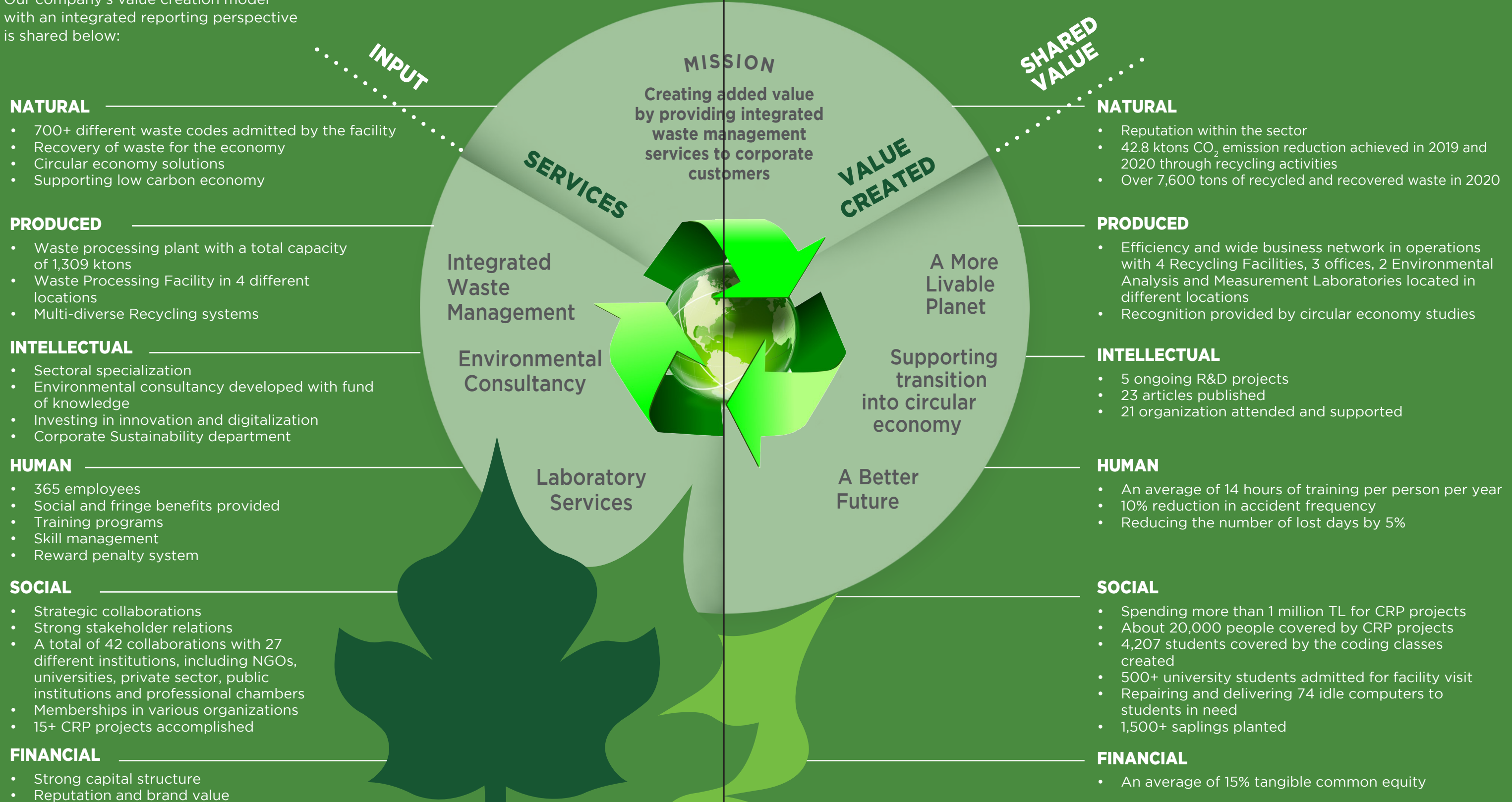
As Akademi Çevre, we create multifaceted value by offering environmentally friendly products and services with our strong partnership structure, competent human resources, close relationships and collaborations with our stakeholders, reputation and brand value we create in the eyes of customers, and the circular economy business model that we create solutions for. The value creation model created by our company with an integrated reporting perspective is shared below:

In the integrated reporting approach, six different capitals are created by considering the relations established by an institution with internal and external stakeholders, all the resources used by the institution, the services and activities provided by the institution, and the outputs obtained by the institution from these. Within the framework of our business

strategy, corporate mission and vision, and priorities determined by our internal and external stakeholders, our company offers various products and services to its customers by providing benefits to both the environment and society. These products and services create an impact in different areas specific to each capital, in other words, they create value.



Our company's value creation model with an integrated reporting perspective is shared below:



## Capitals

The capitals possessed by our company are presented in the table below. Each capital serves the value and outputs created within the scope of the relevant company's

field of activity and that capital.

These relationships are illustrated in the following sections of the report, where activities under each capital are described.

Capitals	Explanation	Relevant Capitals for Akademi Çevre	Material Issues Related to the Capitals
<b>Natural Capital</b>	All renewable and non-renewable natural resources and processes used by Akademi Çevre in its activities	<ul style="list-style-type: none"> <li>Recycling of a wide variety of waste (electronic waste, end-of-life vehicles, PCB waste, cables, etc.)</li> <li>Optimal treatment of contaminated soil, packaging waste and other wastes</li> <li>The energy source used for the realization of the activities</li> <li>Vehicle fuel used in waste management</li> <li>Other inputs required for the realization of activities (water, chemicals, etc.)</li> <li>Evaluation of products that cannot pass quality control</li> <li>Energy efficiency studies</li> </ul>	<ul style="list-style-type: none"> <li>Climate change and energy management</li> <li>Sustainability in the value chain</li> <li>Circular economy and natural resource management</li> <li>Operational efficiency</li> <li>Legal compliance/ Environmental compliance</li> </ul>
<b>Manufactured capital</b>	All physical structures owned or controlled by Akademi Çevre, used for the formation of products and services	<ul style="list-style-type: none"> <li>Waste processing facility with a total capacity of 1,309 ktons</li> <li>Investments in facilities and equipment for efficient and quality production</li> <li>Facilities established in advantageous locations in terms of access to waste (Istanbul, Izmir, Adana, Manisa)</li> <li>A wide variety of recycling systems (Electronic waste treatment unit, PCB purification unit, Cable recycling unit, Scrap metal products and recycling unit for end-of-life vehicles, etc.)</li> <li>Optimized logistics infrastructure</li> <li>Licensed vehicles used for waste management</li> <li>Türkak approved wide-ranging laboratory where various analyzes and measurements are made</li> <li>Solar energy system used for lighting</li> </ul>	<ul style="list-style-type: none"> <li>Circular economy and natural resource management</li> <li>Legal compliance/ Environmental compliance</li> <li>Digitalization and Innovation</li> <li>Operational efficiency</li> <li>Sustainability in the value chain</li> <li>Customer satisfaction and product safety</li> </ul>

<b>Intellectual capital</b>	<p>R&amp;D projects, which are one of the most important elements of competitive advantage, non-physical, competitive intellectual resources such as patents.</p>	<ul style="list-style-type: none"> <li>Intellectual accumulation above the industry average</li> <li>Publishing articles about the industry on platforms such as websites, magazines, and newspapers</li> <li>Active participation in organizations such as events, fairs, webinars</li> <li>R&amp;D projects carried out to improve and expand the activities carried out</li> <li>Collaborations with companies</li> <li>Digitization studies</li> <li>Establishment of corporate sustainability unit structure within the company</li> </ul>	<ul style="list-style-type: none"> <li>Talent management and employee development</li> <li>Digitization, R&amp;D and Innovation</li> <li>Legal compliance/ Environmental compliance</li> <li>Sustainability in the value chain</li> <li>Operational efficiency</li> <li>Stakeholder relations</li> </ul>
<b>Human Capital</b>	<p>Competence, experience and abilities of employees and human resource development processes</p>	<ul style="list-style-type: none"> <li>A corporate culture that fosters employee relationships</li> <li>Competent employee profile</li> <li>Social / fringe benefits and safe working environment provided to employees</li> <li>Human resources policy that pays regard to honesty, integrity, equality and justice</li> <li>Evaluation of young talents</li> <li>Training programs</li> <li>Employee satisfaction surveys</li> </ul>	<ul style="list-style-type: none"> <li>Diversity and inclusion</li> <li>Occupational Health and Safety, human rights and decent work</li> <li>Diversity and inclusion</li> <li>Talent management and employee development</li> </ul>
<b>Social Capital</b>	<p>Resources such as common value, mutual trust and interaction, brand reputation that Akademi Çevre has obtained as a result of its relations with its internal and external stakeholders</p>	<ul style="list-style-type: none"> <li>Close relations with various institutions such as NGOs, professional chambers, stock exchanges</li> <li>Participation in various conferences, workshops, panels and projects</li> <li>Establishing good relations and ensuring transparent communication with public authorities</li> <li>Relationships with customers and suppliers</li> <li>Realized social responsibility projects</li> <li>Sponsored events</li> </ul>	<ul style="list-style-type: none"> <li>Stakeholder relations</li> <li>Customer satisfaction and product reliability</li> <li>Circular economy and natural resource management</li> <li>Climate change and energy management</li> <li>Corporate social responsibility</li> </ul>
<b>Financial Capital</b>	<p>All financial resources resulting from activities and investments</p>	<ul style="list-style-type: none"> <li>Successful financial risk management</li> <li>Successful marketing activities</li> <li>Pricing system</li> </ul>	<ul style="list-style-type: none"> <li>Customer satisfaction and product reliability</li> <li>Legal compliance/ Environmental compliance</li> <li>Circular economy and natural resource management</li> </ul>





Natural  
Capital

03



## 03

Natural  
Capital

With the decrease in natural resources, the importance of environmental factors is increasing day by day. Therefore, Recycling and Recovery has become a rising trend. The Wastes we use in our Recovery, Recycling, Storage Activities and Waste Management practices, which contribute to the value chain of many industries in different areas, constitute the natural capital of Akademi Çevre.

As Akademi Çevre, we ensure the protection of natural resources by carrying out Recycling and Waste Management activities with the vision of “designing processes that will make sustainable life possible by reducing the

use of resources”. We produce products with low environmental impact through Waste Management Practices, Recovery and Recycling activities, using natural resources at the minimum level. Thus, we reduce the environmental impact of

both our company and our customers. Our company, which produces raw materials for many industrial companies that have an important role in climate change, improves the environmental performance of its customers and offers its customers products that will reduce greenhouse gas emissions.

Waste products are seen as a serious source of raw materials rather than waste because they contain both materials that have a chance of secondary use and recyclable materials.

As Akademi Çevre, we contribute to recycling, protect natural resources, contribute to energy and water savings, support less greenhouse gas emissions and contribute to the country's economy.

- By using waste as a raw material source, our company helps to protect the natural resource required for the production of non-secondary raw materials. Conscious use of natural resources will ensure that future generations benefit from natural resources and suffer less resource shortages.

- Our company, which supports the reduction of the amount of waste going to landfill sites through Recycling and Recovery practices, also helps to prevent water and soil pollution.
- Physical and chemical processes applied during Recovery and Recycling cause less energy consumption than normal production processes. Our company, which is an important stakeholder for the transition to the circular economy model, contributes to emission reduction and energy savings. In addition, it contributes to water savings and protection of biodiversity due to the need for less raw material production.
- It contributes to financial efficiency thanks to recycling, which is an efficient economic investment in the long run.



## Our Environmental Performance: Internal Impacts

As Akademi Çevre, we carry out various efforts to minimize the environmental impacts arising from our operational activities. For this purpose, we periodically monitor the natural gas, electricity, water consumption and the amount of waste generated in our facilities and buildings. In addition, we publish a carbon footprint report by calculating greenhouse gas emissions every year according to the ISO 14064 Greenhouse Gas Accounting and Verification Standard.

As Akademi Çevre, we carry out energy efficiency efforts to reduce our

environmental impacts and invest in renewable energy sources, and we keep carbon emissions under control by using environmentally friendly and efficient technologies in our facility investments. Investing in the solar energy system, our company has been generating electricity for domestic consumption since 2019. For now, we are continuing the necessary infrastructure works to implement our solar energy system, which we have commissioned in a pilot region, in all its facilities.

Greenhouse Gas Emissions	2018 (tons)	2019-2020 (tons)
Scope 1 GHG emissions	531,6	647,8
Scope 2 GHG emissions	121,7	194,0
Scope 3 GHG emissions	369,8	316,8
<b>Total</b>	<b>1.023,1</b>	<b>1.158,6</b>

Due to the pandemic, 2019 and 2020 emission data are calculated on a consolidated basis. Greenhouse gas emissions will continue to be calculated annually in the coming years.

Energy Consumption	2018	2019	2020
Non-renewable resources			
Natural gas (m³)	2.675	4.620	3467
Electricity (kWh)	193.241	207.685	175817
LPG (liter)	288	276	300
Diesel Fuel (liter)	200	150	100
Renewable Resources			
Solar Energy (kWh)	-	4	4

Water Consumption	2018 (m³)	2019 (m³)	2020 (m³)
Mains	3.109	2.483	1572
Groundwater (Well water)	120	110	180
<b>Total</b>	<b>3.229</b>	<b>2.593</b>	<b>1.752</b>

Waste Generation	2018	2019	2020
Hazardous Waste Generation			
Energy Recovery	58.741	35.432	49075
Recovery	-	-	67833
<b>Total amount of hazardous waste (tons)</b>	<b>58.741</b>	<b>35.432</b>	<b>116.908</b>
Non-Hazardous Waste Generation			
Recovery	274	370.376	1029639
Sanitary Landfill	343.960	285.323	356473
<b>Total amount of non-hazardous waste (tons)</b>	<b>344.234</b>	<b>655.699</b>	<b>1.386.112</b>
Total Waste Generation			
<b>Total</b>	<b>402.975</b>	<b>691.131</b>	<b>1.503.020</b>



## Natural Capital Relationship Table

Relevant Capital Input	Value Created for the Akademi Çevre	Value Created for the External Environment and Stakeholders	Risks and Opportunities	Performance Indicators and Targets
<ul style="list-style-type: none"><li>Recycling of a wide variety of waste (electronic waste, end-of-life vehicles, PCB waste, cables, etc.)</li><li>Optimal treatment of contaminated soil, packaging waste and other waste</li><li>Energy source used for the realization of activities</li><li>Vehicle fuel used waste management</li><li>Other inputs required for the realization of activities (water, chemicals, etc.)</li><li>Evaluation of products that cannot pass quality control</li><li>Energy efficiency studies</li></ul>	<ul style="list-style-type: none"><li>Efficient and quality production</li><li>Leadership in Integrated Waste Management</li><li>Corporate recognition provided by circular economy studies</li><li>Reputation and brand value created by customers</li><li>Income from its activities</li><li>Centering the SDGs in the activities carried out</li><li>Contribution to emission reduction and energy saving</li></ul>	<ul style="list-style-type: none"><li>Making an important contribution to the transition to the circular economy model</li><li>Contributing to the responsible use of resources by reducing the consumption of natural resources</li><li>Contributing to customers to reduce their environmental impacts</li><li>Contributing to customers' sustainability activities</li><li>Contributing to stakeholders' awareness of sustainability and circular economy</li><li>Reducing the amount of waste and therefore contributing to the prevention of soil pollution</li><li>Ensuring resource efficiency</li><li>Contributing to the conservation of biodiversity and water and energy savings due to the need for less raw material production</li><li>Minimizing fuel consumption in route optimization projects-</li></ul>	<p><b>Risks</b></p> <ul style="list-style-type: none"><li>Operational risks that may occur due to disruptions in waste supply</li><li>Monitoring compliance with changing laws on environmental and social issues</li></ul> <p><b>Opportunities</b></p> <ul style="list-style-type: none"><li>Continuation of waste management activities due to the increasing awareness of climate change in our country</li></ul>	<p><b>Performance Indicators</b></p> <ul style="list-style-type: none"><li>Greenhouse gas emissions / intensity</li><li>Energy consumption / intensity</li><li>Natural gas consumption / density</li><li>Water consumption / density</li></ul> <p><b>Goals</b></p> <ul style="list-style-type: none"><li>Increasing the amount of recycled solid waste</li><li>Increasing the use of renewable energy</li></ul>

Relevant SDGs

6

CLEAN WATER AND SANITATION

8

DECENT WORK AND ECONOMIC GROWTH

9

INDUSTRY, INNOVATION AND INFRASTRUCTURE

11

SUSTAINABLE CITIES AND COMMUNITIES

12

RESPONSIBLE CONSUMPTION AND PRODUCTION

13

CLIMATE ACTION

14

LIFE BELOW WATER

15

LIFE ON LAND

## Our Environmental Approach

Akademi Çevre is aware of its responsibility to eliminate the natural resource and waste problem brought about by the increasing population and limited natural resources, and in this direction, it aims to minimize the use of natural resources such as electricity and water and strives to continue its activities effectively and efficiently.

The environmental approach of Akademi Çevre consists of “Legal compliance/environmental compliance”, “Climate change and energy management”, “Operational efficiency”, “Sustainability in the value chain”, “Circular economy and natural resource management” which are among its priority topics.

As Akademi Çevre, we adopt a proactive environmental management approach with our Occupational Health and Safety Policy and strive to comply with all environmental legislation. In addition, as Akademi Çevre, we have ISO 14001 Environmental Management System and we aim to continuously

improve the currently established environmental management system. In this context, as Akademi Çevre, we:

- Recover the wastes generated as a result of our activities as much as possible,
- Follow the developing technology to reduce losses by keeping the efficiency of the facilities at the highest level,
- Try to minimize the use of natural resources as a result of continuous improvement studies,
- Increase our environmental performance continuously,
- Consider environmental impacts when it comes to new investments



## Waste Management Service

### Integrated Waste Management

As Akademi Çevre, we provide our customers with effective and efficient collection systems with a high level of supervision and control, as well as personnel and equipment for waste storage, accumulation and preparation for shipment, within the scope of Integrated Waste Management service.

In addition, we provide services to some of our customers in the operation of the waste temporary storage area, transportation of hazardous/non-hazardous wastes, temporary storage, recycling, recovery and disposal processes in accordance with the requirements of the Environmental Legislation and ISO 14001 Environmental Management System. The wastes are separated on site by our expert personnel and delivered to the Akademi Çevre Integrated Recycling facility. The process is managed by expert personnel located in the area

where the Waste Management System is set up and vehicles placed on the ramps where the wastes are delivered. When the vehicles kept on the waste ramps that are full, they are replaced by the next vehicle and set out to carry out the relevant recycling activities. We reduce fuel consumption by optimizing the route of waste collection vehicles while the waste collection process is carried out. We perform all these services with our company's trained personnel and equipment. The wastes generated in the process are delivered to Akademi Çevre Tuzla facility without waiting. The target we have set in Integrated Waste Management services is to establish an integrated system infrastructure within the boundaries of the facility, and to achieve the highest efficiency by adopting the "Zero Waste Principle" in Integrated Waste Management.

transported to the recycling/disposal facilities. In case there is no suitable place for final disposal or recovery, or before being delivered to the disposal/recovery facilities, the wastes can be stored in the temporary storage facilities so that the amount of waste

### Storage Service

#### Temporary Storage of Wastes

It is necessary to take measures to ensure that the wastes are safely stored in a way that does not pose a risk to human health and the environment, and that they are safely

reaches sufficient capacity. The wastes should be stored in separate compartments so that they do not react with each other. The waiting period in the temporary storage facility is at most one year. However, this period can be extended in compulsory cases with the permission of the Ministry of Environment, Urbanization and Climate Change.<sup>3</sup>

As Akademi Çevre, we have a license from the Ministry of Environment, Urbanization and Climate Change for Temporary Storage service. Our company sends the waste it receives to the waste temporary storage facility to the contracted Recycling/Disposal Facilities.

#### Temporary Storage of Batteries

Used batteries cause great harm to the environment, directly or indirectly, if not stored properly. Mercury, cadmium, lead, zinc, manganese, lithium, iron, nickel, cobalt and other chemicals contained in batteries are substances that do not dissolve easily in nature and can cause permanent damage to the environment. Mercury, which is one of the dangerous substances, both pollutes the soil and causes irreversible damage to human health. It has been proven that mercury, which penetrates the body through breathing, drinking

water or the food chain causes many diseases. As a result of the chemicals in the batteries mixing with the soil and groundwater, great negative effects may occur on the environment and human health. For this reason, it is of great importance to be recycled and disposed of in accordance with the legislation without contacting humans.

The Regulation on Control of Waste Batteries and Accumulators was published in the Official Gazette numbered 25569 on 31.08.2004.<sup>4</sup> The purpose of the regulation is to determine the principles and policies for the prevention of direct or indirect discharge of batteries and accumulators to the receiving environment, the establishment of a collection system for their recovery or disposal, and the creation of a management plan in the process from production to disposal.

In this context, the Accumulator and Recycling Industrialists' Association (AKÜDER) was established by the industry-leading accumulator manufacturers and recycling industrialists in Turkey in order to fulfill the obligations arising from the said regulation and to ensure the realization of training activities and the Battery Importers and Manufacturers Association (TÜMAKÜDER) was

<sup>3</sup> Republic of Turkey Official Gazette, Communiqué on Waste Temporary Storage Facilities, Issue: 27916, 26.04.2011. <https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=14935&MevzuatTur=9&MevzuatTertip=5>

<sup>4</sup> Republic of Turkey Official Gazette, Regulation on Control of Waste Batteries and Accumulators, Issue: 25569, 31.08.2004. <https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=7118&MevzuatTur=7&MevzuatTertip=5>



established by companies operating as importers and manufacturers in the accumulator sector.

The aim of the activities carried out by AKÜDER in line with its objectives is to reach the deposit rate defined

as 90% and thus contribute to the protection of the environment and the national economy with lead recovery. The regulation imposes obligations on producers, consumers, collectors and recycling facilities regarding the collection of waste batteries.

### Battery Storage Conditions

- Presence of entrance section, waste accumulator reception unit, waste accumulator process area and other working areas in the facility
- The suitability of the facility for the entrance and exit of waste accumulator transport vehicles.
- Protecting the perimeter of the facility, having a fence or wall that controls the entrance and exit, prohibiting unauthorized entry to the area other than the personnel
- Ensuring floor impermeability in the parts of the facility area that are in contact with the waste accumulator, for this purpose, a reinforced concrete or asphalt floor with a thickness of at least 25 cm is made and the walls are covered with acid-resistant material.
- Putting a maximum of five waste accumulators on top of each other, keeping leaky accumulators in sealed polypropylene containers
- Presence of acid neutralization unit or necessary treatment units for acids in waste accumulators
- Protection of the waste reception area and operation area against rain
- Separate collection of stormwaters, washing and similar wastewater generated in the field and storage in accordance with the relevant regulation

As Akademi Çevre, we continue our waste accumulator temporary storage activities with the “Waste Battery Temporary Storage” permit issued by the Istanbul Governorship Provincial Directorate of Environment,

Urbanization and Climate Change. We work together with AKÜDER and TÜMAKÜDER, which are the authorized institutions regarding waste batteries and accumulators.

## Sludge Drying

Treatment sludge constitutes a major part of hazardous wastes in terms of tonnage. Considering the sludge drying activity performed due to the high waste density in Kocaeli province, we have accomplished a great deficiency with the Refuse Derived Fuel (RDF) facility investment performed in the region. In this way, uncontrolled disposal of the entire waste sludge, particularly wastewater treatment plant sludge, shall be prevented to a greater extent and shall be used as an alternative fuel in cement factories. As much as the calorific value of the dry sludge used, the main fuel (coal, fuel oil, etc.) used by the cement factories shall be reduced accordingly and the use of natural resources shall further be reduced as well. Moreover, since alternative fuels are used, emissions resulting from the combustion of fossil fuels have also been reduced and a

serious benefit has been obtained in terms of air quality.

Drying of sludge is of utmost importance in using it as a raw material or additional fuel source in cement factories. In order to use waste sludge as additional fuel for Energy Recovery in cement plants, first of all, the sludge is required to be pretreated and dewatered to a certain extent in order not to affect the operating conditions of these plants. The utilization of wastes as alternative fuels is a technically sound solution because the organic parts of the wastes are destroyed as a result of combustion. It is not feasible for the treatment sludge to have a calorific value without drying it. In order to be combustible, it is required to be dried at a rate of 90-98%.

## Sludge Dewatering

Sludge, which is produced as a result of production processes, is a type of waste in liquid or semi-solid form, odorous, containing 0.25% to 12% solids by weight, depending on the treatment process applied. The physical methods applied to reduce the moisture content of the sludge are called sludge dewatering. Depending on the composition of the sludge, it is feasible to apply different dewatering techniques. As the sludge formed as a result of the dewatering process becomes odorless, its volume also decreases accordingly. In the

laboratory of Akademi Çevre A.Ş. sludge samples are subjected to a comprehensive analysis program to determine the best formulation and dewatering technique.

By increasing the solid matter content of wastewater originating from refinery, petrochemical and various industrial sectors, both the calorific value of the wastes increases and they become available for the transportation on the motorways.



We ensure the removal of suspended solids from water with centrifuge technology in sludge dewatering applications with our experienced staff,

and we provide services for dewatering sludge and waste reduction activities with two processes, as with two-phase and three-phase.

## Building Demolition and Dismantling Operations

During the demolition and dismantling services that contribute to the country's economy, the protection of human health and the environment is of great importance. Dismantling services should be carried out in accordance with legal regulations in order to minimize the harmful effects on the environment and human health. These operations, which provide spare parts to some sectors, supply second-hand materials to some sectors. Important materials such as aluminum and steel separated after demolition and dismantling are transferred to recycling facilities for

reprocessing and shaping. Materials such as concrete, which are made into small pieces, can be used as a filling material in asphalt production.

As Akademi Çevre, we determine the types and amount of waste that may occur, and then determine the appropriate processes for reducing the effect at the source, taking the necessary measures for worker health, and preparing waste management plans. After all these processes, we ship the recyclable materials to the relevant facilities.



## Waste Recycling and Recovery Service

### Waste Electrical and Electronic Equipment Processing

The rapid development of technology in the electronics industry and the consumption habits of people cause the usage times of electrical and electronic products to be shortened. Electrical and Electronic Wastes (e-waste) that have reached the end of their useful life are wastes that are broken, damaged, irreparable or not preferred for use for various reasons. According to statistics, a total of 53.6 million tons of e-waste was generated in the world in 2019. Over the years, the amount of e-waste is expected to reach 74.7 million tons by 2030 due to the increasing need of people for technological products.

Electrical and electronic waste in Turkey includes large and small household goods, information and telecommunication equipment, consumer equipment, lighting equipment, electrical and electronic equipment, toys, entertainment and sports equipment, monitoring and control instruments and vending machines. Almost all of the e-waste, which has reached high levels with the technological developments and consumption habits in recent years, is under the category of hazardous waste. When these devices complete their useful life, if waste management

practices are not carried out properly, they can cause water, air and soil pollution due to the chemicals and heavy metals they contain, which can negatively affect human health, and greenhouse gases resulting from waste can cause climate change.

There are many precious metals, rare earth elements and chemicals in electrical and electronic products. The existence of decreasing raw materials in these products in the world causes the economic value of e-waste to be better understood. It is possible to recover precious metals such as iron, aluminum, copper, lead, gold, silver, platinum, palladium from e-waste, which is an important source for secondary raw materials. E-waste, which is one of the important actors of the circular economy, causes less energy consumption and therefore less greenhouse gas emissions when it is recycled to nature and humanity instead of removing unprocessed materials from mines.

Waste Electrical and Electronic Equipment must be collected separately at the source in accordance with the requirements of the Waste Electrical and Electronic Equipment Control Regulation.<sup>5</sup>

<sup>5</sup> Republic of Turkey Official Gazette, Waste Electrical and Electronic Equipment Control Regulation, Issue: 28300, 22.05.2012. <https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=16159&MevzuatTur=7&MevzuatTertip=5>



Municipalities, producers and authorized organizations specified in the said regulation are responsible for the collection of e-waste in Turkey.

Consumers should give their e-waste to authorized institution officials, authorized service and dealers, technology markets or municipality

officials and/or delivery centers.

Manufacturers are responsible for collecting, transporting and recycling e-waste without harming the environment and human health. In addition, manufacturers should carry out efforts to raise awareness of consumers on this issue.

### Electrical and Electronic Wastes

- They are wastes that are broken, damaged, irreparable or not preferred for use for various reasons.
- It has reached the end of its useful life.
- It is in the category of hazardous waste.
- When left to nature, it causes environmental pollution due to the heavy metals it contains.



### Electrical and Electronic Waste in Turkey includes the waste of the following products:

- Large household items (refrigerator, dishwasher, washing machine, etc.)
- Small household appliances (Vacuum cleaner, toaster, iron, etc.)
- Information and telecommunication equipment (Computer, telephone, etc.)
- Consumer equipment (Video camera, musical instruments, etc.)
- Lighting equipment (Fluorescent, energy saving bulb, etc.)
- Electrical and electronic tools (Drill, saw, etc.)
- Toys, entertainment and sports equipment (Video games, coin operated machines, etc.)
- Medical devices
- Monitoring and control instruments (Thermostat, smoke detector, etc.)
- Vending machines (Money, beverage vending machines, etc.)

As Akademi Çevre, we separate large and small household goods, lighting equipment, information and telecommunication equipment, refrigerators and coolers, televisions and monitors into their components within the framework of the E-Waste

Recycling service. We send plastic, iron, aluminum, copper, integrated card, glass and other wastes in the waste to melting facilities and Recycling facilities for the production of secondary raw materials.

### Stakeholder Opinion

While continuing its activities in line with its sustainability vision, Akademi Çevre beautifully expresses the necessity of thinking about the future while living today, with the motto "There is a future at the end of the day". While revealing the contribution of the circular economy to our country and the world with the added value it produces, it is an institution that makes its environment feel that recycling is vital. I think that we have made a real difference in the field of sustainability in terms of communication, cooperation and social benefit throughout our These Wastes Write Code! E-Waste Recycling project that we run together. I believe that Akademi Çevre will always be a pioneer with the actions it will take in our country and in the sector in the upcoming period.

**Erdal KİRAZ,**

Senior Manager of Public Policy and Corporate Affairs  
Vodafone



## Refrigerator Recycling

Recycling of old refrigerators is of great importance for the environment and human health. Electronic Wastes, which fall under the category of refrigerators and white goods, include large refrigerators, refrigerators, freezers, other large appliances used for cooling, preservation and storage of food, air conditioners, other large white goods, etc. are electrical devices. When electronic products, which are in the refrigerator group used both in homes and in the industry, complete their useful life and become inactive, if they are not processed in licensed facilities operating in accordance with environmental legislation and/or are not included in the recycling process. They cause serious harm to the environment and human health due to the dangerous gases and other substances they contain. As Akademi Çevre, as an Integrated Waste Management company licensed by the Ministry of Environment, Urbanization and Climate Change, we control the dangerous CFC gases (chlorofluorocarbon, chlorofluorocarbon) found in the products released by refrigerator manufacturers after completing their product life cycle. We clean the refrigerators from copper cables, glass

or plastic shelves, household waste before putting them on the processing band. Then, we process the wastes taken into the recycling process in a closed system. We store the gas wastes generated in this process in tanks and ship them to licensed disposal facilities. Our facility is the first and only facility in Turkey to reduce the CFC rate below 0.2%.

As Akademi Çevre, we monitor our carbon emissions and make continuous improvements. With each refrigerator recycling, the release of R12 gas, which has the equivalent of 1,020 kg of CO<sub>2</sub>, and R11 gas, which is equivalent to 1,746 kg of CO<sub>2</sub>, is prevented. As Akademi Çevre, we recycle an average of 76,800 refrigerators per year, preventing the release of 212,428 tons of CO<sub>2</sub> equivalent emissions into the atmosphere. The amount in question is equivalent to the CO<sub>2</sub> produced by 22 vehicles within a 10,000 km driving distance. It corresponds to approximately 134 tours from east to west of Turkey. At the same time, by recovering an average of 37.40 kg of raw materials from a refrigerator, we eliminate CO<sub>2</sub> emissions during the resource use of a total of 2,872 tons of raw materials.



## Scrap Metal and End-of-Life Vehicles (ELV) Processing

### Scrap Metals

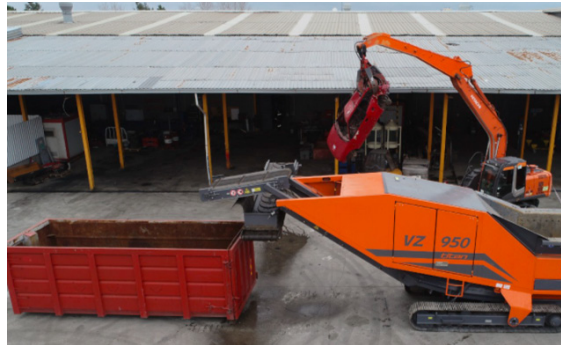
Metals are valuable materials that can be recycled over and over again without deteriorating their properties. Recycling of Metals, while protecting natural resources, reduces energy consumption and indirect greenhouse gas emissions in the production process of new products by using unprocessed raw materials.

As Akademi Çevre, we process metal scrap and other non-hazardous wastes by breaking them down and reducing

their size in order to increase their quality and density. We separate the wastes we accept into the business according to their types, such as scrap metals, copper, bronze, brass, aluminum, lead, zinc, iron, steel, tin and other mixed metals. In our facilities, we enrich the raw materials and reduce their size by processes such as crushing, shredding and pressing, if necessary, by classifying them according to their quality.



## Processing of End-of-Life Vehicles (ELV)



These vehicles are collected, purified, separated and stored in order to ensure the reuse of wastes and parts of motor vehicles that are no longer used, or to convert them into secondary

raw materials by separating them into components.

Our company, which provides services for the Processing of End-of-Life Vehicles, first purifies the vehicles from dangerous parts, liquids and gases. After decontamination, the vehicles are separated into their components by the crushing process. The separated metal, plastic and glass are recovered in our own processes. Battery, end-of-life tires, liquid and gaseous wastes are sent to licensed disposal or recycling facilities.

## PCB Purification

PCB (Polychlorinated biphenyl) is used as an additive in the coatings of electrical cables and electronic equipment, and as a coolant and insulating liquid in transformers and capacitors. The use of PCB, which has a toxic effect, was banned in 1970.

The United Nations Environmental Program (UNEP) has prepared the Stockholm Convention on persistent organic pollutants, including PCB. The convention, which prohibits and restricts the use of substances that adversely affect the environment and human health due to their permanent

and irreversible effects, entered into force in May 2004. Turkey signed the convention in May 2001, to which a total of 179 countries are parties, and became a party to the convention in January 2010. Under the convention, there are obligations to prepare a national implementation plan for persistent organic pollutants and to update this plan periodically, to take measures to reduce or eliminate the stocks and emissions of chemicals, including PCBs.

As Akademi Çevre, we optimize the PCB concentrations of PCB-containing

equipment in our PCB Purification facility, which was established with the support of UNIDO (United Nations Industrial Development Organization). First measurements are made of wastes containing PCBs brought to the facility by licensed vehicles, and the PCB content is checked. The measured wastes are purified at a PCB concentration below 50 ppm by passing through steps such as filtering,

distillation, reaction and centrifugation in the PCB purification facility. Wastes that remain as a result of the process and cannot be processed any more are sent to licensed disposal facilities. Our company carries out all its activities related to the purification of PCB wastes in accordance with the "Regulation on the Control of Polychlorinated Biphenyls and Polychlorinated Terphenyls".<sup>6</sup>



<sup>6</sup> Republic of Turkey Official Gazette, Regulation on the Control of Polychlorinated Biphenyls and Polychlorinated Terphenyls, Issue: 26739, 27.12.2007. <https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=11802&MevzuatTur=7&MevzuatTertip=5>



## SF6 Recovery

Sulfur hexafluoride (SF6) is an inorganic, colorless, odorless and non-flammable gas. SF6, which is a substance that prevents electrical explosions (circuit breaker) and provides good insulation, has a very wide usage area. The greenhouse gas potential of Sulfur hexafluoride, one of the six greenhouse gases listed in the Kyoto Protocol, is 22,800 times that of

CO<sub>2</sub> (carbon dioxide). SF6 gas, which is used as a circuit breaker, loses its purity with corrosion, acidification, moisture over time and becomes unusable.

As Akademi Çevre, we filter the waste SF6 that has become unusable, and clean the molecules and gases that cause impurities, allowing SF6 to be reused.

## Collection, Sorting and Recycling of Packaging Waste

### Collection, Sorting and Recycling of Packaging Waste

Packaging wastes must be collected separately at the source in accordance with the requirements of the Packaging Waste Control Regulation.<sup>7</sup> In this context, separately collected packaging wastes are collected separately in sources such as households, workplaces, industrial institutions and schools, in special colors and appropriate volumes in accordance with the Zero Waste Regulation, as in other types of waste.

Packaging wastes collected separately at the source are brought to our

facilities licensed by the Ministry of Environment, Urbanization and Climate Change and accepted. Mixed packaging wastes accepted to the facility are classified according to their types at the facility. Plastic and metal wastes are pressed with a press machine, paper and cardboard wastes are first shredded and then pressed, glass wastes are stored properly, all wastes are made ready after pretreatment and sent to packaging waste recycling facilities to bring them into the circular economy.



<sup>7</sup> Republic of Turkey Official Gazette, Packaging Waste Control Regulation, Issue: 31523, 26.06.2021. <https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=38745&MevzuatTur=7&MevzuatTertip=5>



## Hazardous Waste Recycling

IBC (Intermediate Bulk Container) tanks, barrels, tins and plastic drums that contaminated with hazardous materials in production facilities are considered hazardous waste after completing their useful life.

Our company accepts waste tanks, barrels, tins and plastic drums to the facility with licensed vehicles. It is subjected to washing process by

using chemicals such as solvents and degreasers for cleaning according to the characteristics of the packaging and the state of pollution. After the waste packaging products are made non-hazardous, they are sent to the crushing department and turned into small pieces. Wastes brought to small sizes are pressed and sent to production facilities to be used as raw materials.

## Cable Recycling Facility

Cables that transmit and distribute electricity are a combination of insulated electrical conductors. While the cable contains precious metals such as copper and aluminum, there is usually plastic material in its outer sheath.

As Akademi Çevre, we first pretreat the cables that have become waste in the stripping machine and separate the plastic from the metal material inside. We send the plastic part of the cables to plastic recycling facilities to be granulated. The metal part coming out of the waste cable is separated and sent to the relevant facilities.





## Product and Secure Data Destruction

### Destruction of Hard Drives

Deleting the files in the hard disk does not mean that the data is completely deleted. When the data is deleted, even if it is seen that the disk is empty, there is a possibility of accessing the data by competent persons. In cases where a correct destruction service is not implemented, passwords, bank information, credit card numbers, company records, registered very special projects, addresses,

registered phone numbers, citizenship information, personal e-mails on the disk are at risk.

As Akademi Çevre, we perform the safe destruction of data in accordance with the standards with devices called Degaussing (magnetic deletion). With these methods, the possibility of reusing the data on the disks is made impossible.

### Destruction of Credit Cards, POS Devices and Sim-Cards in Mobile Phones

The production of credit cards, which increases by approximately 2.5% every year in Turkey, reaches an average of 45 million units. Credit cards contain all user data on the chips they carry. In addition, an average of 7 million POS devices are offered to users annually. After use, these products cannot be repaired and become unusable. Nearly 10 million sim cards are thrown with these POS devices, and nearly 5 million sim cards are thrown together with mobile phones or the information they carry separately.

As Akademi Çevre, we cut these wastes into burrs or granules by cutting credit cards with high-tech cutting machines. Afterwards, we check whether the cut parts, especially the chip parts, are completely destroyed by physical examination. We render the chips that have not been completely destroyed unusable with hand tools and send the photos of the processed products to the relevant persons and/or organizations. After the plastics and coatings are separated, they are sent to the relevant melting and plastic recycling facilities.

### Destruction of Portable Disks

After the use of products such as image and sound recorders, photographic equipment, information backup and transport units, the loss of all kinds of data we store or their seizure by malicious people has become one of the frequently encountered problems. Products of the type resulting from incorrect production or overproduction must be destroyed to protect the manufacturer in order to preserve the product value and prevent sales by other people. CDs and DVDs can be melted and

used for new production after they are completely shredded and made composite.

In terms of information security and not using the product second hand, our company offers the service of making all such products ready for recycling after crushing them in a press machine. In addition to the protection of the environment and natural resources, we also benefit from the protection of intellectual and personal information with this activity we carry out.



## Refuse Derived Fuel (RDF) Production

Wastes can be re-introduced into the economy as Refuse Derived Fuel (RDF) by passing through various separation and processing stages. Fuels derived from waste, which is a type of fuel that is preferred especially in sectors that use fossil fuels with a high energy need, are burned in cement factories, thermal power plants, lime production furnaces, iron and steel and similar co-incineration, incineration and waste-to-energy facilities. RDF production is subject to the Communiqué on Refuse Derived Fuel, Additional Fuel and Alternative Raw Materials published in the Official Gazette dated 20.06.2014 and numbered 29036.<sup>8</sup>

In today's world where resource use is more and more important, the correct supply of energy increases the amount of energy that can be obtained. The amount of energy of RDF released by using industrial wastes can reach up to 5,000 kcal/kg. While the use of alternative fuels reduces the negative effects on the environment, it also increases the environmental performance of the facility.

Our company, which provides the waste management service needed by industrial establishments, provides a homogeneous mixture of RDF and sends the RDF it produces to facilities with co-incineration and incineration licenses.

<sup>8</sup> Republic of Turkey Official Gazette, Communiqué on Refuse Derived Fuel, Additional Fuel and Alternative Raw Materials, Issue: 29036, 20.06.2014. <https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=19804&MevzuatTur=9&MevzuatTertip=5>



Consulting Services

Environmental Consultancy Service

The Regulation on Environmental Permit and License was published in the Official Gazette with the number 29115 on 10.09.2014.<sup>9</sup> The purpose of the regulation is to regulate the procedures and principles to be followed during the environmental permit and license process, which must be obtained in accordance with the Environmental Law. Enterprises that are subject to environmental permit and license regulation and environmental permit or environmental permit and license, enterprises that have a high level of polluting effect on the environment according to their environmental effects (Annex-1 list) are classified as enterprises that have a polluting effect on the environment (Annex-2 list). Businesses included in the Annex-1 and Annex-2 list of the Regulation are subject to permission and inspection in accordance with the regulations that cause and/or may cause environmental pollution as a result of their activities. If the field of activity of the enterprise is included in the Annex-1 and Annex-2 list, it is subject to environmental permit and/or environmental license. Enterprises included in the Annex-1 list of Environmental Permit and

License Regulation must establish environmental management units or receive environmental management services from environmental consultancy firms. Enterprises included in the Annex-1 list of Environmental Permit and License Regulation must establish environmental management units or receive environmental management services from environmental consultancy firms. Enterprises included in Annex-2 list of the regulation, on the other hand, have to employ an environmental officer or environmental engineer permanently or establish environmental management units or receive environmental management services from environmental consultancy firms. Environmental permit or environmental license application is made within the framework mentioned. From the date they started to provide services, businesses have to prepare at least two monthly activity reports for businesses in the Annex-1 list of the regulation, and at least one monthly for businesses in the Annex-2 list. In this context, environmental consultancy firms that audit the compliance of the activities of the enterprises with the legislation, evaluate whether the measures taken

<sup>9</sup> Republic of Turkey Official Gazette, Regulation on Environmental Permit and License, Issue: 29115, 10.09.2014. <https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=20033&MevzuatTur=7&MevzuatTertip=5>

are implemented effectively, carry out monthly inspections, organize annual internal audit programs, apply for environmental permits and licenses, and prepare technical information, documents and reports in accordance with the relevant legislation. are available. Our company, which is

an environmental consultancy firm, has been authorized by the Ministry of Environment, Urbanization and Climate Change to provide environmental consultancy services. Current environmental permits and licenses that businesses are subject to are presented below:

Environmental Permits	Recycling License Issues	Disposal License Issues	Other Waste Management Activities	Pre-Processing License Topics
<ul style="list-style-type: none"><li>• Air Emission Permit</li><li>• Wastewater Discharge Permit</li><li>• Environmental Noise Permit</li><li>• Deep Sea Discharge Permit</li></ul>	<ul style="list-style-type: none"><li>• Biodegradable Waste Recovery Facilities</li><li>• Mechanical Separation</li><li>• Biodrying</li><li>• Biomethanization</li><li>• Compost</li><li>• Waste Oil Refining</li><li>• Vegetable Waste Oil Recovery</li><li>• Waste Battery and Accumulator Recycling</li><li>• End of Life Tire Recovery</li><li>• Hazardous Waste Recovery</li><li>• Non-Hazardous Waste Recycling</li><li>• Advanced Thermal Processing Plants (Pyrolysis, Gasification etc.)</li></ul>	<ul style="list-style-type: none"><li>• Waste Landfill Facilities (I., II. and III. Class Waste Landfill Facilities)</li><li>• Mine Waste Disposal</li><li>• Storage</li><li>• Deep Injection</li><li>• Disposal in the Receiving Environment</li></ul>	<ul style="list-style-type: none"><li>• Waste Incineration and/or Co-incineration Plants</li><li>• Waste Intermediate Storage Facilities</li><li>• Vegetable Waste Oil Temporary Storage Facilities</li><li>• Waste Oil Transfer Points</li><li>• Waste Accumulator Intermediate Storage Facilities</li><li>• End-of-Life Tire Storage Facilities</li><li>• Waste Reception Facilities where Ships' Wastes and Cargo Residues are Collected</li><li>• Tanker Cleaning Facilities Reprocessing</li></ul>	<ul style="list-style-type: none"><li>• Medical Waste Sterilization</li><li>• Waste from Electrical and Electronic Equipment processing</li><li>• Refuse Derived Fuel (RDF) Preparation</li><li>• PCB Purification</li><li>• ELV Temporary Storage</li><li>• Hazardous Waste Pretreatment</li><li>• Non-Hazardous Waste Pretreatment</li><li>• Collection-Separation Facilities (1<sup>st</sup> Type, 2<sup>nd</sup> Type, 3<sup>rd</sup> Type or Other Collection Separation Facilities)</li><li>• Ship Recycling Facility</li><li>• Scrap Metal/ELV Processing</li></ul>



## Zero Waste Consultancy Service

Zero Waste is a target defined as a waste prevention approach that includes preventing waste, using resources more efficiently, reducing the amount of waste generated, establishing an effective collection system, and recycling waste. The first steps of the Zero Waste approach in Turkey were taken in 2017 with the Zero Waste Project. As of January 2019, plastic bags are being charged. In June 2019, the Zero Waste Blue Project was launched to prevent pollution in the seas. Following these developments, the Zero Waste Regulation was published on 12 July 2019.<sup>10</sup>

Within the scope of the Zero Waste Regulation, there are local administrations and buildings / campuses. The implementation of Zero Waste will take place gradually, considering the dates determined in the regulation, and the deadline for the completion of the transition to the

system is 31 December 2022. The main purposes here are to establish this system in buildings and campuses, to collect wastes separately, to collect or have the waste collected by the municipalities, to raise awareness of the public, to keep the records of the system by the authorized units, to cause less damage to the environment, to recycle or recycle the collected wastes and to ensure that waste is a part of the circular economy by sending it to energy production facilities.

As Akademi Çevre, we offer a holistic service within the scope of establishing and monitoring the Zero Waste Management System and obtaining the Zero Waste Certificate.



<sup>10</sup> Republic of Turkey Official Gazette, Zero Waste Regulation, Issue: 30829, 12.07.2019. <https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=32659&MevzuatTur=7&MevzuatTertip=5>





Manufactured  
Capital

04



## 04

**Manufactured  
Capital**

Our company, which was established in 2005 to provide noise and vibration measurement services, expanded its field of activity in 2009 and entered the Recycling sector. It started to operate its facility in Istanbul in 2011 and has increased its produced capital by expanding its activities since the year it was founded. Our company, which has a Waste Processing Facility with a total capacity of 1,309 ktons, has contributed to its generated capital over the years by choosing advantageous locations in terms of access to waste with the Integrated Waste Management facilities it has established in Izmir, Kocaeli and Adana, in addition to its central facility in Istanbul. Among the manufactured capitals we have, there are two Türkak approved laboratories in Istanbul and Manisa, a liaison office in Manisa and offices in Ankara where we provide Environmental Consultancy services.

As Akademi Çevre, we use machines and equipment such as Electronic Waste Processing Unit, PCB Purification Unit, Cable Recycling Unit, Scrap Metal Products and Recycling Unit for End-of-Life Vehicles (ELVs) at our facilities in Istanbul, İzmir, Kocaeli and Adana. We provide Integrated Waste Management service by hosting a recycling system. In addition, we have two Türkak approved laboratories where various analyzes and measurements are made. In addition to these, we provide Integrated Waste Management solutions and Environmental Consultancy

services for institutions, organizations and businesses in different cities with our liaison office in Manisa and our consultancy office in Ankara. Our company, which considers efficient and quality production and environmental performance as its most important component, manages its facilities under produced capitals with integrated management systems. In this context, as Akademi Çevre, we have ISO 10002 Customer Satisfaction, ISO 14001 Environmental Management System, ISO 45001 Occupational Health and Safety Management System certificates.



## Manufactured Capital Relationship Table

Relevant Capitals Input	Value Created for the Environment	Value Created for the External Environment and Stakeholders	Risks and Opportunities	Performance Indicators and Targets
<ul style="list-style-type: none"><li>Waste processing facility with a total capacity of 1,309 ktons</li><li>Investments in facilities and equipment for efficient and quality production</li><li>Facilities established in advantageous locations in terms of access to waste (Istanbul, Izmir, Adana, Manisa)</li><li>Wide range of recycling systems (Electronic Waste Processing Unit, PCB Purification Unit, Cable Recycling Unit, Scrap Metal Products and Recycling Unit for End-of-Life Vehicles)</li><li>Optimized logistics infrastructure</li><li>Licensed vehicles used for waste management</li><li>Türkak approved wide-ranging laboratory where various analyzes and measurements are made</li><li>Solar Energy System used for lighting purposes</li></ul>	<ul style="list-style-type: none"><li>Reputation created by customers</li><li>Renewable energy generation investments</li><li>Income from its activities</li><li>Less carbon emissions due to advantageous location</li><li>Contribution to sustainable production</li><li>High-capacity utilization</li></ul>	<ul style="list-style-type: none"><li>Responsible use of resources</li><li>Providing fast service to customers due to location advantage</li><li>Making an important contribution to the transition to the circular economy model</li><li>Allowing customers to profit by evaluating their low-quality products</li></ul>	<p><b>Risks</b></p> <ul style="list-style-type: none"><li>Fast-changing technological developments</li><li>Change of stakeholder expectations in a fast-growing market</li></ul> <p><b>Opportunities</b></p> <ul style="list-style-type: none"><li>Evaluation of the import option in the future due to the production facilities close to the ports</li><li>Creating diversity in income sources</li></ul>	<p><b>Performance Indicators</b></p> <ul style="list-style-type: none"><li>Production capacity</li><li>Number of facilities</li><li>Number of Licensed Vehicles</li><li>Goals</li><li>10% increase in production capacity compared to the previous year</li><li>Increasing the number of licensed vehicles</li><li>Increasing the equipment of existing vehicles</li></ul>
Relevant SDGs	       			

## Our Current Facilities and Branches

### Head Office and Branches (Istanbul and Manisa)

Our head office is located in Istanbul Ataşehir. In addition, we have offices in Ankara and Manisa.

### Istanbul Integrated Waste Management Facility

As Akademi Çevre, we started our activities in 2005 by making noise and vibration measurements and in 2011, we took a big step towards growth by establishing an Integrated Waste Management Facility in Tuzla, Istanbul. Our facility, established on 46,615 m2, has an annual capacity of 575.5 ktons. The fields of activity we serve in our facility are listed below:

- Waste Electrical and Electronic Equipment Processing
- Hazardous Waste Recycling
- Non-Hazardous Waste Recycling
- Packaging Waste Recycling
- Scrap Metal and ELV Processing
- ELV Temporary Storage

- PCB Purification
- Collection and Separation of Packaging Waste
- Tanker Cleaning
- Waste Temporary Storage
- End-of-Life Tire Temporary Storage
- Temporary Storage of Waste Batteries and Accumulators
- Collection and Separation of Non-Hazardous Wastes

There is a pilot scale solar energy system with a power of 3.6 kW in the Istanbul Integrated Waste Management Facility. It is planned to increase the production capacity of this system, which currently meets a very small part of the electricity need of the facility, in the coming years.

### Ankara Consulting Office

Our communication office in Ankara Tepe Prime, which we started to serve in 2019, provides consultancy services, especially Environmental Consultancy and Zero Waste Consultancy.



### Manisa Liaison Office

With our liaison office, which is close to waste producers in the Aegean region and has Customer Relationship Management (CRM) professionals, we offer fast and effective solutions to our customers' needs in Waste Management.

### Adana Recycling Plant

We offer services for the Non-Hazardous Waste Collection and Separation services and Waste Battery and Accumulator Temporary Storage services at our Adana Recycling Facility with a capacity of 10.0 ktons, established on a total area of 1,616 m<sup>2</sup>.

### Kocaeli Refuse Derived Fuel (RDF) Facility

Kocaeli RDF facility was established in 2020 to produce an alternative source to fossil fuels. Our facility, which was established on 8,384 m<sup>2</sup>, has an annual capacity of 44.1 ktons. The fields of activity we serve in our facility are listed below:

- Refuse Derived Fuel (RDF) Production
- Sludge Drying



Kocaeli Refuse Derived Fuel (RDF) Facility



Adana Recycling Plant

### İzmir Recycling Plant

The Izmir Recycling Plant, we have commissioned in Izmir in 2020, has been established on an area of 8,452m<sup>2</sup>. With an annual capacity of 679.5 ktons, we provide services under the following headings of Environmental Permit and License at the said plant:

- Waste from Electrical and Electronic Equipment Processing
- Hazardous Waste Recycling
- Non-Hazardous Waste Recycling
- Hazardous Waste Pretreatment
- Non-Hazardous Waste Pretreatment
- Scrap Metal and ELV Processing
- ELV Temporary Storage
- PCB Purification
- Tanker Cleaning
- Non-Hazardous Waste Collection and Sorting
- Preparation for Reusing (Reprocessing)

### Environmental Analysis and Measurement Laboratories (Istanbul and Manisa)

As Akademi Çevre, we have a total of 2 environmental analysis and measurement laboratories under possession. We provide measurement services with our laboratory specialized personnel, within the scope of the Ministry of Environment, Urbanization and Climate Change legislation Environmental Measurement and Analysis Laboratories Qualification Regulation, and the Ministry of Family, Labor and Social Services legislation within the scope of the Regulation on Laboratories Performing Occupational Hygiene Measurement, Testing and Analysis. Moreover, we have central and branch laboratories in Istanbul and Manisa to provide services within the framework of the Turkish accreditation institution and internationally valid standards.



İzmir Recycling Plant



Intellectual  
Capital

05





# 05

## Intellectual Capital

Continuing to make a difference with its solid position within the sector and intellectual knowledge, our corporation creates value in its endeavors to combat climate change with its high-performance circular economy practices. A sustainable growth is an issue focused and emphasized by both our stakeholders and the international community. Our corporations perform its operational activities acting with this sensitivity and awareness.

As Akademi Çevre, we do believe that the business world has a valuable role in raising awareness about combating climate change and performing the mission of protecting the environment in the local and global environment, and we highly believe that the collaborations to be established in this direction shall make a substantial

contribution. In accordance with this awareness, we explain our industry experiences and circular economy-oriented business approach to large audiences at trade fairs, exhibitions and seminars we regularly attend, reinforce our relations with stakeholders operating within the sector, and take solid steps towards a sustainable future

with successful cooperation established and to be established.

As Akademi Çevre, we invest in R&D activities for the purpose of expanding the value created by the evaluation and recycling of wastes. During the period covered by our Integrated Report, we invested a total of 2.5 million TL

in R&D activities and operations. We have implemented 3 R&D projects that shall create added value and introduce innovation to the sector.

We closely follow sectoral, national and international trends, successful R&D studies and technological developments and take relevant actions accordingly.

### Intellectual Capital Relationship Table

Relevant Capital Input	Value Created for Akademi Çevre	Value Created for the External Environment and Stakeholders	Risks and Opportunities	Performance Indicators Goals
<ul style="list-style-type: none"><li>Intellectual accumulation above the industry average</li><li>Publishing industry-related articles on platforms such as websites, magazines, and newspapers</li><li>Event, fair, webinar etc. active participation in organizations</li><li>R&amp;D projects conducted to improve and expand the activities performed</li><li>Collaborations with enterprises</li><li>Digitalization studies</li><li>Establishment of corporate sustainability unit structure within the company</li></ul>	<ul style="list-style-type: none"><li>Being a pioneer and leader within the industry</li><li>Maintaining a solid position in the market</li><li>Ensuring the continuity of product quality</li><li>Providing visibility and increasing awareness due to the published articles and the organizations involved</li><li>Not to remain behind the sector thanks to closely following the technology advancing</li><li>Increasing productivity and profits through digitalization efforts</li><li>Increased productivity and efficiency</li></ul>	<ul style="list-style-type: none"><li>Increasing the sustainable impact of the products produced due to the use of recycled raw materials</li></ul>	<p><b>Risks</b> The requirement of continuous intellectual development with developing technology</p> <p><b>Opportunities</b> Developing new business opportunities through collaborations</p>	<p><b>Performance Indicators</b></p> <ul style="list-style-type: none"><li>R&amp;D project count</li><li>R&amp;D budget and investment amounts</li><li>Ratio of R&amp;D budget to sales revenue</li></ul> <p><b>Goals</b></p> <ul style="list-style-type: none"><li>Increasing the budget allocated to R&amp;D projects</li><li>Increasing the number of R&amp;D projects compared to the previous year</li></ul>
Relevant SDGs				



## R&D Projects and International Projects

As Akademi Çevre, we have received support from TÜBİTAK (Scientific and Technological Research Council of Turkey), one of Turkey's esteemed scientific institutions, for the recovery of precious metals such as cobalt and copper from lithium-ion batteries, and we successfully completed this project.

"Precious Metal Recovery from Waste Electrical and Electronic Equipment in 2019, within the scope of TÜBİTAK 2244 Industrial Ph.D. Program: The Project of Transition from Concept Process to Pilot Implementation has been initiated. We aim to support the circular economy by recovering metal from Electronic

Equipment on an industrial scale with this project.

We have participated in the Project for the Disposal of Persistent Organic Pollutants (POPs) Stocks and Reducing POP Emissions for the purpose of eliminating the damages that may be caused by hazardous chemicals that may pose a threat to human health and the environment. As part of the PCB Purification Project led by UNIDO and the Ministry of Environment, Urbanization and Climate Change, we have established the purification unit in our facility.

## Trade Fairs, Exhibitions / Seminars We Have Attended

National and international collaborations play a crucial role in raising awareness of environmental protection and in promoting climate and environmental protection at local and global levels. We attend and participate in fairs and seminars to combat global climate

change and reinforce international collaboration in waste management and we unite with our stakeholders in the sector and share our experiences.

Acting as the Main Sponsor, we have contributed to the 9th TURKTAY Panel

themed "Waste in Economy, Economy in Waste" held in Ankara on October 17-18, 2018. We have united with the sector stakeholders.

In the IREMCON International Environment Conference, held by our main sponsorship in 2019, we have deepened our collaboration by meeting with valuable participants and speakers from Europe and the Balkans, such as Germany, Macedonia, Romania, Croatia and Kosovo.

We, as Akademi Çevre, convened with the senior executives of national and international public and private organizations at IFAT Eurasia, International Environmental Technologies Specialization Fair in 2019, and provided information regarding our sector experiences and investments. In the trade fair, where new products in the categories of solid waste, water and wastewater technologies, bioenergy, waste collection and transportation vehicles, recycling systems, recovery facilities and products, renewable energy technologies and urban environmental cleaning tools were

exhibited, we have exhibited sculptures we made entirely from waste in the Art Transformation workshop and got credit.

At the 25<sup>th</sup> United Nations Conference of the Parties on Climate Change (COP25), held in Madrid on December 2-13, 2019, dozens of conferences on different subjects have been held in country pavilions and halls of the United Nations. The relationship between the waste problem and climate change has only been addressed in the Turkish Pavilion. Ufuk IŞIK, our CEO, who has delivered a speech on behalf of Akademi Çevre, the only waste management company participating in the 25<sup>th</sup> Conference of the Parties in the Turkish delegation, has highlighted the management of electronic waste, its recycling, its impact on climate change and the measures taken to combat this issue in Turkey, and underlined the value created by our company in Waste Management and Circular Economy. At the COP26 held in Glasgow in 2021, we have made a presentation on "An alternative 'RDF' to combat Climate Change".



## Our Articles

### Research on Consumption and Waste Behaviors in the Pre and Post Period of the COVID-19 Pandemic



We conducted a research study across Turkey in cooperation with the Mind Your Waste Foundation, aiming to transform the behavior of reducing garbage production and disposing of wastes in the right place. This research mirrors the change introduced about by the COVID-19 pandemic in garbage disposal and recycling habits.

The research, conducted out with the participation of a total of 1,067 people in different age groups across Turkey, revealed how the perception and habits of the society about garbage and recycling in Turkey have been affected by the pandemic process. According to the results of the research, 63% of the society only wear disposable masks.

Only 13% of disposable mask users dispose of their used masks correctly, while the rest treat the mask as any kind of garbage.

One of the most substantial outputs of the research is that the preference for disposable products is increasing due to the pandemic process. Based on the results, 74% of people prefer to use disposable cutlery and cups even in restaurants and cafes. While disposable products already were a big issue for the environment before the pandemic, the recycling of disposable products, which is likely to overwhelm the world with garbage, gains importance with the change in the perception of hygiene. Another transformation created by the pandemic process is that individuals think that packaged foods are more reliable in terms of hygiene. In line with this perception, it is observed that 30% more packaged food is consumed compared to the pre-pandemic period. While the rate of those who dispose their garbage in the trash while outside

before the pandemic was 79%, this rate decreased to 73% after the pandemic process, and it has been acknowledged that 43% of those who did not prefer to

dispose their garbage into the container were concerned about the risk of transmission of the COVID-19 disease.

#### Stakeholder Opinion

As Mind Your Garbage Foundation, which performs its endeavors and activities to contribute to the creation of a cleaner environment by transforming the behavior towards reducing the garbage and its disposal in the right place in Turkey, we do cooperate with institutions that want to create value in this field. In this context, the Impact of the Pandemic on Waste Habits Research, which we conducted in collaboration with Akademi Çevre, revealed how the perception and habits of the society about garbage and recycling in Turkey have been influenced by the pandemic process. The results of the research, conducted out in response to an important requirement in our country, shall guide the studies and endeavors to be carried out by the public and private sectors on waste management in the upcoming years. This cooperation of the Akademi Çevre and Mind Your Waste Foundation, which takes responsibility for the clean future of Turkey, has made a significant contribution to the Zero Waste movement that has been initiated to ensure the sustainability of resources and the ecological balance.

**Emrah BİLGE**  
General Manager  
Mind Your Waste Foundation



## Consulting Services

The entire subsidiaries of Akademi Invest Holding, especially Akademi Çevre, operate in various fields in the context of Environment, Sustainability and Circular Economy. Despite the fact that the corporate managements are independent from each other, enterprises within the holding benefit from each other's power and talent pool as they complement each other in the cyclical chain.

Our corporation, authorized by the Ministry of Environment, Urbanization and Climate Change to provide Environmental Consultancy services, performs and offers its consultancy services from its liaison office located in Ankara Tepe Prime.

We, as Akademi Çevre, provide consultancy and training services in line with the requirements arising from both legal obligations and environmental sensitivities within the scope of Environmental Legislation. In the light of our knowledge and experience, we provide consultancy services on the implementation and integration of international environmental and sustainable approaches in the Turkish business world. In our consultancy

service processes, we comply with the principle of customized approach according to the strategy and the requirements of the institution, based on the philosophy of sustainability. In our entire project processes, we adapt our service items according to the current situation of the institution and create customized solutions and roadmaps. We, as Akademi Çevre, can list our areas of specialization within the scope of Consultancy Services as follows;

- Environmental and Waste Management Consultancy
- Zero Waste Consultancy
- Environmental Legislation Consultancy
- Integrated Management System Consultancy
- Risk Management
- Sustainability Management
- Training-Educational Consultancy
- Social Responsibility Projects
- Environmental and Social Assessment
- Technical Consultancy
- Brand Management
- Carbon Consultancy
- Environmental and Social Risk Management

## Our Intellectual Capacity

In line with the scope of work in our agreements concluded with our customers, we, as Akademi Çevre, recycle the products that are not suitable for our customers to put on the market under the Integrated Waste Management service, and that cannot pass the quality control process, and recycle these products in a way that

is suitable for use in different sectors. This service, which is considered as a good practice for the circular economy model, ensures that products that do not pass the quality control process are evaluated in different areas as a secondary product without waste and introduced to the economy.





Human  
Capital

06



# 06

## Human Capital

Believing that achieving the goals we have set in accordance with our sustainable growth strategy is greatly based on human capital, Akademi Çevre has a corporate culture nourishing and enhancing the employee relations. The aspect of human resources is among our top priority issues. Believing that there is a positive relationship between the satisfaction of our employees and the performance of the corporation, we develop various applications, considering the requirements and expectations of our personnel, and act meticulously to ensure their well-being and comfort.



We, as Akademi Çevre, contribute to the individual development of our employees in line with the training activities and operations we perform with an innovative approach and continuous improvement principle.

We perform perpetual improvement endeavors in recruitment, performance evaluation, talent management and employee training processes. With the Occupational Health and Safety approach, which we manage

in the light of the superior value we place on people, we fulfill the entire national and international obligations and keep the welfare of our employees at the highest level. Providing equal opportunities to all individuals and carrying out activities that shall

contribute to gender equality are top priority issues for our corporation, and we elaborate to provide equal opportunities among our employees, without discrimination, both in recruitment and career development.

### Human Capital Relationship Chart

Relevant Capital Input	Value Created for Akademi Çevre	Value Created for the External Environment and Stakeholders	Risks and Opportunities	Performance Indicators Goals
<ul style="list-style-type: none"><li>Corporate culture nourishing the employee relations</li><li>Competent employee profile</li><li>Social/fringe benefits and safe working environment provided to employees</li><li>Human resources policy focusing on honesty, integrity, equality and justice</li><li>Evaluation of young talents</li><li>Educational programs</li><li>Satisfaction surveys for employees</li></ul>	<ul style="list-style-type: none"><li>Maintaining corporate culture</li><li>Increasing employee loyalty thanks to the fringe benefits, value demonstrated and activities performed</li><li>Early identification of risks and taking precautions with a competent employee profile</li><li>Maintaining the leadership in the sector and maintaining the presence in the market</li></ul>	<ul style="list-style-type: none"><li>Employment growth/local development</li><li>Increasing the employment of personnel with disabilities</li><li>Creating an efficient working environment</li><li>Skill management</li><li>Providing a safe and decent working environment</li><li>Improvement of working conditions and rights provided to employees, development of employee capacity</li></ul>	<p><b>Risks</b></p> <ul style="list-style-type: none"><li>The turnover rate of talented employees due to the increasing competition in the sector</li><li>Lack of access to talented employee group</li><li>OHS risks</li></ul> <p><b>Opportunities</b></p> <ul style="list-style-type: none"><li>Quick decision making with the establishment of agile business models</li></ul>	<p><b>Performance Indicators</b></p> <ul style="list-style-type: none"><li>Accident frequency rate</li><li>Number of lost days</li><li>Number of employees with disabilities</li><li>Hours of Training provided</li><li>Number of emergency drills</li><li>Employee turnover rate</li><li>Employee satisfaction survey score</li></ul> <p><b>Goals</b></p> <ul style="list-style-type: none"><li>25% reduction in the accident frequency rate compared to the previous year</li><li>Reducing the number of lost days by 25% compared to the previous year</li><li>Increasing the number of employees with disabilities</li><li>Increasing the number of Environmental Education hours per person by 50%</li><li>Providing an average of at least 32 hours of OHS training per person</li><li>Conducting emergency drills at least twice a year</li><li>Increasing employee satisfaction by at least 5% compared to the previous year</li></ul>
Relevant SDGs				



## Our Human Resources Approach

We, as Akademi Çevre, consider human resources as one of our most significant values and manage human resources processes in compliance with the entire relevant legal requirements. With the human resources strategy, amongst the focal issues of the sustainability approach, we develop practices to increase motivation by considering the requirements and expectations of our

personnel. Our corporation, adopting the human resources policy with a human-centered philosophy, stands against all kinds of discrimination, especially gender, age, ethnicity, nationality, health status, and considers and regards this as the basis for the formation and execution of the entire value chain.

### Stakeholder Opinion

I was introduced with Akademi Çevre when I just graduated from the university. With its extremely dynamic and ever-evolving structure, Akademi Çevre not only performs successful projects, but also ensures that its employees become successful and constantly improve themselves. As Akademi Çevre employee, we can take responsibility and continue to achieve greater success with the support of experienced directors. The experience, competencies and friendships I have gained at Akademi Çevre are the greatest values I have incorporated to my life.

**Ayşegül ORDU ÇAKIROĞLU**  
Environmental Engineer  
Akademi Çevre

## Our Competent Employee Profile

Employee development and talent management are among our top priorities. Our corporation aims to manage its human resources in the most effective and efficient way through talent management and career development practices. We are aware of the added value that each of our competent employees shall introduce to the organization and we attach great importance to this aspect. By involving our employees in the innovative approach and learning processes, we support their individual development

and at the same time, we provide corporate development accordingly. In this direction, we organize in-house seminars and trainings, apart from the compulsory legal trainings, such as “waste and environmental awareness, personal development, body language, e-mail language training” that increase the social skills and awareness of our employees in protecting the environment. In line with this approach, we conducted 10 trainings between the years 2018 and 2020 benefited by our entire personnel.

Employee Trainings - Total Hours (person x hour)	2018	2019	2020
Blue Collar	133	247	272
White Collar	77	77	93
Female	70	70	300
Male	140	254	65



## Employee Benefits and Safe Working Environment Provided to Employees

By keeping the COVID-19 pandemic, which affected the whole world under its influence in 2020, at the forefront, we harmonized the working conditions with the current process and have taken various measures in this direction. We changed the dining hall arrangement, office seating arrangement and the shuttle arrangement in our entire facilities. We have endeavored to prevent the spread of the pandemic within the organization with the disinfectants and informational texts we posted in the common areas. We have regularly taken fever measurements at the entrances and exits to the premises

and applied HES code controls. We tried to support our employees contracted with the pandemic by distributing hygiene and food packages during their infection.

We, as Akademi Çevre, receive feedback from our employees and evaluate these opinions in order to improve our operations and employee rights. In this context, we implement employee satisfaction and complaint surveys and support our employees to increase employee loyalty through the reward system.

## Occupational Health and Safety

With our Occupational Health and Safety (OHS) Policy, which reflects the value we place on people, we offer our employees a safe, healthy and well-being-enhancing work environment. In this context, we do care about acting in accordance with legal requirements and international standards on Occupational Health and Safety. We perform corporate activities and operations within the framework of our Occupational Health and Safety Policy and the ISO 45001 Occupational Health

and Safety Certificate in our possession.

We define the design, engineering and administrative controls, preventive maintenance and safe works in accordance with the Occupational Health and Safety risk analysis (for instance; chemical, electricity and other energy sources, fire, vehicles and fall hazards), and we follow the current situation by performing assessments within this framework.

### OHS Trainings Offered to Employees - Total Hours (person x hour)

2018	2019	2020
2,960	4,384	5,120

We employ an OHS committee closely following up on OHS issues. OHS committee members consist of OHS Manager, Facility Manager, Production Manager, Maintenance Specialist, Quality Manager, Human Resources Specialist and an Employee Representative, and our committee holds weekly meetings. Committee activities and meetings are regularly reported to the senior management.

In early 2020, we have implemented the required software within the scope of the OHS Management System to be used in our entire locations. We enabled the current situation to be followed digitally by the technical and OHS units by collecting our entire information on Occupational Health and Safety on the software. The trainings and legal obligations we

perform and conduct on this platform, where our different departments can be integrated, are implemented and followed by the Human Resources and OHS units. With this application, which is aimed to be managed based on a system independent of the person and the department, it is ensured that the periodic maintenances in the activities performed within the scope of OHS are conducted within the relevant schedule.

Occupational Health and Safety is an aspect adopted by the senior level attached great importance by us. Managers and assistant general managers can follow the current situation in the committee, where the OHS, Technical Unit, Operation, Production, Human Resources and Senior Management serve as the internal partners.

## Inclusion and Diversity

Within the framework of respect for human rights, we elaborate to provide equal opportunities to the entire individuals and contribute to gender equality. The entire blue-collar personnel working in the pre-treatment

processes are women. In order to support our goal of supporting gender equality, we aim to increase female employment throughout the corporation in the upcoming years.

### Employees by Gender

Female (White Collar)	28
Men (White Collar)	65
Female (Blue Collar)	37
Men (Blue Collar)	235

### Employees by Age Groups

18-30	143
30-45	157
45+	65



Social  
Capital

07



Simay ES



# 07


## Social Capital

As a corporation that has adopted the mission of combating climate change within the framework of the principle of respect for the society and planet in which we operate, we create value with our practices to improve circular economy and waste management, while we carry out social responsibility activities so that this mission can be passed on to future generations.

With the endeavors we perform, we raise awareness regarding climate change and recycling at a significant level among young generations and support sustainable movements for the welfare of the future. In line with the importance we attach to the dialogs

with our stakeholders, we identify our priority issues, regularly perform communication activities, and through this way, we collect feedback from our stakeholders and update our processes accordingly.

## Social Capital Relationship Chart

Relevant Capital Input	Value Created for Akademi Çevre	Value Created for the External Environment and Stakeholders	Risks and Opportunities	Performance Indicators Goals
<ul style="list-style-type: none"><li>• Close relations with various organizations such as NGOs, professional chambers, stock exchanges</li><li>• Participation in various conferences, workshops, panels and projects</li><li>• Establishing good relations with public authorities and ensuring transparent communication</li><li>• Relationships with customers and suppliers</li><li>• Accomplished social responsibility projects</li><li>• Sponsored events</li></ul>	<ul style="list-style-type: none"><li>• Positive reputation and brand value created before stakeholders</li><li>• Positive image created in society</li><li>• Developing sustainability-themed studies</li><li>• High customer satisfaction</li></ul>	<ul style="list-style-type: none"><li>• Raising the recycling awareness of the society</li><li>• Providing social benefit through corporate social responsibility projects</li></ul>	<p><b>Risks</b></p> <ul style="list-style-type: none"><li>• Failure to meet rapidly developing stakeholder expectations</li><li>• Potential negative effects of negative developments in the sector on the image of the company</li></ul> <p><b>Opportunities</b></p> <ul style="list-style-type: none"><li>• Establishing collaborations to provide efficiency with the effective management of the supply chain</li><li>• Providing a positive contribution to the customers to whom it is a supplier due to the European Green Deal with the works to be performed</li><li>• Creating value for customers subject to the emissions trading system</li></ul>	<p><b>Performance Indicators</b></p> <ul style="list-style-type: none"><li>• Customer satisfaction survey score</li><li>• Complaint closing time</li><li>• On-time delivery rates of the orders</li><li>• Number of supported social responsibility projects</li><li>• Number of Supported sponsorships</li></ul> <p><b>Goals</b></p> <ul style="list-style-type: none"><li>• Maintaining the role of the customer as a trusted solution partner</li><li>• Maintaining the zero-defect goal for customers</li><li>• Adding new ones to the supported social responsibility projects</li><li>• Increasing the number of sponsorships supported</li></ul>
Relevant SDGs				



## Our Customer Relations and Customer Satisfaction

While performing our activities and operations, we observe our customer expectations and follow a disciplined approach in line with the goal of increasing satisfaction. We aim to increase customer satisfaction by improving our service quality on a daily basis, thanks to the services we provide and successful financial performance.

We manage customer satisfaction within the scope of ISO 10002 Customer Satisfaction Management System, and we conduct regular surveys for our customers. We evaluate and resolve complaints and objections as soon as possible, and we provide feedback to our customers accordingly.

## Our Strong Stakeholder Relations

We, as Akademi Çevre, attach great importance to the communication we establish with our stakeholders, having considered the organization's value creation strategy is related to the value it creates for its stakeholders. We consider our stakeholder expectations while determining the material issues required for the institution and creating the corporate strategy, and we request to have the opinions of our stakeholders through the communication activities we perform on a regular basis.

We attach importance to being in close and up-to-date communication with our stakeholders, and we evaluate this dialog in many fields such as establishing company policies, conducting collaborations, and developing social responsibility projects. We conduct satisfaction surveys for our stakeholders at least once a year and activate our complaint evaluation mechanism in case of any dissatisfaction.

## Our Communication Channels

Stakeholders	Communication Platform	Communication Period
Employees	Akademi Çevre website	Continuous
	Social Media	Continuous
	Newsletters - sustainability and compliance, occupational health and safety, environment, quality management systems, information security, human resources, public announcements, experiences acquired and best practices	Continuous
	Employee satisfaction survey	Continuous
	Information security breach incident notification form	Continuous
	Audits	Continuous
Customers	Customer satisfaction survey	At least once a year
	Websites	Continuous
	Meetings	Within certain intervals
	Akademi Çevre Integrated Quality Management System	Continuous
	Annual Reports	Once a year
Business Partners (Suppliers, Subcontractors, 2. Party Audit Firms, 3. Party Audits Insurance Companies, Logistic Enterprises, Service Providers, Consultancy Firms, etc.)	Websites	Continuous
	Evaluation surveys	At least once a year
	Management system audits	Within certain intervals
	Akademi Çevre Integrated Quality Management System	Continuous
	Complaint Mechanisms	In case of need
	Meetings	Within certain intervals
Societal Stakeholders (local communities, NGOs, media)	Audits	Within certain intervals
	Websites	Continuous
	Media, social media	Continuous
	Meetings	Within certain intervals
	Complaint mechanisms	Continuous
Public institutions (governments, local organizations, university and academic institutions, tax authorities)	Memberships	Within certain intervals
	Websites	Continuous
	Meetings	Within certain intervals
	Official correspondences	Continuous
	Audits	Within certain intervals
	Memberships	Within certain intervals



## Our Corporate Memberships

Our Memberships
UNGC Turkey – UN Global Compact Turkey
ISWA - International Solid Waste Association
SKD Turkey – Sustainable Development Association
TOBB- Union of Chambers and Commodity Exchanges of Turkey
TAYCED - Waste and Environmental Management Association
Sustainability Academy
Turkey Materials Marketplace
TÜDAM - Recycle Waste Materials Industrialists' Association
ÖTASAD - End of Life Vehicle Industrialists' Association
GEKSANDER - Association of Recycling Industrialists
İGEDDER - Istanbul Recyclers Association
Confederation of Recyclers
BIR.ORG
British Chamber of Commerce
Italy Chamber of Commerce

We, as Akademi Çevre, believe that sustainability can only be feasible in line with an interdisciplinary approach and cooperation. Acting with the awareness that preventing the use of resources starts with design, we perform various studies and endeavors with industrial design students within the scope of university and industry collaborations. We have implemented separate design-oriented projects with Yeditepe University and Beykent University in accordance with this mission.

Within the scope of the 2244-Industrial Ph.D. Program carried out by TUBITAK for the purpose of training qualified human resources with doctorate degrees, highly required in the industry, in collaboration with the university

and industry, we have conducted studies and endeavors with Hacettepe University. In this direction “Industrial Ph.D. Project in the Field of Evaluation of Electronic Waste” in 2019 has been entitled to be supported by TUBITAK.

### Stakeholder Opinion

Akademi Çevre A.Ş. supports education in the fields of research and development, innovation and contribution to society as an external stakeholder, as well as the University-Industry cooperation studies and endeavors it performs with the Yeditepe University Faculty of Architecture Department of Industrial Design. In line with the Sustainable Development Goals of the United Nations, we contribute to education and training through our sustainability studies and collaborations.

**Assoc. Prof. Ayşem G. BAŞAR**  
Yeditepe University  
Faculty of Architecture  
Head of Department of Industrial Design

We, as Akademi Çevre, regularly sponsor various sectoral and social events. In line with this, the events sponsored by us are as follows:

2018	9 <sup>th</sup> TURKTAY (Waste Management with its Entire Aspects in Turkey) Program in 2018
	Istanbul Metropolitan Municipality International Environment Summit
2019	TÜÇEV (Environmental Protection Foundation of Turkey) Waste Management Summit
	IREMCON International Environment Conference
	5. Istanbul carbon Summit
	Garbage and Waste Panel Discussion in Istanbul
	IGEDDER (Istanbul Recyclers Association) Sectoral Meeting
	15. Sponsorship of Our National Athlete Ömer Atar for the World Mounted Archery Championship
	16. Istanbul Biennial- Seventh Continent
2020	Fenerbahçe DEV Ataşehir Volleyball and Basketball Uniform Name Sponsorship

Moreover, during the reporting period, we have sponsored the New Plastics Economy and Green Business Summit organized by the Sustainability Academy.



## Stakeholder Opinion

Our pride is the social and technical projections of Akademi Çevre, which started at the first and only Istanbul Electrical and Electronic Waste Summit of our country on March 5-6, 2015, and increased our efficiency in cooperation with the Istanbul Carbon Summits, and our waste business world stakeholder. May the employment and green money that the Akademi Çevre sustainability management shall generate in the circular economy be abundant.

**Prof. Dr. Filiz KARAOSMANOĞLU**  
İTÜ Academician  
Chairperson of SÜT-D

## Our Social Responsibility Projects

By integrating sustainability into our business model and strategy, we have implemented various awareness, consciousness and development projects for the purpose of contributing to the children who are the representatives of the future and the society in which they perform activities, in parallel with our mission on

issues such as Climate Change, Circular Economy and Waste Management. In this direction, while supporting projects creating environmental and social impact, we render this social responsibility awareness an inseparable and indispensable part of our corporate culture.

## Examples for Our Social Responsibility Projects



### Vodafone “These Wastes Write Code”

“These Wastes Write Code” project, which we started with Vodafone on the 2019 World Environment Day in order to promote the Recycling of E-Waste and raise awareness on sustainability, continues to open new coding classes.

The project which its Electronic Wastes brought by Vodafone employees have been collected and donated, coding classes are opened in Mardin, Samsun, Adana and Gaziantep up to the present. With the contributions of 22 stakeholder companies and 14,000 employees,

E-Waste continues to be collected and coding classes continue to be opened with the revenue generated by recycling at the Academy Environmental Recycling Facilities. The social impact of the project is increased by opening the coding classes in disadvantaged areas and making the classrooms accessible not only to the students at that school but also to the entire children in that city.







## Akademi Çevre KidZania Recycling Center

We have been training the Waste Management Specialists of the future for a sustainable future. We opened the Akademi Çevre KidZania Recycling Center in KidZania, the Land of Children, in August 2020, so that children are able to experience the entire process, from the sorting of Electronic Waste to the contribution of recycling to the environment and the economy. Children coming to Akademi Çevre KidZania Recycling Center disassemble waste electronics with their own hands and include it in the Recycling process and obtain valuable materials such as

Copper and Plastic as a process output. They internalize these concepts by experiencing subjects such as Circular Economy, Sustainability, Waste, Waste Management and Environment.

Within the scope of the collaboration, in where children aged 6-14 who grew up with technology can gain extensive experience in Waste Recycling and environmental protection, 4,528 children experienced being a "Waste Management Specialist" in 2020 and entitled to receive a certificate.



## E-Waste Mobilization

Following the E-Waste Mobilization Project, which we have implemented in collaboration with the Sustainable Development Association (SKD) during the reporting period, we have implemented circular economy practices within the scope of combating the climate crisis for the welfare of our planet, and in this sense, we have contributed to the education of children, the future of ours in this regard. 74 computers,

obtained by restoring unused electronics through repair and repair processes, have been donated to our children who had online education during the pandemic period but did not have access to a computer, through the Association for Supporting Contemporary Life, Koruncuk Foundation, Tider Foundation and Atabağı Primary School in Siirt's Baykan district.



## Zero Waste Blue Bademli Coast Cleaning



We as Akademi Çevre, promised Zero Waste Blue to prevent pollution of the seas and coasts, to combat pollution, to encourage and to perform encouraging activities to increase the participation in this context. In the light of this goal, we have started to work for the coasts, and on Saturday, August 3, 2019, we have organized a waste collection event with Zeliha Sunal to draw attention to the pollution of the coasts in Bademli Village Beach of Dikili district of Izmir, and we have performed cleaning activities together with the habitants of the region and the employees of the corporation.







## We are with WWF - Turkey, Pursuing the Goal of NO PLASTICS IN NATURE!

Following the protocol concluded between WWF-Turkey (World Wildlife Fund) and Municipality of Çeşme, the District of Çeşme joined WWF's Plastic Waste Free Cities Network and committed to reduce plastic pollution by 30 percent in the district within 2 years. We, as Akademi Çevre, have both ensured the coordination of this project and undertaken the consultancy endeavors of the project. Within the scope of the project, acting with the teams of Municipality of Çeşme Directorate of Environmental Protection

and Control and WWF-Turkey, we have distributed recycling bags to a total of 90 households in the neighborhoods determined. At the end of the project, which includes the determination of the composition of household waste as well as the characterization of non-household waste and the determination of control levels of recovery/disposal facilities, it is aimed to develop strategies and plans for the purpose of improving waste management with the outputs obtained and to provide assistance to the people of Çeşme to have a better urban life.



## Zero Waste Song

In line with the support we give to waste reduction and resource management, we, As Akademi Çevre, contributed to the vocalization of the song "Zero Waste", which was written by the students and Music Teacher Funda Cumbul of Ataşehir Emlak Konut Secondary School and we brought them together with famous pop singer and activist Zeliha Sunal. The School had been selected as the first pilot school within the scope of the "Zero Waste Project" of the Ministry of Environment, Urbanization and Climate

Change and was entitled to receive the Environment Certificate. In order to share the valuable messages in the content of the song with the whole of Turkey, a video clip has been shot by supporting this valuable project and the song "Target Zero Waste" has been introduced to the audience on 300 different digital platforms. The song is made available for the use of the entire schools in all special days and awareness raising activities related to the environment, especially the Environment Day.



## Sustainable Chats Youtube Channel Project



Akademi Çevre has an academic and unifying mission, true to its name, in the ecosystem it sustains its existence. On the basis of this mission, we have created the Sustainable Chats Youtube Channel Project by uniting the industry on a digital platform.

An open source, having the characteristics of an archive and where information can be obtained whenever needed, has been created especially for university students and the sector in which they operate. Along with guests who are renown experts in their fields such as Mert Firat, Güven İslamoğlu and senior executives of significant organizations such as TEMA, ÇEVKO, PAGEV, consciousness and awareness-raising activities have been performed on subjects such as sustainability, climate, circular economy, recycling, and zero waste through the Youtube platform.

Sustainable Chats, reaching out approximately 30 thousand people with the social media communication performed during the live broadcasts, received more than 12 thousand hits with its YouTube live broadcasts. Following the series of live broadcasts, content for raising public awareness regarding the Zero Waste, Waste types and management, developments in regulations and waste continues to be produced through recorded broadcasts and continues to establish benefits for the entire stakeholders as an open source.

With the Sustainable Chats Youtube Channel Project, we have been entitled with an award in the Social Impact category for the Low Carbon Hero awards organized by SÜT-D (Sustainable Production and Consumption Association) during the reporting period.



## Traditional April 23 Painting Contest

We share the holiday enthusiasm of our children every year and support the raising of Zero Waste awareness with the April 23 Painting Contest, we organized for the second time this year, especially for the children of our employees. We support our children between the

ages of 5 and 12, who are interested in painting, through painting with a theme determined every year on the occasion of April 23, National Sovereignty and Children's Day, which was gifted to the children of the world by the founder of our Republic, Gazi Mustafa Kemal Atatürk.



**MİNİK KALPLER,  
BÜYÜK MUTLULUKLAR**

Ödüllü resim yarışmamızla bu 23 Nisan'da da çocuklarımızın coşkusuna ortak oluyoruz.

5 - 12 yaş arası çocuklarımızın katılabileceği yarışmamızın bu seneki teması ise "sınırlı kaynak kullanımı".

Sınırlı olan doğal kaynaklarımızın etkin kullanımına yönelik çalışmalarınızı bekliyoruz...

Minikleri bekleyen ödüller ise şöyle;

**1.'lik ödül - 2.000TL**

**2.'lik ödül - 1.500TL**

**3.'lük ödül - 1.000TL**



## Training and Technical Trip Program

As Akademi Çevre, we open the doors of our facility to all student groups, from kindergarten students to graduate students, and show how an Integrated Recycling Facility works on-site.

According to the age groups and interests of the participants, we organize trainings in our fields of expertise such

as Zero Waste, Recycling, Climate Change, Sustainability, Circular Economy, then continue with a technical trip. With this training package, in which we show how the processes progress in practice, we reached 1080 students in 2019 and we received the Low Carbon Hero Award given by the SÜT-D Association.

## Our Responsible Supply Chain

We, as Akademi Çevre, evaluate our suppliers, from which we purchase products or services, based on various criteria. In this context, we expect our entire suppliers and sub-suppliers of our suppliers to improve the working environment for their employees, support a cleaner environment and comply with the rules of business ethics, by determining and employing working standards and behavioral methods.

We, as Akademi Çevre, have identified the issues that our suppliers are required to comply with in terms of legal compliance, human rights, Occupational Health and Safety, non-employment

of child labor, anti-bribery and anti-corruption, ensuring confidentiality and sustainability, management systems, environmental protection, prevention of pollution and reduction of resource use and we addressed this matter in our Sustainability Policy.

We have increased the number of suppliers to 234 and conducted 4 audits with our suppliers within 2020. In the audits we conducted, we have detected non-conformities with 6 suppliers of ours and established improvement plans for 3 suppliers.



Financial  
Capital

08






# 08

## Financial Capital

Thanks to our sustainability-focused activities, a positive rise in our financial indicators is available, with successful operational profitability and net profit performance. Our sales costs have increased by 35% in 2020 compared to the previous year.

## Financial Capital Relationship Chart

Relevant Capital Input	Value Created for Akademi Çevre	Value Created for the External Environment and Stakeholders	Risks and Opportunities	Performance Indicators Goals
<ul style="list-style-type: none"> <li>Successful financial risk management</li> <li>Successful marketing activities</li> <li>Pricing system</li> </ul>	<ul style="list-style-type: none"> <li>Maintaining a strong financial infrastructure</li> <li>Sustainable growth capacity and competitiveness</li> <li>Highly accomplished market share</li> </ul>	<ul style="list-style-type: none"> <li>Employment creation</li> <li>Contribution to economic development</li> <li>Value delivered to suppliers and customers</li> </ul>	<p><b>Risks</b></p> <ul style="list-style-type: none"> <li>Being subject to criminal sanctions due to non-compliance with legal regulations</li> </ul> <p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>Reflection of increased recycling activities on financial performance due to developing market preferences and legal obligations</li> </ul>	<p><b>Performance Indicators</b></p> <ul style="list-style-type: none"> <li>Profitability rate (net profit / sales)</li> </ul> <p><b>Goals</b></p> <ul style="list-style-type: none"> <li>5% increase in profitability compared to the previous year artırılması</li> </ul>
Relevant SDGs				

## Value We Have Created with Financial Capital

The focus of our value creation model is sustainable development, brand value identified with trust, reputation and prestige, sustainable growth capacity and competitiveness, effective risk and opportunity management, circular economy practices and support for economic development.

We, as Akademi Çevre, follow the approach of actively monitoring financial risks within the

framework of different criteria and managing them dynamically by taking relevant actions.

In accordance with our operations focused on sustainable development, we observe a positive and stable rise in our financial indicators. Acting with an approach to customer satisfaction and an environmentally friendly service approach, our sales incomes has increased by 35% in 2020 compared to the previous year.

Net Sales Income	2018	2019	2020
(compared to the previous financial year)	84% increase	33% increase	35% increase





Appendix

09



# Appendix 1: GRI Index

## GRI 102-55

GRI Standard	Disclosure	Page numbers, explanations and/or URL	Omissions
GRI 101: Foundation 2016			
GRI 102: General Disclosures 2016			
GRI 102: General Disclosures 2016	Company Profile		
	102-1	About the Report p.5	-
	102-2	About Akademi Çevre p.12-19	-
	102-3	İstanbul, Türkiye	-
	102-4	About Akademi Çevre p., Our Facilities and Branches p.19	-
	102-5	About Akademi Çevre p.12-19	-
	102-6	About Akademi Çevre p.12-19	-
	102-7	About Akademi Çevre p.12-19	-
	102-8	The Message of the Senior Management p.6-7, The Message of the CEO p.8-9	-
	102-9	Our Responsible Supply Chain p.121	-
	102-10	There were no significant in the organizational boundaries and supply chain during the reporting period.	-
	102-11	Corporate Governance p.20	-
	102-12	Sustainability Approach p.24-27	-
	102-13	Our Corporate Memberships p.112	-
	Strategy		
	102-14	Akademi Çevre CEO Message p.8-9	-
	102-15	Corporate Governance p.20	-
	Ethics and Integrity		
	102-16	Corporate Governance p.20	-
	102-17	Corporate Governance p.20	-
	Governance		
	102-18	Sustainability Governance p.28 Corporate Governance p.20	-
	Stakeholder Engagement		
	102-40	Our Strong Stakeholder Relations p.110-111	-
	102-41	Social Performance Indicators p.132-134	-
	102-42	Our Strong Stakeholder Relations p.110-111 Sustainability Governance p.24-27	-
	102-43	Our Strong Stakeholder Relations p.110-111 Sustainability Governance p.24-27	-
	102-44	Our Strong Stakeholder Relations p.110-111 Sustainability Governance p.24-27	-

GRI 102: General Disclosures 2016	Reporting Practice		
	102-45	About the Report p.5	-
	102-46	About the Report p.5	-
	102-47	Akademi Çevre Materiality Matrix p.26	-
	102-48	There are no restatements.	-
	102-49	There are no restatements.	-
	102-50	About the Report p.5	-
	102-51	About the Report p.5	-
	102-52	Annual	-
	102-53	About the Report p.5	-
	102-54	About the Report p.5	-
	102-55	GRI Content Index p.128-131	-
	102-56	No external assurance in place for sustainability reporting.	-

Material Issues			
GRI Standard	Disclosure	Page numbers, explanations and/or URL	Omissions

Climate Change and Energy Management			
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	Natural Capital p.50-54, Our Environmental Approach p.55	-
	103-2 The management approach and its components	Natural Capital p.50-54, Our Environmental Approach p.55	-
	103-3 Evaluation of the management approach	Natural Capital p.50-54, Our Environmental Approach p.55	-
GRI 302: Energy 2016	302-1 Energy consumption within the organization	Natural Capital p.50-54, Environmental Performance Indicators p.135-136	-
	302-3 Energy intensity	Natural Capital p.50-54, Environmental Performance Indicators p.135-136	-
	302-4 Reduction of energy consumption	Natural Capital p.50-54, Environmental Performance Indicators p.135-136	-
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	Natural Capital p.50-54, Environmental Performance Indicators p.135-136	-
	305-2 Energy indirect (Scope 2) GHG emissions	Natural Capital p.50-54, Environmental Performance Indicators p.135-136	-
	305-4 GHG emissions intensity	Natural Capital p.50-54, Environmental Performance Indicators p.135-136	-
	305-5 Reduction of GHG emissions	Natural Capital p.50-54, Environmental Performance Indicators p.135-136	-

Circular Economy and Natural Resource Management			
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	Waste Management Service p.56, Natural Capital p.50-54	
	103-2 The management approach and its components	Waste Management Service p.56, Natural Capital p.50-54	
	103-3 Evaluation of the management approach	Waste Management Service p.56, Natural Capital p.50-54	-
GRI 303: Water and Effluents 2018	303-3 Water withdrawal	Waste Management Service p.56, Natural Capital p.50-54 Environmental Performance Indicators p.135-136	-
	303-4 Water discharge	Waste Management Service p.56, Natural Capital p.50-54 Environmental Performance Indicators p.135-136	
GRI 306: Effluents and Waste 2016	306-1 Water discharge by quality and destination	Waste Management Service p.56, Natural Capital p.50-54 Environmental Performance Indicators p.135-136	
	306-2 Waste by type and disposal method	Waste Management Service p.56, Natural Capital p.50-54 Environmental Performance Indicators p.135-136	



Legal Compliance/Environmental Compliance			
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	Corporate Governance p.20, Akademi Çevre Business Model p.32-36, Our Environmental Approach p.55	
	103-2 The management approach and its components	Corporate Governance p.20, Akademi Çevre Business Model p.32-36, Our Environmental Approach p.55	
	103-3 Evaluation of the management approach	Corporate Governance p.20, Akademi Çevre Business Model p.32-36, Our Environmental Approach p.55	

Talent Management and Employee Development			
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	Our Human Resources Approach p.102, Our Competent Employee Profile p.103	
	103-2 The management approach and its components	Our Human Resources Approach p.102, Our Competent Employee Profile p.103	
	103-3 Evaluation of the management approach	Our Human Resources Approach p.102, Our Competent Employee Profile p.103	
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	Social Performance Indicators p.132-134	
	401-3 Parental leave	Social Performance Indicators p.132-134	
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	Our Competent Employee Profile p.103, Social Performance Indicators p.132-134	
	404-2 Programs for upgrading employee skills and transition assistance programs	Our Competent Employee Profile p.103	
	404-3 Percentage of employees receiving regular performance and career development reviews	Social Performance Indicators p.132-134	

Diversity and Inclusion			
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	Diversity and Inclusion p.105	
	103-2 The management approach and its components	Diversity and Inclusion p.105	
	103-3 Evaluation of the management approach	Diversity and Inclusion p.105	
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	Social Performance Indicators p.132-134	
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	Corporate Governance p.20, Sustainability Governance p.28 There were no incidents of discrimination during the reporting year.	

Occupational Health and Safety, Human Rights and Decent Work			
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	Occupational Health and Safety p.104-105, Corporate Governance p.20	-
	103-2 The management approach and its components	Occupational Health and Safety p.104-105, Corporate Governance p.20	-
	103-3 Evaluation of the management approach	Occupational Health and Safety p.104-105, Corporate Governance p.20	-
GRI 403: Occupational Health and Safety 2018	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.104-105, Social Performance Indicators P.132-134	
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	Corporate Governance p.20, Sustainability Governance p.28 There were no incidents of discrimination during the reporting year.	-

Occupational Health and Safety, Human Rights and Decent Work			
GRI 408: Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	Corporate Governance p.20, Our Responsible Supply Chain p.121	
GRI 409: Forced or Compulsory Labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	Corporate Governance p.20, Our Responsible Supply Chain p.121	

Customer Satisfaction and Product Reliability			
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	Our Customer Relations and Customer Satisfaction p.110	-
	103-2 The management approach and its components	Our Customer Relations and Customer Satisfaction p.110	-
	103-3 Evaluation of the management approach	Our Customer Relations and Customer Satisfaction p.110	-
GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	Our Customer Relations and Customer Satisfaction p.110	
	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	There are no non-compliance cases regarding health and safety impacts of products in reporting period.	-
GRI 419: Socioeconomic Compliance 2016	419-1 Non-compliance with laws and regulations in the social and economic area	There are no non-compliance cases regarding health and safety impacts of products in reporting period.	

Sustainability in Value Chain			
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	Our Responsible Supply Chain p.121	-
	103-2 The management approach and its components	Our Responsible Supply Chain p.121	-
	103-3 Evaluation of the management approach	Our Responsible Supply Chain p.121	-
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	Our Responsible Supply Chain p.121	-
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	Corporate Governance p.20, Sustainability Governance p.28, Our Responsible Supply Chain p.121	

Digitalization, R&D and Innovation			
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	R&D Projects and International Projects p.92	-
	103-2 The management approach and its components	R&D Projects and International Projects p.92	-
	103-3 Evaluation of the management approach	R&D Projects and International Projects p.92	-

Corporate Social Responsibility			
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	Our Social Responsibility Projects p.114-120	-
	103-2 The management approach and its components	Our Social Responsibility Projects p.114-120	-
	103-3 Evaluation of the management approach	Our Social Responsibility Projects p.114-120	



## Appendix 2: Performance Indicators

### Social Performance Indicators

Total employees (Number)	2018	2019	2020
Direct Employees	210	324	365
Female	70	70	65
Male	140	254	300
Subcontracted Employees			
Female	-	-	-
Male	-	-	-

Employees by Gender (Number)	2018	2019	2020
Permanent	210	324	365
Female	70	70	65
Male	140	254	300
Temporary			
Female	-	-	-
Male	-	-	-

Employees by education (Number)	2018	2019	2020
Primary school	50	69	70
High School	125	170	210
University and above	35	85	85

Employees by age group (Number)	2018	2019	2020
18-30	70	134	143
30-45	105	155	157
45+	35	35	65

Management Level Employees by Gender	2018	2019	2020
Top Management			
Female	8	8	10
Male	15	15	15
Mid-Level Management			
Female	10	14	20
Male	11	20	24

New Employees by Gender	2018	2019	2020
Female	20	27	13
Male	50	75	18
Turnover by Gender	2018	2019	2020
Female	8	15	20
Male	45	50	170

Parental Leave	2018	2019	2020
Employees Who Took Parental Leave			
Female	1	3	2
Male	0	0	0
Employees Returning from Parental Leave			
Female	1	0	0
Male	0	0	0
Employees Who Were Still Employed After 12 Months Since Returning from Parental Leave			
Female	0	0	2
Male	0	0	0

Disabled Employees	2018	2019	2020
Kadın	0	0	0
Erkek	1	2	2



Employees Under Collective Agreement Labor (Unionization)	2018	2019	2020
Direct Employees	0	0	0

Employee Trainings	2018	2019	2020
Number of Participants			
Blue Collar	13	25	15
White Collar	5	5	5
Female	5	5	0
Male	13	25	20
Total Hours (personxhour)			
Blue Collar	133	247	272
White Collar	77	77	93
Female	70	70	300
Male	140	254	65
OHS Training (personxhours)			
Direct Employees	-	324	365
Subcontracted Employees	-	-	-
Total Hours (personxhour)			
Direct Employees	2,960	4,384	5,120
Subcontracted Employees	-	-	-

Occupational Health and Safety Performance	2018	2019	2020
Injury Frequency Rate (Number of injuries / Total official working hours)*1,000,000	8.1	2.0	0
Lost Time Injury Frequency Rate (Number of lost time injuries / Total official working hours)*1,000,000	8.1	2.0	0
Injury Severity Rate (Number of lost days due to injuries / Total official working hours)*1,000,000	54.9	6.1	0
Incidents Resulting in Death	0	0	0

Environmental Performance Indicators

Environmental Performance	2018	2019	2020
Non-renewable sources			
Natural gas (m³)	2,675	4,620	3,467
Electricity (kWh)	193,241	207,685	175,817
LPG (liter)	288	276	300
Acetylene	-	-	-
Coal/anthracite	-	-	-
Diesel (Auxiliary power units, liters)	200	150	100
Renewable sources			
Solar	-	4	4
Hydrogen	-	-	-
Wind	-	-	-
Biofuel	-	-	-
Other	-	-	-

Greenhouse Gas Emissions (tCO <sub>2</sub> e)	2018	2019-2020
Scope 1 (Direct)	531.6	647.8
Scope 2 (Indirect - Energy)	121.7	194.0
Scope 1+2	-	-
Scope 3 (Indirect)	369.8	316.8
Annual CO <sub>2</sub> Emissions	1,023.1	1,158.6

Within the scope of Akademi Çevre’s greenhouse gas emissions, emissions originating from fuel consumption consumed for heating and electricity generation in Turkey operations are direct emissions (Scope 1), emissions originating from purchased electricity are energy indirect emissions (Scope 2) and emissions originating from business travels and personnel services are other indirect emissions (Scope 3).



Water Consumption (m³)	2018	2019	2020
Total water withdrawal by source (m³)			
Mains	3,229	2,593	1,752
Surface waters (lake, river, pond, dam, etc.)	3,109	2,483	1572
Groundwater	-	-	-
Other (Bought from 3 <sup>rd</sup> parties, sea water, etc.)	120	110	180

Waste Amount	2018	2019	2020
Waste (ton)	402,975	691,131	1,503,020
Hazardous Waste by Disposal Method (ton)	58,741	35,432	116,908
Energy recovery	58,741	35,432	49,075
Recycling			67,833
Incineration	-	-	-
Landfill	-	-	-
Other	-	-	-
Non-Hazardous Waste by Disposal Method (ton)	344,234	655,699	1,386,112
Energy recovery	-	-	-
Recycling	274	370,376	102,963.9
Incineration	-	-	-
Landfill	343,960	285,323	35,6473
Other	-	-	-

# Appendix 3:

## Collaborations Established by Akademi Çevre

Collaborations Established by Akademi Çevre		
Organization	Project Name	Year
Yeditepe University and İstek Schools	"Sitting Element" Design Workshop within the scope of "University-Industry Collaborations for Sustainable Environment"	2018
Municipality of Tuzla	Providing Training on E-Waste by Visiting the Entire Schools in Tuzla Region	
Kültür College	Mentoring and Jury Membership within the Scope of Recycling-Oriented Start-Up Development Program	
İGA	Sapling Planting Event within the Scope of We Are Sprouting Our Future	
Istanbul University	Journal Event	
IFAT	Trade Fair	
IREMCON	Conference	
TÜRK TAY	Panel Discussion	
REW	Trade Fair	
Beykent University	Workshop	
Yeditepe University	Lighting Equipment Design Workshop	2019
Eloise Hawser	Istanbul Biennial-Seventh Continent	
Hacettepe University	Environment Summit	
Altınbaş University	Speaker in Garbage and Waste Panel Discussion in Istanbul	
Dikili, Bademli	Zero Waste Blue, Coast Cleaning Awareness Event	
TURMEPA	Zero Waste Blue, Coast Cleaning Awareness Event	
Adım Adım (Step by Step)	Istanbul Marathon	



Collaborations Established by Akademi Çevre		
Organization	Project Name	Year
İGA	November 11 National Afforestation Day	2019
Istanbul Aydın University	Speaker in Environment and Culture Course	
COP25	Presentation on "The Impact of E-Waste on Climate Change and the Measures Taken in Turkey"	
IFAT	Trade Fair	
IREMCON	Conference	
TÜRKTAŞ	Panel Discussion	
VODAFONE	These Wastes Write Code	
Emlakkonut Secondary School	Zero Waste Song	
Yeditepe University	Plastic Recycling (Supporting the Establishment of Workshop)	2020
KIDZANIA	Recycling Center	
Hacettepe University	Industry-Doctorate Project	
Vodafone	Reworld	
Vodafone	These Wastes Write Code	
Mind Your Waste Foundation	Research on Consumption and Waste Behaviors in the Pre and Post period of the COVID-19 Pandemic	
KIDZANIA	Akademi Çevre Kidzania Recycling Center	
Sustainability Academy	New Plastic Economy	2021
Sustainable Development Association - SKD	Circular Economy Week	
Sustainability Academy	Green Business Summit	
Yeditepe University	Webinar	
Green Child	Instagram Live Broadcast	
Green Child	Podcast	
Vodafone	These Wastes Write Code	
Agid, Habitat, D-Cube, Kolektifhouse	Collective Effort (E-Waste) Project	

# Appendix 4: Published Articles and Interviews

Akademi Çevre Published Articles and Interviews		
Media	Type	Year
Recycling Industry	13. Anniversary Article	2018
Recycling Industry	Article on "Investments in 2017"	2018
Recycling Industry	Motat	2018
İGEDDER	Interview	2018
Recycling Industry	Interview	2018
Recycling Industry	Article on "Role of Stakeholders in Sustainable Waste Management"	2018
Recycling Industry	Article on "Waste Management in New Airport"	2018
Recycling Industry	14. Anniversary Article	2019
Recycling Industry	Article on "Fluorinated Greenhouse Gases"	2019
Dünya Newspaper	Interview	2019
Journal of Recycling Economics	Interview	2019
ST Heavy Industry Solutions	Interview	2019
Water and Environment Local Waste Journal	Article on "Waste Management within COVID-19 Pandemic"	2020
Capital Journal	Article on "Industry 4.0 is Indispensable"	2020
Recycling Industry	Article on "Pursuing an Objective Beyond Profit"	2020
Dünya Newspaper	Article on "Licensed Waste Treatment Facilities have been increased by 50% in 5 Years"	2020
Journal of Recycling Economics	Article on "We Must Adapt to Industrial Revolution"	2020
Recycling Industry	Article on "We have Started to Produce 2-fold Garbage During COVID-19"	2021
İGEDDER	Article on "Sustainable Development Goals for a Better World"	2021
Fortune	News	2021
Anadolu Ajansı	News	2021
Recycling Industry	Article on "The Climate Crisis, "Natural" Disasters, and Code Red for Humanity"	2021
Recycling Industry	Interview	2021
Recycling Industry	Article on "Not only March 8 But 365 Days for a Sustainable Development"	2021



REPORTING CONSULTANCY



**escarus**

(TSKB Sustainability Consultancy)

info@escarus.com

www.escarus.com

T: +90 (212) 334 5460

REPORT DESIGN

Pelin G naltay

www.orfereklam.com.tr



**AKADEMi**  
** EVRE**

**www.akademicevre.com**