

Clean Environment Healthy Society

IZMIT WASTE AND RESIDUE TREATMENT, INCINERATION AND RECYCLING CO INC.

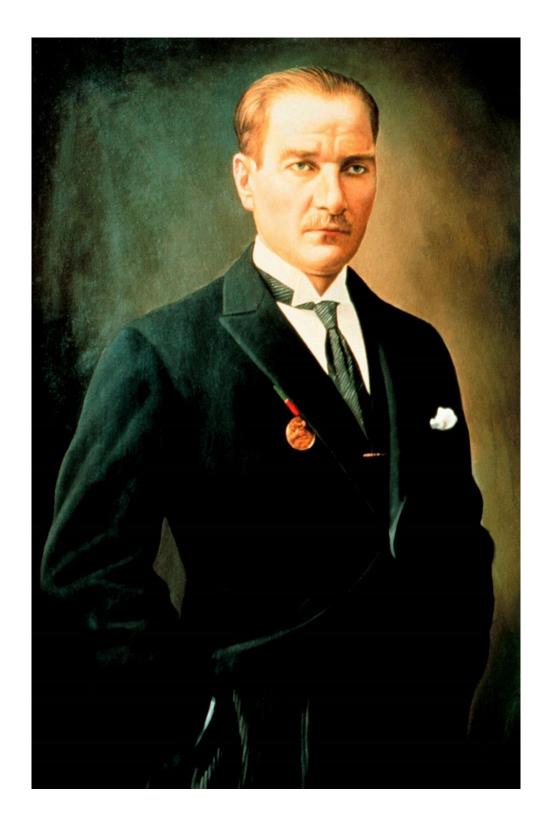
# 2021 Annual Report

v4.18 (tr2en









Mustafa Kemal Atatürk (1881 - 1938) Founder and first President of the Republic of Turkey

"We don't need anything, we only need one thing; to be hardworking!"  $\label{eq:hardworking} A taturk$ 

(16.01.1923, From a speech he made to Istanbul Journalists in Izmit)



Assoc. Prof. Tahir BÜYÜKAKIN,

Mayor of Kocaeli Metropolitan Municipality,

Chairman of the Board of Directors of IZAYDAS

#### Dear fellow citizens,

Due to conditions such as the spread of industrialization and rapid population growth, the problem of environmental pollution has come to the fore and has turned into a global problem. The harmful effects of environmental problems such as air, water, soil pollution on human structure and life have started to increase. Today, with the negative consequences of global warming, the protection of our environment has become even more important.

Blue flags are now flying in our seas, which used to be inaccessible due to its bad odour. Our seven beaches are currently at the service of our citizens with blue flags. With our advanced biological wastewater treatment plants, we prevent the entry of polluted water into our seas. We use smart city and innovative applications to solve environmental problems. We have become a city with 25 million square meters of green space. Our green areas has increased to 12.48 square meters per person. We are implementing many exemplary projects and services for Turkey, in which many such environmental sensitivities are brought to the fore, in order to leave our Kocaeli cleaner for future generations.

With IZAYDAS, we continue our work by adding value to nature, the environment and people in order to preserve and sustain the future heritage of Kocaeli. We put our innovative solutions into operation with the best facilities offered by science and technology and carry out environmental protection studies. We add significant value to the economy of Kocaeli and Turkey by reaching record figures in the energy categories generated from the incinerated waste and wastes. With the importance we attach to a safe and healthy life at global standards, we carry our people to a healthy and clean future, and increase the brand value of our city.

Performing vital services in the Covid-19 epidemic, IZAYDAS ensured the destruction of tons of Covid-19 suspected waste collected from different points of the city together with the pandemic wastes. IZAYDAŞ thus continued its success in sensitive issues such as municipal waste disposal, waste transportation and hazardous waste incineration during the pandemic period and once again demonstrated how important an institution it is.

It is our duty to leave a safe city, a safe country, a safe world to our children. Living in a healthy environment is the most fundamental human right. But this right is not directed only at humankind. Both the ecosystem and future generations also have this right. We cannot leave a world with depleted resources and difficult living conditions for the generations that will come after us. The environment, that is, the nature we live in, is one of the cornerstones of our lives as the most important factor that determines our quality of life and health. Both physical and mental health of people are closely related to the environment. With this consciousness, we continue our works by adding vision and momentum to them.

We will continue to increase our goals for a happier Kocaeli and a happier world by raising the bar even higher with service understanding that makes difference.

We wish to be always ahead in order to add value to our city and humanity...

Assoc. Prof. Tahir BÜYÜKAKIN, Mayor of Kocaeli Metropolitan Municipality



Muhammet SARAÇ
General Manager of IZAYDAS

#### Hello,

As IZAYDAS, Turkey's leading company in waste management, we have left behind our 25th year. With our experience, determination to work and constant effort, we have not fallen below the bar of success that we have brought to this day. Despite very difficult conditions in 2021, we performed well in general.

Of course, we have also experienced days when the pandemic process prevailed, which negatively affected us all. The sadness of losing our colleagues Hüsnü Dal and Cemal Savaş is still in our hearts ... But life goes on despite everything.

We are working with our colleagues at all levels in our company with great dedication to carry IZAYDAŞ to the future in the best way. We have determined the future route of our company by creating the 2022-2026 strategic plan with a strategic management approach. Using resources in the most efficient way with our strategic plan, in this way we predict to reach our goals by managing our activities more effectively.

In 2021, when we celebrated our 25th anniversary, our turnover exceeded 130 million TL. About 40 thousand tons of waste coming to our plant was disposed of at the level of the capacity of our incinerator. On the other hand, the electrical energy we generated was approximately 17 million kWh, while six million kWh of this energy was sold to the national grid.

A total of 52 million kWh of electrical energy was generated at the LFG facilities installed at our municipal waste landfills. With 9.4 million kWh electricity generation in our hydroelectric power plant project and 79 million kWh in total in one year with our Biogas facility, İZAYDAŞ has generated electricity in response to the domestic electricity needs of a city with a population of ninety-three thousand.

We have provided waste transportation services to about 1,200 companies and waste reception services to about 4,200 ships entering the gulf of Izmit. We have also achieved important works in terms of combating marine pollution. Our mucilage cleaning works with our sea surface sweeping boats were appreciated. While approximately 4,750 analyses were carried out in our IZAYDAS Laboratory, we also signed 66 tenders.

In the light of all these figures, we will continue to work with all our strength for our business, our sector and our country with the awareness of our responsibilities. I wish 2022 to be a good year for all humanity.

Under the leadership of Our Mayor of Kocaeli Metropolitan Municipality and İZAYDAŞ Chairman of the Board Assoc. Prof. Tahir BÜYÜKAKIN, with the support of our management and our colleagues, we will continue to serve our country and our city with the same sincerity, faith and determination.

We would like to thank all our stakeholders, especially our customers, for their endless support and contribution.

Muhammet SARAÇ
General Manager of IZAYDAS

## **INDEX**

1	CC	ORPORATE STRUCTURE	. 10
	1.1	OUR MANAGERS	. 10
	1.2	ORGANIZATIONAL CHART	. 10
	1.3	OUR HISTORY	. 11
	1.4	INTEGRATED MANAGEMENT SYSTEM	. 12
	1.5	ENVIRONMENTAL MANAGEMENT SYSTEM	. 14
	1.6	ENERGY MANAGEMENT SYSTEM	. 15
	1.7	AUDITS	. 16
2	FII	NANCIAL STATUS	. 18
	2.1	ACCOUNTING	. 18
	2.2	PURCHASING	. 19
	2.3	TENDERS AND CONTRACTS	. 19
3	Н	JMAN RESOURCES	
	3.1	EMPLOYEE STATISTICS	
4	PE	RFORMANCE INFORMATION	
	4.1	LABORATORY ACTIVITIES	
	4.2	IMPROVEMENT AND DEVELOPMENT ACTIVITIES	
	4.3	LOGISTICS	
	4.4	MARKETING ACTIVITIES	
	4.5	MARINE SERVICES ACTIVITIES	
	4.6	INCINERATION AND ENERGY GENERATION	
	4.7	MEDICAL WASTE STERILIZATION	
	4.8	BIOGAS UNIT	. 28
	4.9	WASTE WATER TREATMENT PLANT	
	4.10	WASTE PREPARATION	
	4.11	SANITARY LANDFILL AREAS	
	4.12	ENERGY GENERATION FROM LANDFILL GAS	
5		FORMATION TECHNOLOGIES	
	5.1	SYSTEM AND SOFTWARE TECHNICAL SERVICES	
	5.2	ACTIVITIES PERFORMED	
6		CCUPATIONAL HEALTH AND SAFETY	
	6.1	OCCUPATIONAL ACCIDENTS	
	6.2	OHS ACTIVITIES	
	6.3	ENVIRONMENTAL ACCIDENT EXERCISES	. 35

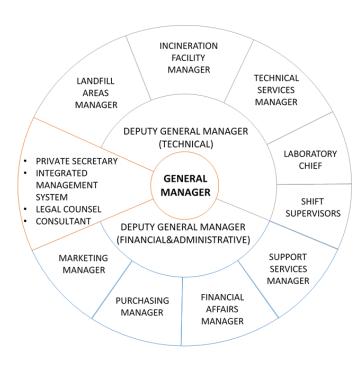
7	PRO	OJECTS	35
	7.1	COMPLETED PROJECTS	35
8	TR	AININGS	36
9	VIS	SITORS/OUR VISITS	37
10	EV	ENTS	38
	10.1	EVENTS WE PARTICIPATED	38
11	<b>OT</b> :	HER WORKS	42

## 1 CORPORATE STRUCTURE

## 1.1 OUR MANAGERS



## 1.2 ORGANIZATIONAL CHART



#### 1.3 OUR HISTORY

At the beginning of the 1990s, Izmit Metropolitan Municipality implemented the Izmit Integrated Environment Project with the aim of preventing air, groundwater and soil pollution, preventing pollution in Izmit Bay, eliminating the odour problem, improving urban land use and preventing value loss, and protecting public and environmental health.

Within the Scope of Izmit Integrated Environment Project:

- Clinical and Hazardous Waste Incineration and Power Generation Facility,
- Municipal and Industrial Solid Waste Landfill Facility,
- Izmit Eastern Part Industrial and Municipal Wastewater Treatment Plant,
- Waste Water Collectors,
- Stream Remediation were implemented.

Our company was established on 13.09.1990 by the Izmit Metropolitan Municipality with the title of IZKAYA with the aim of "undertaking public services in the fields of health, education and public works". The company was assigned to operate the clinical and hazardous waste incineration and energy generation facility, sanitary landfills and treatment facilities, which were built within the scope of the Izmit Integrated Environment Project between the years of 1993-1996. For this reason, with the extraordinary general assembly resolution held on 27 May 1996 and published in the Trade Registry Gazette dated 13.06.1996, the title of our company was changed to and registered as İzmit Waste and Residue Treatment, Incineration and Recycling Co Inc. (İZAYDAŞ). As the current titles and services have started from this date; this date is now considered to be the company's foundation day. The facilities were officially opened to service with a ceremony on April 5, 1997.

The first license was obtained in 2000, and to date, it has been repeatedly renewed, merged and improved. The current license includes all the main activities and is valid until 24.08.2022. All legally required documents (occupation permit, GSM license, discharge permit, licenses, registration documents, patents, trademark registrations, etc.) have been completed and renewed when necessary.

We obtained ISO 9001, ISO 14001 and OHSAS 18001 management systems certificates in 2006. ISO 17025, ISO 10002 in 2013, ISO 17043 and ISO 50001 in 2014, ISO 27001 in 2018 were added to these documents. These documents have been renewed and their continuity has been ensured with the audits carried out in the relevant periods. Most recently, ISO 45001 certificate was obtained instead of OHSAS 18001 in 2021.

#### 1.4 INTEGRATED MANAGEMENT SYSTEM

#### 1.4.1 CUSTOMER SATISFACTION SURVEY

The customer satisfaction survey was carried out by the survey company with outsourcing and survey methods. The survey was applied to four customer groups: regular-irregular customers, potential customers, customers receiving laboratory service, and customers receiving proficiency testing service. The results of the survey were reported by the survey company, and an informative presentation was made on 18.02.2021. According to the results, the rate of customers finding IZAYDAS successful is 94.2%, and customer satisfaction is 80.2 points. According to the results of the survey, the issues that need improvement were followed up by action planning.

#### 1.4.2 RISK-OPPORTUNITY MANAGEMENT

According to the legislation and the management system standards that are being implemented, risks are assessed by risk assessment teams according to defined procedures and instructions and managed in three groups. Process risks have been evaluated by teams in the corporate risk assessment module of the QDMS program. Risks within the scope of Occupational Health and Safety have been evaluated by teams according to PL-104-09 OHS Risk Analysis Update Plan 2021, and risk assessment tables have been updated. Environmental risks have been evaluated and managed in the Environmental aspects and impacts module of the QDMS program.

#### 1.4.3 TRACKING EMPLOYEE AND CUSTOMER NOTIFICATIONS

Employee notifications are tracked on the program. In 2021, 70 suggestions/requests/complaints and near-miss notifications were received, managed, and tracked through the program. Risk and near miss notifications regarding Occupational Health and Safety were submitted to the OHS Committee every month, and necessary actions were planned and realized.

In 2021, 16 suggestions, requests and complaints from our customers and the immediate environment were recorded and evaluated. Eight notifications were managed within the scope of ISO 10002 Customer Satisfaction-Complaint Management System with a customer-oriented management approach, as they contain complaints about the services provided by customers.

## 1.4.4 UNIT ACTIVITIES EVALUATION MEETING – MANAGEMENT REVIEW MEETING

Unit activities for 2020 were carried out with the presentations of unit managers and the participation of unit managers and chiefs in the face-to-face session via video conference on 23-24.02.2021. Unit activities for the first six months of 2021 were evaluated at the meetings held on 03-04-05-06.08.2021, again with the presentations of the unit managers, using the video conference method.





February 2021 UNIT ACTIVITIES EVALUATION Meeting





August 2021 UAE Meeting

A management review meeting (MRM) was held on 03.03.2021 in order to maintain the suitability, adequacy and effectiveness of the integrated management system for its purpose. At the meeting, previous MRM decisions, changes in internal and external issues related to management systems, needs and expectations of related parties, policies, targets, performance indicators, monitoring and measurement results, nonconformities, corrective actions, audit results, risks, opportunities, improvement areas and resource needs were evaluated, and decisions were taken for the continuity of the system and improvements. Before the ISO 45001:2018 transition certification audit, a MRM meeting with a narrow agenda was held on 10.09.2021 in order to review the current situation by the management.

#### 1.4.5 STRATEGIC PLAN 2022-2026

With the strategic management approach, a strategic plan was made for the years 2014-2018 and it was carried out successfully in terms of its main items. In 2019, studies was started for the new five-years period, the main document was created, but it was not published and put into practice due to the economic conditions and the pandemic that had a heavy impact. The preparatory work in 2019 and 2020 was also reviewed, and the company's future route was determined by evaluating the current situation and creating a strategic plan for 2022-2026. In this way, it is envisaged that the activities will be managed more effectively and the goals will be achieved by using the resources efficiently with the strategic plan.

The main themes in the strategic plan are maintaining the leadership in the sector, operational efficiency through efficient use of all resources, institutionalization that will increase employee loyalty and contribution, and environmental and social sustainability supported by the main activity.





December 2021 Strategic Planning Workshop

#### 1.5 ENVIRONMENTAL MANAGEMENT SYSTEM

#### 1.5.1 ENVIRONMENTAL PERMIT AND LICENSE CERTIFICATE

License application made within the scope of the Temporary Activity Certificate received on 20.05.2020 in order to add the hazardous waste recycling activity to the scope of the existing Environmental Permit and License Certificate within the framework of the Environmental Permit and License Regulation, was found appropriate as a result of the inspection made by the Ministry and a subject was added to the Environmental Permit and License Certificate. Renewed Environmental Permit and License Certificate covers all fields of activities such as Air Emission, Hazardous Waste Recovery, Waste Incineration, and Co-incineration, Landfill-1st Class (Hazardous Waste Landfill), Landfill-2nd Class (Municipal Waste and Non-Hazardous Waste Landfill), Waste Interim Storage, Biodegradable Waste Processing-Biomethanization.





#### 1.5.2 ENVIRONMENTAL RISK ASSESSMENT

In accordance with ISO 14001:2015 Environmental Management System, Environmental Risk Assessment studies of the processes were continued and updated in line with the Environmental Risk Assessment Instruction (T-103-02). Processes reviewed and updated in 2021 are as follows:

- SR-16 Failure and Maintenance Process on 09.04.2021
- SR-09 Billing –Accounting Process on 07.05.2021
- SR-10 Transportation (Waste Handling) Process on 07.05.2021
- SR-17 Training Process on 29.06.2021
- SR-18 Recruitment Process on 06.29.2021
- SR-19 Customer Complaint Management Process on 29.06.2021
- SR-07 Laboratory Process on 08.18.2021
- SR-14 Procurement Process on 08.18.2021
- SR-20 Asset Deposit Process on 08.18.2021
- SR-15 Tender Process on 24.08.2021
- SR-07 Incineration Disposal Process on 08.26.2021

In addition, site inspections were carried out with OHS, IMS and related field supervisors within the scope of the site, layout and cleaning tour within the facility every month and actions were initiated for the necessary arrangements.

#### 1.6 ENERGY MANAGEMENT SYSTEM

#### 1.6.1 ENERGY MANAGEMENT SYSTEM CERTIFICATE

The transition audit of the Energy Management System to the ISO 50001:2018 standard for 2020 was carried out by KALİTEST, the certification body, on 27.08.2020 under the supervision of TÜRKAK. As a result of the audit, the documents indicating the compliance of the Energy Management System being implemented with the relevant standard were renewed and our document were renewed until 12.10.2023.

#### 1.6.2 IMPROVEMENT ACTIVITIES

Within the scope of the Energy Management System, actions were planned in 2021 for the improvements to be made in line with the decisions taken at the Management Review meeting held on 03.03.2021 and the corporate targets determined. In this context, by considering the opened actions, improvements were made to replace the existing equipment with energy-efficient equipment within the plan and budget (insulations, lighting, motor, fan, leaks, etc.), and improvement actions are processing also in 2022. Within the scope of the energy management system, natural resource consumptions were monitored throughout the year, and leaks such as air, water, etc. were eliminated.

#### 1.7 AUDITS

#### 1.7.1 AUDITS OF THE CERTIFICATION BODY (Third-Party Audits)

The re-certification audit of the integrated management system was carried out by the certification body KALITEST on 20-21-22.09.2021. The compliance of the quality management system practices within the scope of the integrated management system with the ISO 9001:2015 standard and the compliance of the environmental management system practices with the ISO 14001:2015 standard were audited, the audit was successfully completed and the documents were renewed. The compliance of occupational health and safety management system applications that are certified according to OHSAS 18001 standard with ISO 45001:2018 standard has been audited and certified.

Customer Satisfaction-Complaint Management System supervision audit was carried out on 22.01.2021 by the certification body KALITEST using remote access method. The compliance of the management system applications with the ISO 10002:2014 standard was audited, the audit was successfully completed and the continuation of the certificate was decided.

Integrated Management System was founded in 2006 by integrating the, ISO 9001 Quality Management System, ISO 14001 Environmental Management System and OHSAS 18001 Occupational Health and Safety Management System. The documents renewals and additional documentations are listed in the table below.

Management System	First Document Date	Last Document Renewal Date	End Date
ISO 9001:2015 Quality Management System	21.08.2006	08.10.2021	26.08.2024
ISO 14001:20015 Environmental Management System	21.08.2006	08.10.2021	26.08.2024
ISO 45001:2018* Occupational Health and Safety Management System	21.08.2006	08.10.2021	08.10.2024
ISO 10002:2014 Customer Satisfaction Management System	17.01.2013	19.02.2019	04.01.2022
ISO 50001:2018 Energy Management System	02.12.2014	20.05.2021	10.12.2023
ISO 27001:2013 Information Security Management System	10.04.2018	28.06.2021	10.04.2024
ISO 17025:2012 Laboratory Accreditation	22.12.2011	10.01.2020	17.04.2024
ISO 17043:2013 Laboratory Proficiency Test Provider Accreditation	07.08.2014	03.12.2018	02.12.2022

<sup>\*</sup>The Occupational Health and Safety Management System, which was certified according to the OHSAS 18001 standard in 2006, was certified in 2021 according to the ISO 45001:2018 standard.

#### 1.7.2 CUSTOMER AUDITS (Second-Party Audits)

The compliance of the management systems applications with the relevant standards is also audited by the customers, and IZAYDAS attaches importance to these audits in terms of the continuity of service procurement of its customers. Due to the pandemic process measures in 2021, customer audits were generally carried out by video conference/supplier survey/question list/evaluation information form filling methods, and five customers visited the facility. No noncompliance findings were found in the audits conducted.

The customers who performed the audit and the communication dates within the scope of the customer audit are given in the table below.

Company	Date
PPG Industries Kimya San. ve Tic. A.Ş	March 2021
Baxter Healthcare Corporation	March 2021
SMO TU Lojistik ve Ambalaj Sanayi ve Ticaret A.Ş.	April 2021
Helba İlaç İç ve Dış San. ve Tic. A.Ş.	April 2021
Johnson&Johnson Sıhhi Malzeme San. ve Tic. Ltd. Şti.	April 2021
Novartis Technical Operations NTO Solids Gebze-2	April 2021
Sandoz Grup Sağlık Ürünleri İlacları Sanayi ve Ticaret A.Ş.	April 2021
Teklas Kauçuk San. ve Tic. A.Ş.	May 2021
Goodyear Lastikleri T.A.Ş.	May 2021
Roche Müstahzarları San. A.Ş.	June 2021
Sanofi Sağlık Ürünleri Ltd. Şti.	August 2021
Dow Türkiye Kimya Sanayi	August 2021
Loreal Türkiye Kozmetik Tic. ve San. A.Ş	October 2021
Neutec İlaç San. Tic. A.Ş.	November 2021
Bayer Türk Kimya San.Ltd.Şti	November 2021
Abdi İbrahim İlaç San.ve Tic.A.Ş.	December 2021

#### 1.7.3 INTERNAL AUDITS (First-Party Audits)

Integrated Management System internal audits are carried out by internal auditors in the company pool, and compliance of management system applications with relevant standards is audited. The conformity of the quality, environmental and OHS management systems was audited between 14-18.06.2021 and the conformity of the customer satisfaction-complaint management system was audited on 19.10.2021. The opening and closing meetings of the audit were held by video conferencing method. Nonconformities observed in the system and applications were reported by the audit teams. Necessary corrective actions were initiated and followed up. The application is carried out according to the standards and the PR-03 Internal Audit Procedure. Within the scope of ISO 50001 Standard and PR-03 Internal Audit Procedure, an internal audit of the Energy Management System was planned and audits were carried out on 22.06.2021 and 17-22.11.2021. Corrective and Preventive Actions have been initiated by

the audit teams regarding the nonconformities seen in the system and in practice, and improvement actions have been planned accordingly.

#### 1.7.4 INDEPENDENT AUDIT

Pursuant to the Turkish Commercial Code (TCC) numbered 6102, our company was covered by a mandatory independent audit and a contract was signed with the Independent Auditor, Etken Bağımsız Denetim ve YMM A.Ş. The opinion given in the Independent Audit Report is that the financial information included in the annual report of the board of directors is consistent with the audited consolidated financial statements in all material respects and reflects the truth.

In the part of the other liabilities arising from the legislation, it is stated that there is no significant uncertainty regarding the inability of the business to continue its activities in the foreseeable future within the framework of the continuity of the business according to IAS 570, pursuant to the third paragraph of Article 402 of the Turkish Commercial Code No. 6102 (TCC).

#### 1.7.5 ENVIRONMENTAL AUDITS

On 03.02.2021, Kocaeli Metropolitan Municipality License and Inspection Branch Directorate conducted an audit on Business Opening and Working License. A Sudden Audit was conducted by the Kocaeli Provincial Directorate of Environment, Urbanization and Climate Change on 05.02.2021 and 23.02.2021, and an Informed Unified Environmental Audit was conducted on 01.10.2021. No non-conformities were identified in the audit report prepared.

## 2 FINANCIAL STATUS

#### 2.1 ACCOUNTING

IZAYDAS reached a turnover of TL 131,599,810.72, and a pre-tax profit of TL 2,046,573.49 in 2021.

The Ordinary General Assembly of 2020 was held on 23.03.2021.

IZAYDAŞ's sources of income are listed as follows:

- Incineration Incomes
- Municipal Waste Landfill Incomes
- Industrial Waste Landfill Incomes
- Hazardous Waste Landfill Incomes
- Inert Waste Landfill Income
- Special Transaction Income
- Energy Incomes
- Ship Waste Incomes
- Laboratory Incomes
- Other Incomes

#### 2.2 PURCHASING

In 2021, IZAYDAŞ purchased the following by direct procurement method:

- 8,981,026.69 TL of goods,
- 4,855,410.28 TL of service,
- 23,083.00 TL of construction work,

#### 2.3 TENDERS AND CONTRACTS

In 2021, a total of 66 tenders were held consisting of 15 revenue-generating works with a contract value of 9,110,442.00 TL and 51 works with a contract value of 49,413,562.75 TL + VAT.

#### 3 HUMAN RESOURCES

#### 3.1 EMPLOYEE STATISTICS

The number of employees in our institution as of the end of the 31 December period is given in the table below.

SECTION	2017	2018	2019	2020	2021
General Directorate	7	8	7	6	6
Deputy General Mngr	1	1	1	1	1
Manager of Financial Affairs.	25	72	69	78	19
Support Services Directorate					66
Department of Marketing.	18	30	30	29	27
Department of Purchasing	12	11	11	12	11
Deputy General Mngr	20	20	18	19	21
(Technical)					
Operating Directorate	59	76	71	72	74
Landfill Areas Directorate	15	20	19	19	20
Department of Technical	49	46	45	45	48
Services					
Consultants	4	5	4	4	5
External Mission	9	9	8	7	7
Total	219	298 (*)	283	292	305

<sup>(\*) 81</sup> people were recruited by the Decree Law No. 696. In 2021, the Financial and Administrative Affairs Directorate was separated.

#### 4 PERFORMANCE INFORMATION

#### 4.1 LABORATORY ACTIVITIES

IZAYDAŞ Laboratory, as a laboratory that has a say in many fields today, is a leader and also a guide to the sector, and continues its studies with great diligence and care. It has been able to maintain the ISO 17025 accreditation certificate, which is received in 2011, by constantly expanding the scope of its services. In 2020, it was entitled to continue its activities until 2024 by adding Emission and Imission measurements to its scope under the document renewal audit.

Within the scope of "Environmental Legislation", the distribution of measurements and analyses to be made for the purpose of permission, monitoring, confirmation, and license, the results of which are submitted to the Ministry or the institutions to which the Ministry has delegated authority, has begun to be made through the MELBES (Central Laboratory Determination System). As a result of this development in the sector, IZAYDAŞ Laboratory Unit has added its Emission and Imission areas to the scope of the "Environmental Measurement and Analysis Qualification Regulation" and MELBES in order to increase its analysis revenues.

IZAYDAS Laboratory has managed to increase the number of paid analyses more than twice compared to the previous year by closely following the legal and commercial developments in the sector.

By expanding the scope of the accreditation certificate it received in July 2014 in order to organize Proficiency Test Programs within the scope of ISO 17043 Standard in 2015, it also maintains the title of being the first proficiency test provider laboratory in Turkey in the field of water, wastewater and waste analysis. With the certificate renewal audit carried out in 2018, it provides the sector with the assurance of continuing its activities until 2022. In line with the demands from the sector, the regulation of proficiency tests, which was organized for the first time in Turkey, has become a routine operation.

Since 2013, we still continue to be the first domestic and national laboratory to produce certified internal quality control samples for laboratories within the scope of ISO Guide 80 standard, offer them for sale, and continuously increase our product portfolio in line with customer demands.

IZAYDAS Laboratory provides services as follows:

- With ISO 17025 Accreditation Certificate in the Experimental Field: Water, Waste Water, Sea Water, Pool Water, Waste, Soil, Sewage Sludge, Waste Oil, Insulation Liquids, Precious Metals, Medical Waste, Solid Fuel (Coal), Emission and Imission,
- In the Sampling Area: Rivers and Streams, Groundwater, Lakes and Ponds, Sea Waters, Solid Wastes, Sludge Sampling from Sewage Water and Treatment Plants, Sampling from Surface Soil, Manual Sampling of Petroleum Liquids, Sampling of Insulating Liquids, Emission and Imission Measurement and Sampling,

- With ISO 17043 Accreditation Certificate in the Field of Proficiency Testing: Waste, Water, Waste Water and Waste Oil,
- In the Field of Control Standard Production; Waste oil, water, waste water and waste



Yeniköy Kemerköy Elektrik Üretim ve Tic. A.Ş. (Kemerkoy Branch - Chimney Height 300 m)

Our analysis parameters within the scope of TÜRKAK Accreditation Certificate and Certificate of Competence are published on the TÜRKAK website at <a href="www.turkak.org.tr">www.turkak.org.tr</a>, on the website of the Ministry of Environment, Urbanization and Climate Change at <a href="http://laboratuvar.cevre.gov.tr">http://laboratuvar.cevre.gov.tr</a> and on the website of İZAYDAŞ at <a href="www.izaydas.com.tr">www.izaydas.com.tr</a>

Year	2017	2018	2019	2020	2021
Declaration and Gainful Analysis	858	1,050	1,164	1,186	2,426
Waste Acceptance Analysis	1,420	998	684	206	186
Plant Analysis	2,394	2,239	2,218	1,917	2,136
Total	4,670	4,287	4,066	3,309	4,748

#### 4.2 IMPROVEMENT AND DEVELOPMENT ACTIVITIES

In the last twelve years, 53,500 saplings have been planted in the facility by teams of Kocaeli Metropolitan Municipality Parks and Gardens Department. In the work conducted in the last two months, 104 tree seedlings were planted with 1,079 shrub groups. The total number of trees planted in the last thirteen years is 54,683.

#### **4.2.1 MAINTENANCE UNIT ACTIVITIES**

By the Technical Services Maintenance Unit in 2021:

- 800 mechanical failure maintenance jobs,
- 143 electrical fault maintenance jobs,
- 250 instrument breakdown maintenance jobs.
- 425 vehicle maintenance breakdown jobs

1,618 general works, incidental maintenance, manufacturing and overhaul works were carried out.

- 1,049 mechanical maintenance jobs,
- 1,062 electrical maintenance jobs,
- 630 instrument maintenance jobs,
- 631 vehicle maintenance jobs

And a total of 3,372 periodic and planned maintenance works were carried out.

- The parameters measured in accordance with the Communique on Continuous Emission Measurement Systems are CO<sub>2</sub>, HCL, HF, SO<sub>2</sub>, NO<sub>X</sub>, CO, H<sub>2</sub>O, TOC, Temperature, Flow, O<sub>2</sub>, and Dust. QAL2 measurement tests were performed by an accredited laboratory and measurement functions were established.
- 72 measurement and control devices were calibrated and reported.
- The emission and operating parameters data required for the Ministry report were prepared on a monthly basis.

#### 4.3 LOGISTICS

#### 4.3.1 HAZARDOUS WASTE TRANSPORTATION

According to the Environmental Law and the Communique on the Transportation of Wastes on Highways, hazardous wastes must be transported by persons, institutions, or organizations licensed to carry them from the relevant governorship.

IZAYDAS provides hazardous waste transportation services with its 11 licensed vehicles and 18 certified drivers. As of 2021, we provided 14,174.03 tons of hazardous waste transportation services. In addition, the amount of sludge, hazardous waste and municipal waste transported from Derince Port to our facility with a total of 318 expeditions is 1,984.97 tons. 37 pieces of waste transportation was done with notification, upon written or verbal request of Kocaeli Metropolitan Municipality - Department of Environmental Protection and Control - Waste Management Branch Directorate.

Transported from companies	Unit	2017	2018	2019	2020	2021
Waste Oil	ton	112,19	0	0	0	0
Hazardous Waste	ton	9,416.19	10,193.06	10,272.24	8,823.11	14,174.03
Number of Expeditions from Companies	expedition	1,610	1,812	1,662	1,427	2,238
Derince Port Bilge Water,	expedition	258	294	241	303	318
Sludge, Hazardous Waste, Household Garbage (Number of Expeditions)	ton	1,459.91	1,301.66	1,361.40	1,935.28	1,984.97
Donouted Wests	expedition	11	25	6	3 (*)	37
Reported Waste	ton	43.30	339.20	62.27	0.504 (*)	584.08

<sup>(\*)</sup> Transportation service has been received.

Two of our drivers who received SRC5 training in 2021 have been eligible to receive the certificate as a result of the exams.

#### 4.4 MARKETING ACTIVITIES

- 102 company visits were made.
- 4,390 phone calls were made.
- 2,342 price offers were sent.
- 1,245 units of waste were accepted to our incineration plant and 376 units of waste were accepted to our landfills from waste producers.
- 1,291,175 kg of reported waste (unclaimed) has been disposed of in our facility.

#### **ACCEPTED WASTE QUANTITIES**

The Amount of Waste Coming to the Incineration Plant

Year	2017	2018	2019	2020	2021
Accepted (ton)	41,998	41,290	42,137	37,956	39,640

#### Amounts of Waste Arriving at Landfills (From Customers)

Year	2017	2018	2019	2020	2021
1st Class Landfill (ton)	6,432	40,730	42,947	44,585	51,715
2 <sup>nd</sup> Class Landfill (ton)	29,751	32,005	18,760	13,991	33,024
Total (ton)	36,183	72,736	61,706	58,576	84,739

## 4.5 MARINE SERVICES ACTIVITIES

#### 4.5.1 WASTE SHIPMENT

Ships Served and Revenues

Year	2017	2018	2019	2020	2021
Number of Ships Receiving Waste (Units)	3,323	3,340	3,409	3,454	4,193
Total Waste Purchase Revenues (TL)	5,791,238	7,776,157	7,652,473	10,682,676	15,359,641

Types and Amounts of Waste Taken from Ships

Year	2017	2018	2019	2020	2021
Bilge (m³)	1,922	3,462	2,922	2,196	2,642
Sludge (m³)	4,405	5,770	5,321	5,592	5,389
Waste Oil (m <sup>3</sup> )	259	285	233	342	307
Garbage (m³)	3,051	3,457	3,391	3,655	4,303
Polluted Water (m <sup>3</sup> )	562	670	855	1,248	1,793
Total (m³)	10,202	13,646	12,724	13,033	16,147

## 4.5.2 ENVIRONMENTAL CONTROLLING AIRCRAFT

IZAYDAS Seaplane Flight Hours (minutes)

Year	2018	2019	2020	2021
İZAYDAŞ	12,689	2,235	1,060	720
İSU	635	0	0	0
ISKI	12,475	5,505	0	0
KBB Environmental Protection	3,900	4,675	6,405	9,095
Total	29,699	12,415	7,465	10,970

#### 4.5.3 TRASH SKIMMER BOATS

Trash Skimmer Boats clean the physical pollution reaching our seas through receiving environments. Our Trash Skimmer Boats, whose tender was held on 17.05.2017, started to serve as of 01.01.2018. As a result of the studies, 500 tons of mucilage were collected from the sea surface and sent to our landfill areas.





#### 4.6 INCINERATION AND ENERGY GENERATION

The operating principle of the facility with an incineration capacity of 5,400 kg/hour, is based on the incineration of combustible plastic wastes, used oils, pharmaceutical and cosmetic wastes, petrochemical wastes, PVC, solvents, paint wastes, glues and adhesives, treatment sludge, hazardous wastes and clinical wastes from the industry.



#### 4.6.1 WASTE DISPOSED OF BY INCINERATION

The data of the wastes disposed of by incineration in the incineration plant in line with the waste acceptance criteria are given in the table below. In 2021, 1,466,426 Sm<sup>3</sup> natural gas was consumed as additional fuel in the incineration plant.

Year	2017	2018	2019	2020	2021
Unit			ton		
Solid waste	27,694	25,178	28,774	26,885	29,883
Barrel Feed	1,829	2,001	2,008	2,293	2,654
Clinical waste	49	106	237	250	220
Special liquid	2,079	1,980	2,025	1,485	2,289
Aqueous liquid	3,079	2,654	3,067	2,656	2,268
Flammable liquid	4,888	4,841	4,799	3,182	2,666
Total	39,618	36,762	40,910	36,751	39,980

#### 4.6.2 FLUE GAS EMISSION VALUES

The Flue Gas Emission status of the Combustion Plant for 2021 is given in the table below and meets all the standards of the relevant regulations.

	TABLE OF DAILY EMISSIONS										
Emissions	Limit Value (mg/nm³)	Exceeding Value	%	Mass flow rate kg/year							
COn	50	0	100,00%	1,731.90							
NO <sub>xn</sub>	400	0	100,00%	23,515							
SO <sub>2n</sub>	50	0	100,00%	318.60							
TOCn	10	0	100,00%	51							
HFn	1	0	100,00%	0.27							
HCLn	10	0	100,00%	85.87							
DUSTn	10	0	100,00%	107							

#### 4.6.3 INCINERATION PLANT PERFORMANCE

As of the end of 2021, the total working hours of the facility were 7,730 hours, the incidental downtime was 138 hours, and the planned maintenance downtime was 892 hours.

#### 4.6.4 INCINERATION PLANT POWER GENERATION

16,937,400 kWh of electrical energy was generated from 39,980 tons of incinerators in 2021, within the framework of the 49-years production license. 11,924,374 kWh of this was consumed at the facility, 6,035,302 kWh was sold to TEİAŞ and 1,022,276 kWh of electricity was purchased.

	kWh	2017	2018	2019	2020	2021
Electricity Generated	kWh	17,157,710	16,658,000	17,686,800	16,235,000	16,937,400
Electricity Purchased	kWh	787,849	887,371	777,969	896,901	1,022,276
Electricity Consumed	kWh	12,723,744	11,975,605	13,219,129	11,764,216	11,924,374
Electricity Sold	kWh	5,221,815	5,569,770	5,245,640	5,367,685	6,035,302

#### 4.7 MEDICAL WASTE STERILIZATION

Medical waste generated in all medical institutions within the borders of Kocaeli province is collected by licensed medical waste transportation vehicles and transported to IZAYDAŞ field. Infected medical wastes are finally disposed of in the 2<sup>nd</sup> Class Sanitary Landfill after sterilization and shredding in the Medical Waste Sterilization Facility. Pathological wastes are incinerated at Hazardous Waste Incineration and Power Generation Plant.





The amounts of medical waste collected in Kocaeli province are listed in the table below.

Year	2017	2018	2019	2020	2021
Total Amount of Medical Waste (kg)	2,120,181	2,272,583	2,337,337	2,889,970	3,212,660
The Amount of Pathological Waste (kg)	37,135	42,643	46,342	43,858	47,687

#### 4.8 BIOGAS UNIT

Biogas is obtained as a result of anaerobic digestion using cattle manure, fruit and vegetable waste, tripe waste, grass, and process-compatible food sector waste at the Biogas Plant. The produced gas is converted into electrical energy with the help of a gas engine. The heat energy generated by cooling the gas engine is used to heat reactors operating under mesophilic conditions.





With the Renewable Energy Generation License valid for 49 years obtained from EMRA in 2012 and its partial temporary acceptance by the Ministry of Energy and Natural Resources, the electrical energy generated at the facility, as of 01.01.2013, is sold to the Electricity Distribution Company within the scope of renewable energy.

The amount of waste taken to the facility and the amount of fermented product coming out of the facility are given in the table.

Type of waste	2017	2018	2019	2020	2021	Unit
Grass	0	0	100	320	1,882	kg
Chicken Manure	0	0	0	0	0	kg
Cattle Manure	3,096,840	3,072,390	3,345,460	2,724,620	4,459,840	kg
Fruit and Vegetable	10,180	0	2,905	21,224	10,405	kg
Tripe Waste	47,260	92,490	45,430	158,070	228,320	kg
Other	117,250	69,200	71,900	689,580	1,024,400	kg
Total	3,271,530	3,234,080	3,465,795	3,593,814	5,724,847	kg

Type of Fermented Product	2017	2018	2019	2020	2021	Unit
Fermented Solid	23,030	1.000	200	2,280	7,920	kg
Fermented Liquid	3,252,740	3,177,020	3,237,080	3,605,020	5,870,000	kg
Total	3,275,770	3,178,020	3,237,280	3,607,300	5,877,920	kg

The amount of energy generated is given in the table below.

Year	2017	2018	2019	2020	2021
Energy (kWh)	149,400	109,200	27,700	18,800	71,600

#### 4.9 WASTE WATER TREATMENT PLANT

The planned treatment plant for the treatment of IZAYDAS wastewater in accordance with the ISU discharge criteria was completed and commissioned in 2013. Waste water coming out after the treatment is sent to the Waste Water Treatment Facilities of ISU via the collector line. In 2019, the capacity was increased by making revisions at the Treatment Facility.

The amounts of wastewater treated at the facility and the resulting sludge by years are given in the table below.





Year	2017	2018	2019	2020	2021
The Amount of Treated Wastewater (m³)	93,509	82,177	130,201	160,340	122,270
Amount of Sludge Released (kg)	940,420	18,580	765,370	602,200	725,700

#### 4.9.1 Amount of Waste Water

The amounts of waste water between 2017-2021 are as follows.

Year	2017	2018	2019	2020	2021
Amount of Dilovası Waste Water (ton)	60,476	43,352	22,504	11,914	19,290
Amount of Gebze Waste Water (ton)	1,296	3,504	2,553	3,211	4,419
Amount of Kandıra Waste Water (ton)	1,428	1,073	572	412	468
Amount of Körfez Waste Water (ton)	1,427	1,490	1,650	1,468	845

#### 4.10 WASTE PREPARATION

In order to clean the contaminated IBC, Metal/plastic drum packages by washing them with pressurized hot water and chemicals and to bring them into the economy, Environmental Permit License Certificate was obtained on 15.01.2021, for the unit that previously worked with GFB.





The amount of preparation (liquid splitting, dust splitting, packaging for recycling, etc.) applied to wastes on a yearly basis is shown in the table below.

YEAR		Unit	2017	2018	2019	2020	2021
Adjustment of vari liquids or powders desired weight		kg	238,838	110,500	183,571	118,430	220,745
Amount of	Plastic	kg	37,840	22,390	25,030	14,920	16,740
Contaminated Packaging Going to Recovery	Metal	kg	193,870	151,340	163,860	101,740	90,770
Amount of IBC Re	cycled	piece	2,162	2,425	1,267	821	657

#### 4.11 SANITARY LANDFILL AREAS

#### 4.11.1 IZMIT LANDFILLS

Izmit Municipal and Hazardous Solid Waste Sanitary Landfill Areas were built in 1997 on an area of 363,007 m<sup>2</sup> of the 800,000 m<sup>2</sup> area allocated by the Ministry of Environment, Urbanization and Climate Change. Municipal and hazardous wastes accepted to the landfill are transferred to the working area in the appropriate lot according to the type of waste. There are 6 lots with a capacity of 3,163,000 m<sup>3</sup> for municipal waste (total capacity 4,753,000 m<sup>3</sup> with the in-between roads and after lot 1 displacement), and one lot with a capacity of 969,919 m<sup>3</sup> for hazardous wastes. It is covered with intermediate cover soil to prevent odour and adverse

environmental conditions by applying laying/compaction processes with the help of construction machines.

When the landfilling process, is completed, which is estimated to be 25-32 years, this area will be greened and will be returned to the Ministry of Environment, Urbanization and Climate Change.

Izmit Landfill	Unit	2017	2018	2019	2020	2021
The Amount of Hazardous Waste (1st Class)	ton	20.90	56.72	59.06	56.82	63.03
Amount of Industrial Waste (non-hazardous) (2 <sup>nd</sup> Class)	ton	24.04	32.25	19.41	15.99	33.79
Amount of Municipal Waste (2 <sup>nd</sup> Class)	ton	524.75	670.39	633.47	663.72	642.38

Total in 2021; 642.38 tons of Municipal Waste (2<sup>nd</sup> Class), 63.03 tons of Hazardous Waste (1<sup>st</sup> Class) were landfilled and disposed of in Izmit Sanitary Landfills.

#### 4.11.2 GROUNDWATER/LEACHATE ANALYSIS

In accordance with the "Regulation on the Sanitary Landfilling of Wastes" in 2021, samples were taken from the Groundwater Wells and Leachate Collection Manholes in the Izmit and Dilovası Landfills and they were analysed.

#### 4.12 ENERGY GENERATION FROM LANDFILL GAS

#### 4.12.1 IZMIT LANDFILL

A tender was held on 23.06.2010 for the Construction and Operation of the Electricity Generation Plant from the Landfill Gas (LFG) of IZAYDAS Izmit and Dilovası Municipal Solid Waste Sanitary Landfill. As a result of the tender, the electrical connections of the Izmit Landfill Facility and the completion of the electricity generation started on 02.03.2012. In 2021, the total gross amount of energy generated was 49,575,710 kWh/year.

Year	2017	2018	2019	2020	2021
Gross Generated Energy(kWh/year)	40,264,270	38,824,960	26,251,650	33,663,420	49,575,710
Energy Sold(kWh/year)(*)	38,635,970	37,284,780	24,902,720	32,056,240	47,569,810

<sup>(\*)</sup> Refers to the net electrical energy supplied to the grid after transformer and busbar losses.

The energy generation facility from landfill gas, built within the scope of the Landfill Gas Power Generation Facility Project, is being developed as the "Gold Standard Project", which is considered as the most prestigious among international voluntary standards. Körfez Enerji Company, which has been generating energy from landfill gas since March 2012, has sold a

total of 631,452 tCO<sub>2</sub>e carbon between 2014 and 2018. In 2021, 309,243 (tCO<sub>2</sub>e) carbon was sold.

Table of the amount of carbon credits sold between 2017 and 2021

Year		2017	2018	2019	2020	2021
Credit Amount (tCO2e)	Izmit	121,774	90,000	N.V. (*)	N.V. (*)	309,243
Credit Amount (tCO2e)	Dilovasi	-	-	-	-	-

<sup>(\*)</sup> There has been no validation.

#### **Izmit Landfill Gas Efficiency Improvement Works**

- As part of efforts to increase gas efficiency, Körfez Enerji San. A.Ş company carried out perimeter line renovation works.
- 850 meters of piping work was carried out to a total of six 550 meters water channels opened in Lot-1 region.
- In Lot-1 region, two of the D 315 pipes and drainage canal works was completed, with a total of four pieces, each approximately 160 meters.
- A total of 43, 2,000-meter horizontal channel excavation work and 3,500-meter piping work were carried out in Lot-5-7 region. The horizontal channel opened is closed with clay over the channels.

#### 4.12.2 DILOVASI LANDFILL AREA

There are two gas engines at the Dilovası Landfill. The engines have an installed capacity of 1,063 MW and the plant operates at full capacity for over 8,000 hours per year. Dilovası Landfill Facility started to generate electricity on 24.10.2015 as a result of the electrical connections and the completion of the electricity generation. In 2021, the total amount of gross energy generated was 2,976,370 kWh/year. Since no waste is taken, energy generation has decreased. On 01.06.2017, the site was closed for garbage collection.





Appearance of the Gas Balloon at Dilovasi Landfill

Appearance of Gas Engines at the Dilovasi Landfill

Year	2017	2018	2019	2020	2021
Gross Generated Energy (kWh/year)	12,516,251	10,220,073	6,177,303	3,939,120	2,976,370
Energy Sold (kWh/year) (*)	11,979,709	9,728,296	5,762,160	3,649,438	2,810,734

<sup>(\*)</sup> Refers to the net electrical energy supplied to the grid after transformer and busbar losses.

#### Dilovası Landfill Site Gas Efficiency Improvement Studies

Studies have been carried out to increase the methane content by covering the site with clay. For this reason, clay excavation was taken at the Dilovası landfill site and the closure process was carried out.

#### 5 INFORMATION TECHNOLOGIES

#### 5.1 SYSTEM AND SOFTWARE TECHNICAL SERVICES

In 2021, a total of 446 work orders were executed in the field of Systems and Software with Information Technology Responsibility.

a-vamma - / a a	YEAR	2017	2018	2019	2020	2021
SYSTEM / SOFTWARE TECHNICAL SERVICES	System	454	398	312	147	221
	Software	104	162	133	99	225

#### 5.2 ACTIVITIES PERFORMED

- Within the scope of information security studies:
  - ✓ Hardware modification,
  - ✓ Virus infection.
  - ✓ USB Inputs,
  - ✓ Backup,
  - ✓ Server health status,
  - ✓ Blacklist,
  - ✓ Internet disconnection reports

were examined on a daily basis and were constantly checked.

- The website has been updated and the hosting service has been updated. Extensions of domain names period of web addresses have been provided.
- Space saving studies were carried out in data storage areas.
- In place of the existing monitoring programs, free monitoring programs have been researched, tested and implemented.
- Improvements have been made to comprehensively monitor the health of the systems.
- Planned internal audits have been carried out within the scope of ISMS.
- The Management Review meeting planned within the scope of ISMS was held.

- ISO 27001 Information Security Management System Certification Audit was been carried out and the audit successfully passed.
- Periodic maintenance was carried out within the scope of the Annual Maintenance Plan of IT Devices and exercises were planned within the scope of ISO 27001 Information Security Management System (ISMS).

#### 6 OCCUPATIONAL HEALTH AND SAFETY

#### 6.1 OCCUPATIONAL ACCIDENTS

As of the end of December 2021, the number of minor and major occupational accidents was recorded as 45. First aid, medical intervention, and hospital referral procedures were applied to 45 casualties in 45 occupational accidents. In 2021, 75 workdays were lost due to 45 occupational accidents.

We keep the number of accident-free workdays in our facility on the board located above the shift supervisor. If there are two or more lost work days as a result of the accidents experienced by an IZAYDAS employee on our board, we reset our board. As of 31.12.2021, our workdays, which passed without accidents, has been recorded as 24. Our accident-free workday record is 568 in our records. Most recently, ISO 45001 certificate was obtained instead of OHSAS 18001 in 2021.

The accident frequency index and accident severity rate for the years 2017-2021 are given below.

YEAR	2017	2018	2019	2020	2021
Number of Accidents (IZAYDAS + Contractor Company)	49	44	44	52	45
Loss of working days (IZAYDAS + Contractor Company)	90	43	18	208	75
Accident Frequency Rate	71.47	70.68	78.96	86.88	61.14
Accident Severity Index	0.13	0.069	0.031	0.348	0.106

#### 6.2 OHS ACTIVITIES

In 2021, the number of on-the-job work permits of the contractor company is 389.

Distribution of the total number of work permits in 2021 is:

- 8 excavation works,
- 130 work in closed areas and tanks,
- 459 hot work.
- 421 working at height.

The OHS unit continued its work with a total of 10 people in 2021.

#### **6.3 ENVIRONMENTAL ACCIDENT EXERCISES**

Unannounced environmental accident exercise carried out on 10.12.2021 within the scope of Emergency Preparedness and Response Procedure (PR 11), Emergency Preparedness and Response Plans (PL-660-01) and Environmental Accident and Emergency Management Instruction (T-103-01). The exercise was completed successfully and the actions to be taken were determined by holding an evaluation meeting after the exercise.

#### 7 PROJECTS

#### 7.1 COMPLETED PROJECTS

- Installation of Waste Reception Facility for the separation/dewatering of petroleum-derived ship wastes
- IZAYDAS Online Conference System
- Vertical wind turbine project
- Medical waste collection, transportation, (pre-treatment), disposal work
- The POP project
  - To fulfil obligations within the framework of the Stockholm Convention on Persistent Organic Pollutants (POPs), to which our country became a party in 2010, and to increase the implementation capacities of the EU Regulation and national regulations, "Identification and Improvement of POPs Contaminated Areas Project" was initiated on 08.10.2019 under the execution of the United Nations Development Program (UNDP) under the beneficiary of the Ministry of Environment and Urbanization. The aim of the project is to prevent human health and the environment from being damaged by the negative effects of persistent organic pollutants, especially the management of POPs contaminated sites and the prevention of POPs, and it lasts for 36 months. Within the scope of the "Disposal of Persistent Organic Pollutant (POP) Stocks and Reducing POPs Emissions Project" between the Ministry of Environment and Urbanization, General Directorate of Environmental Management and İZAYDAŞ, the Protocol on the Waste POP Stock to be Disposed of by IZAYDAS" was signed and the disposal of POP stock wastes was carried out within the scope of the protocol.
- Treatment, disposal or recovery of liquid waste by vacuum extraction method (Ataneo)

The establishment of the facility was completed and commissioned within the scope of the facility establishment and operation project for the disposal or recycling of the wastes, which are qualified as liquid waste, by vacuum extraction method. Trial studies are carried out with different types of waste. We continue to work to obtain an Environmental Permit for the facility.





#### 8 TRAININGS

• Kocaeli University-Industry Education Cooperation

Within the scope of Industry-University Education Cooperation Protocol signed on 07.07.2007, in the 2020-2021 academic year, "Waste Management I" Waste Management II and Waste Evaluation and Recycling" courses were given online due to the pandemic process, at the Environmental Cleaning and Inspection Program of Kocaeli University Hereke Ömer İsmet Uzunyol Vocational School and Hereke Asım Kocabıyık Vocational School Environmental Cleaning Services Department.

- Training has been provided to employees.
- IZAYDAS and Waste Management training was given to the Eskişehir Technical University Environmental Engineering Department students and lecturers.
- Environmental Engineering and Waste Management training was given to Gebze Technical University Environmental Society students, at IZAYDAS.

In accordance with the Regulation on Environmental Management Services, trainings were carried out in 2021, taking into account the pandemic conditions, within the scope of providing training to at least 60% of the employees and responsible persons related to environmental laws and secondary regulations. Completed trainings are as follows:

- Environmental Legislation Training on 23.03.2021
- In-Plant Waste Management Training on 25.03.2021
- Environmental Legislation Training on 10.11.2021
- In-Plant Waste Management Training on 29.11.2021

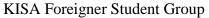
#### 9 VISITORS/OUR VISITS

In 2021, the number of visitors admitted to IZAYDAS from schools, local and foreign institutions, municipalities, associations and foundations, and chambers was 526.

Year	2017	2018	2019	2020	2021
Number of Visitors	4,900	4,961	3,142	1,316	526

- We visited Eyyüp KARAHAN, MEU Environmental Management General Manager, Mehrali ECER, MEU EIA Permit and Inspection General Manager, Oğuz CAN, MENR Energy Efficiency General Manager, with TAYÇED.
- We hosted TÜBİTAK 4004 Project İzmit Science and Art Center teachers' committee in the İZAYCAN hall and made a comprehensive presentation on İZAYDAŞ and waste management. We answered their questions.
- TÜBİTAK 4004 PROJECT Gölcük Science and Art Center student group was hosted.
- Association of Trabzonians.
- KİHMED Delegation
- İSTAÇ General Manager M. Aslan DEĞİRMENCİ
- We welcomed Erasmus Foreign Students of İzmit Secondary School (Hızır Reis), we answered their questions and introduced the facility.
- IHH Kocaeli Delegation
- Ford Otosan After Sales General Manager
- Deputy of Gümüşhane Hacı Osman AKGÜL
- We hosted KISA Student Group consisting of different departments studying at Kocaeli University.

Sakarya MEU Provincial Directorate







## Kocaeli University Industrial Engineering Club

Chamber of Mechanical Engineers Committee





Suleyman Demirel Unversity

**Industrial Engineering Club** 



Delegation from Bosnia and Herzegovina



We visited institutions that took office in 2021.

- Ministry of Environment, Urbanization and Climate Change
- Ministry of Energy and Natural Resources
- General Directorate of İSTAÇ
- Sakarya Entegre Katı Atık Yönetimi A.Ş.

#### 10 EVENTS

#### 10.1 EVENTS WE PARTICIPATED

- Technical Advances in Waste Management: Increasing Productivity
- We participated in webinar events of VacuDry® '21st Century Thermal Desorption time to grow green and boost your profits!
- We participated in Kocaeli Environmental and Agriculture Workshops.

Kocaeli Environmental Workshop



Kocaeli Environment Workshop was held on 02.11.2021 within the scope of the "Kocaeli Sustainable Environment Action Plan" studies by Kocaeli Metropolitan Municipality. In 13 titles (climate change mitigation, climate change adaptation, local transportation, urban green spaces including sustainable land use, nature and biodiversity, air quality, environmental noise and vibration quality, waste generation and management, water and wastewater management, eco innovation and sustainable business, energy performance, integrated environmental management and Izmit Bay) workshop focus group meetings were held. As the Environmental Management System, opinions and suggestions were shared by participating in the integrated environmental management focus group meeting.

#### • Kocaeli Chamber of Industry – Şahabettin Bilgisu Environment Awards

Kocaeli Chamber of Industry has been organizing the "Kocaeli Chamber of Industry Şahabettin Bilgisu Environment Awards" award program since 1995 in order to reward industrial organizations that contribute to the development of environmental awareness, protection and improvement of the environment. In the award organization, which was held for the  $27^{th}$  time in 2021, the companies applied were evaluated by being included in the Field Audit Team in order to find the owners of the environmental awards in the large-scale companies and SME categories. An Award Ceremony was organized by Kocaeli Chamber of Industry on 11.08.2021 for the enterprises awarded as a result of the evaluations.

KSO 27th Şahabettin BILGISU Environmental Awards - KOCAELI





#### VII. Istanbul Carbon E-Summit, Low Carbon Hero Award



At the 7<sup>th</sup> Istanbul Carbon E-Summit organized by the Sustainable Production and Consumption Association on 28.09.2021, the «İZAYDAŞ HEPP, Green Voice to Nature» project, İZAYDAŞ Yuvacık Branch Hydroelectric Power Plant, was awarded the 2021 SÜT-D Low Carbon Hero Award.

Event Name	Date	Location
Productivity and Technology Fair	09-12.06.2021	ANKARA
11 <sup>th</sup> TURKTAY Panel	08-09.09.2021	ANKARA
BIOEXPO Analytech Exhibition	06-08.10.2021	İSTANBUL
IREMCON Conference	21.10.2021	İSTANBUL
IFAT Eurasia Exhibition	21-23.10.2021	İSTANBUL
9 <sup>th</sup> MSMB Summit Program	06.11.2021	İSTANBUL
TURKCHEM TV	17.02.2021	YouTube
Water Panel	04.03.2021	Zoom
Carbon e-Summit	28.09.2021	Special Platform
Environmental TV	31.03.2021	YouTube
Environmental Engineering Congress	09.12.2021	Special Platform

## Productivity and Technology Fair - Ankara





#### 11th TURKTAY Panel - Ankara





#### **BIOEXPO ANALYTECH Exhibition – Istanbul**





#### **IREMCON Conference – Istanbul**





#### **IFAT Eurasia Exhibition - Istanbul**





#### 11 OTHER WORKS

### • www.izaydas.com.tr

Our website is updated regularly. Our monthly and annual activity reports and tender announcements are published up-to-date.

In 2021, 13 news items were published at our website. www.izaydas.com.tr

A total of 21,730 people visited our website in 2021. The following table shows the number of domestic and international visitors for the last five years.

	Year	2017	2018	2019	2020	2021
Website Visitor Numbers	Turkey	36,255	22,154	18,661	18,588	18,819
	International	1,701	2,101	2,394	2,680	2,911
	Total	37,956	24,255	21,055	21,268	21,730

#### • Social Media

We take place in social media with a total of 9,194 followers in order to strengthen our communication, to increase our strength and to keep our corporate brand value at the top, with the thought that we all have a place on digital platforms.





## Clean Environment, Healthy Society

**Customer Suggestion and Complaint Hotline:** 

0 800 291 00 02

Alikahya Atatürk Mh. Çarşıbaşı Cd. No: 350 41310

izmit / Kocaeli

Tel: 0262 316 60 00 Fax: 0262 316 60 50

info@izaydas.com.tr - www.izaydas.com.tr







