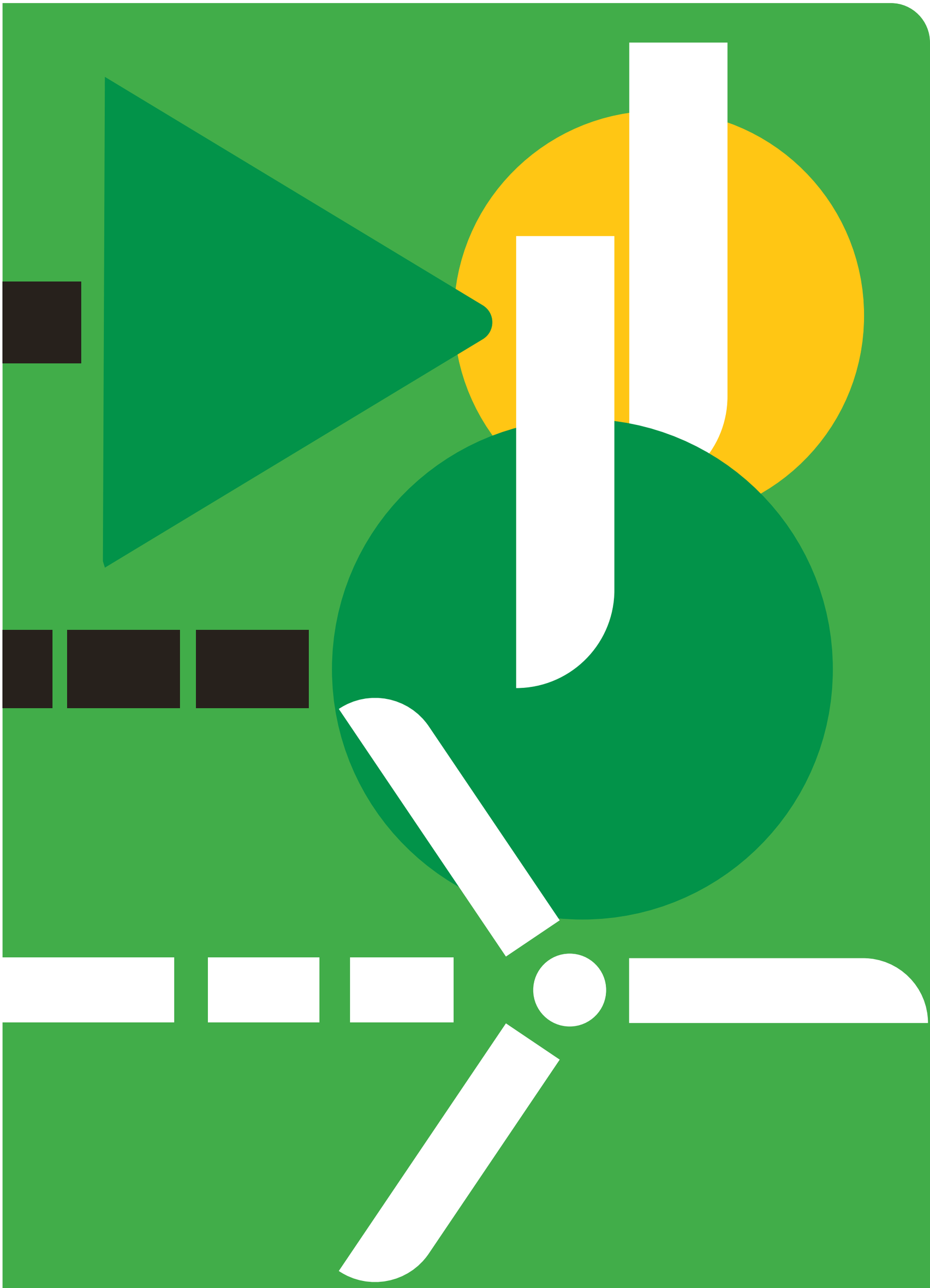
REDUCING ENVIRONMENTAL IMPACT



ENVIRONMENTAL MANAGEMENT

ENKA PUBLICLY SHARES AND HIGHLIGHTS ITS COMMITMENT TO "REDUCING ENVIRONMENTAL IMPACT" RESULTING FROM ITS ACTIVITIES TO THE PUBLIC THROUGH ITS ENVIRONMENTAL MANAGEMENT APPROACH AND POLICY. THIS STRONG COMMITMENT HAS BEEN HEAVILY REINFORCED BY TAKING ITS PLACE UNDER THE HEADING "REDUCING ENVIRONMENTAL IMPACT" IN 2027 SUSTAINABILITY GOALS. IN DETERMINING THESE SUSTAINABILITY GOALS, THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS, GLOBAL TRENDS, THE IMPACTS AND GOALS OF ENKA İNŞAAT AND ITS SUBSIDIARIES ON THE ENVIRONMENT AND THE FEASIBILITY AND TRACEABILITY OF THE GOALS WERE ESPECIALLY TAKEN INTO CONSIDERATION.

ENKA İnşaat and its subsidiaries implement environmental management and its commitments in compliance with international environmental management systems, develop their own environmental management systems in line with the ISO 14001:2015 Environmental Management System Standards and they are audited by independent organisations.

The environmental impacts of ENKA İnşaat's activities are managed by the Health Safety and Environment (HSE) Departments or by the management representatives based on the ISO 14001:2015 Environmental Management System. The identified indicators are monitored by environmental engineers and experts employed in the HSE departments and environmental performance is regularly reported. In order to ensure that ENKA's environmental performance complies with both its own standards and national and international standards, the corporate and project HSE Departments continuously audit the relevant activities and identified non-conformances are closed out as fast as possible. When undertaking works in countries where national standards are less stringent than the ENKA's environmental requirements, ENKA aims to establish environmental management systems that go beyond the national standards and meet its own target and that are exemplary.

At ENKA, the Director of Quality, HSE & Integrity, who also leads the Sustainability Department, reports to senior management the performance and outputs of the Management Systems which includes ISO 9001:2015, ISO 27001, ISO 14001:2015 and ISO 45001:2018 as its components. As part of the Management Systems, all processes are audited, audit results are reported to relevant departments which then undertake the necessary corrective or improvement actions. The effectiveness of the actions run by the relevant departments are followed up. The Corporate HSE Manual, which details ENKA's HSE policies, is communicated to all employees in hard and electronic copies and in trainings. Furthermore, relevant subjects are covered at Sustainability Committee meetings and representatives of ENKA and subsidiaries are informed accordingly.

Subcontractors and suppliers working with ENKA are expected to act just as sensitively, so various training and audits are carried out to this end. The environmental approach and performance ENKA expects of its suppliers is clearly expressed in ENKA Supplier Code of Conduct and in procedures governing the selection, assessment and auditing of suppliers.

No ENKA activity starts before its environmental impact is identified and appropriate measures are taken. Within the scope of environmental management, impacts resulting from use of natural resources, impacts on soil, impacts on water resources, air emissions, greenhouse gas emissions and climate change impacts, soil erosion, impacts on flora and fauna, impacts on endangered species, impacts arising from waste, environmental impacts of dust, noise and vibration impacts and the impacts resulting from emergencies are assessed, appropriate precautions are identified and the effectiveness of these precautions are measured and monitored during the activity period.

In 2019, there were no significant monetary or non-monetary fines or measures taken against ENKA due to non-compliance with environmental laws and regulations.

ENKA carries out series of activities to measure, eliminate and minimise the impacts mentioned above. A part of these activities are trainings provided to employees and relevant stakeholders. In 2019, ENKA İnşaat provided a total of 14,732 person-hours of environmental training.

ENVIRONMENT TRAININGS PROVIDED BY ENKA İNŞAAT IN 2019

14,732

PERSON-HOURS

According to field of activity and impact, the performance of ENKA and its subsidiaries is regularly monitored and the necessary actions for achieving environmental goals are taken. The compliance of ENKA and its subsidiaries with the environmental targets of the 2027 Sustainability Goals is shown in the table at the end of this section.

GRI 102-11, 307-1, 413-2

WATER MANAGEMENT

IN PARALLEL WITH ITS GOAL OF REDUCING ENVIRONMENTAL IMPACT TO MINIMUM, ENKA CONDUCTS ITS ACTIVITIES WITHOUT COMPROMISING FROM ITS RESPONSIBLE WATER MANAGEMENT APPROACH. TODAY WHERE CLEAN WATER RESOURCES BECOME DEPLETED AND BOTH INDUSTRIAL AND DOMESTIC WATER DEMAND RISES CONTINUOUSLY, ENKA PRODUCES VARIOUS SOLUTIONS FOR THE SUSTAINABILITY OF ITS ACTIVITIES.

Depending on regional conditions and the needs of the relevant unit, groundwater, surface water, mains and sea water are used in ENKA's operations. Regardless of the source of the water used, permits are obtained from the relevant authorities and internal and external audits are carried out to ensure appropriate operation is in place. At ENKA projects, majority of water consumption takes place due to watering activities for dust preventiont, the production of materials such as concrete and asphalt at plants and domestic water use at projects.

Discharge locations vary depending on the geography and the scope of the work. If a sewage infrastructure is present in the area, it is preferred. In locations where there is no sewage system, the wastewater is treated to acceptable quality and discharged into receiving bodies.

Both before starting business activities and then also at regular intervals, the condition of the water sources in the region, water stress and the quality of drinking water and wastewater are examined and improvement actions are taken regarding the identified remedial issues. In addition, projects that aim to reduce water consumption are developed and implemented in ENKA subsidiaries.

In order to raise the awareness of employees, regular trainings are provided and information about water management is communicated at all ENKA companies.

Water consumption data for 2019 shows a 66% decrease compared to 2018. The main reason for this decrease is that the ENKA Power Plants stopped their operations in 2019. An increase of 22% was recorded in network water consumption and water purchased from third parties for activities, when the power plants are excluded.

Wastewater produced as a result of ENKA's activities is discharged based on the most stringent of legal requirements of the host country or customer contract requirements. Furthermore, sector-specific IFC standards may also be followed depending on the project's scope.

The pollutant loads in wastewater resulting from ENKA operations in 2019 are shared in the table below:

■ Amount of Wastewater Pollutant Loads

POLLUTANTS	UNIT	POLLUTANT LOADS (2019)
CHEMICAL OXYGEN DEMAND (COD)	Tonnes/Year	546
BIOCHEMICAL OXYGEN DEMAND (BOD)	Tonnes/Year	308
TOTAL SUSPENDED SOLIDS (TSS)	Tonnes/Year	239

In locations where there is no sewage infrastructure, treatment systems are established and operated. Even if the discharge point is a sewage system, wastewater analyses are conducted through accredited laboratories and the wastewater values; especially for pH, BOD, COD, nitrogen, phosphorus, TSS and coliforms are examined in detail. If the wastewater is to be discharged into the environment, the quality of the receiving environment is also controlled and monitored with regular measurements to determine the environmental impact.

■ Amounts of Withdrawal and Discharged Water by Source

SUBSIDIARY/FACILITY/PROJECT		AMOUNT OF WATER WITHDRAWAL BY SOURCE				WASTEWATER DISCHARGE (m^3)	DISCHARGE POINT
		MUNICIPAL WATER (m^3)	SURFACE WATER (SEA, RIVER, LAKE ETC,) (m^3)	GROUND-WATER (m^3)	RAINWATER (m^3)		
CIMTAS PIPE		26,774	X	X	580	27,354	Municipal Wastewater Treatment Plant
ÇİMTAŞ STEEL		1,986	X	39,340	X	15,000	The Sea of Marmara
ENKA POWER PLANTS	ADAPAZARI	X	X	16,434	X	16,434	Municipal Wastewater Treatment Plant
	GEBZE	X	X	32,868	X	32,868	Municipal Wastewater Treatment Plant
	İZMİR*	X	8,291,089	26,131	X	6,091,022	Sea
ENKA PAZARLAMA		7,300	X	X	X	7,111	Municipal Wastewater Treatment Plant
ENKA SCHOOLS KOCAELİ		10,104	X	X	X	10,104	Municipal Wastewater Treatment Plant
ENKA FOUNDATION		51,656	X	X	X	51,656	Municipal Wastewater Treatment Plant
CITY CENTER INVESTMENT (CCI)		194,708	X	X	X	194,708	Municipal Wastewater Treatment Plant
ENKA TC		573,900	X	X	X	565,700	Municipal Wastewater Treatment Plant
MKH		62,946	X	X	X	62,946	Municipal Wastewater Treatment Plant
ENKA HEADQUARTERS		13,340	X	X	X	13,340	Municipal Wastewater Treatment Plant
NIZHNEKAMSK PROJECT		24,000	X	X	X	18,000	Municipal Wastewater Treatment Plant

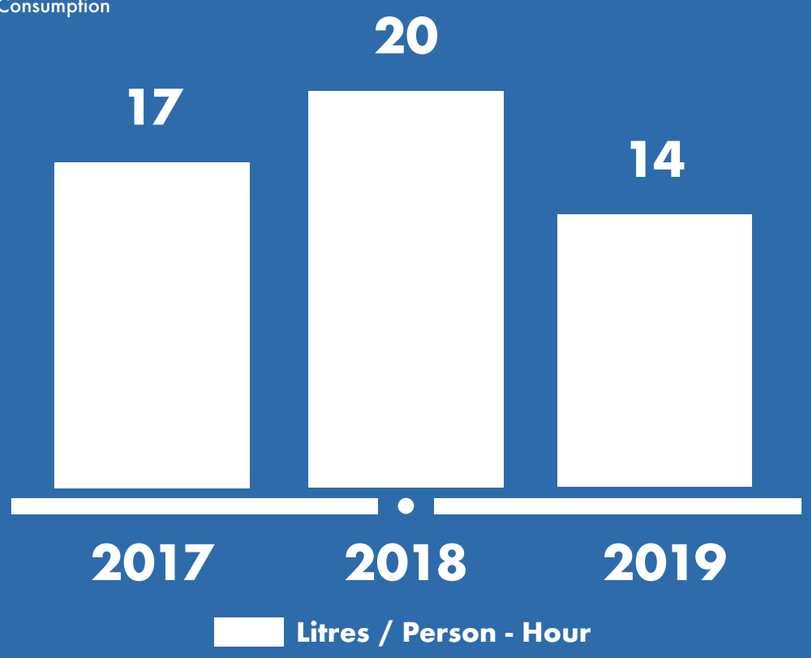
* While the seawater was included in calculations in the 2019 and 2017 reports, it was excluded in the 2018 report.

Amounts of Withdrawal and Discharged Water by Source continued.

SUBSIDIARY/FACILITY/ PROJECT	AMOUNT OF WATER WITHDRAWAL BY SOURCE				WASTEWATER DISCHARGE (m^3)	DISCHARGE POINT
	MUNICIPAL WATER (m^3)	SURFACE WATER (SEA, RIVER, LAKE ETC.) (m^3)	GROUND-WATER (m^3)	RAINWATER (m^3)		
DHI QAR PROJECT	55,333	X	X	X	3,009	Municipal Wastewater Treatment Plant
SAMAWA PROJECT	79,303	11,500	X	X	76,800	Receiving Body After Treatment
TOTAL (m^3)	1,101,350	8,302,589	114,773	580	7,218,052	

Within the scope of ENKA 2027 Sustainability Goals, Çimtaş monitors its specific water consumption data by using metrics specific to the company. In 2019, specific domestic water consumption was recorded 14 litres/person-hour, keeping below the goal of 15 litres/person-hour and achieving 30% improvement compared to 2018.

■ Çimtaş Water Consumption

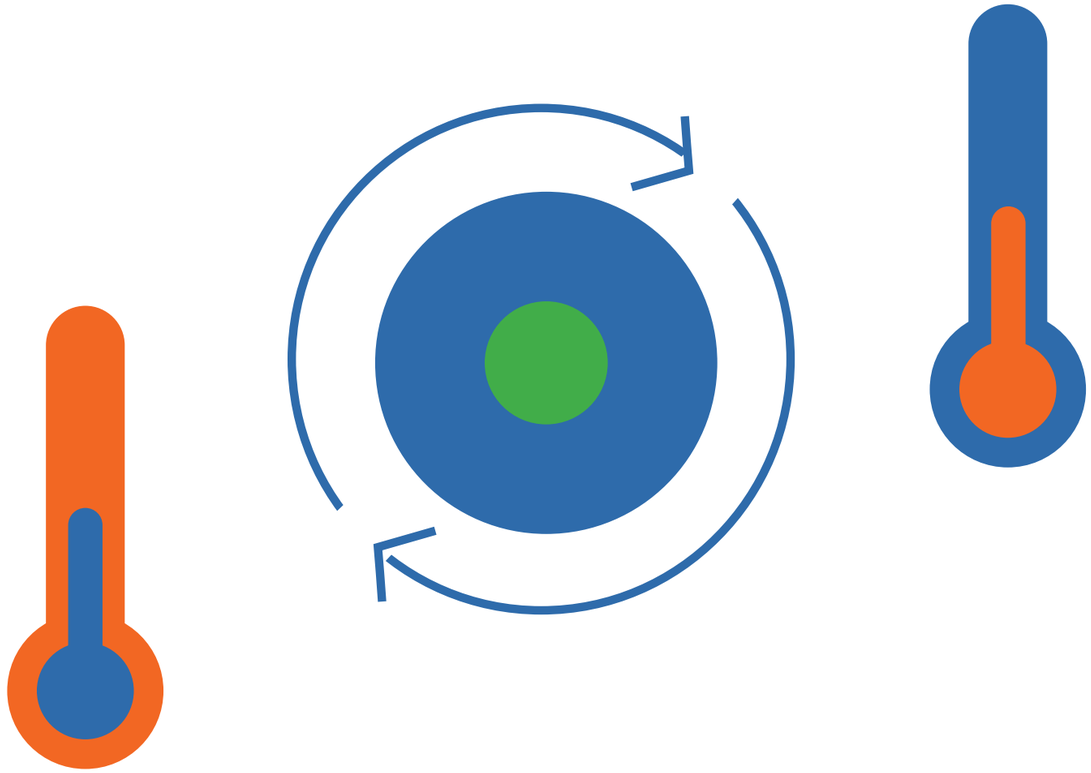


■ Water Efficiency Efforts in 2019

COMPANY	WATER EFFICIENCY EFFORTS
CIMTAS PIPE	As a result of studies such as; increasing the amount of rainwater use, improvements in garden irrigation systems, daily monitoring of water consumption, early detection and repair of leaks, 25% water saving was achieved compared to 2018.
ÇİMTAŞ STEEL	Due to the volume of business in 2019, there was an increase in the number of employees compared to the previous year. With the increase in the number of employees, additional load was placed on the wastewater treatment plant and a kaizen project was initiated to improve the current performance of the treatment plant and prevent it from being affected by the increased number of employees. In this context, overload protection gauges were installed at the treatment plant together with an intermittent relay to ensure that the system operates at certain intervals. In addition, a bacteria dosage unit was installed to the oil retention system of the treatment system. As part of the individual kaizen project, the faucet flows in all the sinks at the factory were optimised and an average 250 m^3 of clean water was saved monthly.
ENKA SCHOOLS KOCAELİ	Within the scope of ENKA Sustainability Goals, ENKA Schools Kocaeli has completed the project studies for storing rainwater and using the stored rainwater for garden irrigation with the “Rainwater Recovery System”.
ENKA SCHOOLS İSTANBUL	Nearly 2,000 m^3 of water was saved over compared to 2018 through the use of sensor faucets and adjustments to their settings.
CITY CENTER INVESTMENT BV	With the installed system, the fan coil drainage water is stored and reused in the system in case the system pressure decreases or fan coil water is discharged. With the same method, it was ensured that water containing glycol discharged from the safety valves on closed system lines is reused in the systems. With these methods, approximately 300 m^3 of water was saved in a year.
ENKA TC	The “Rainwater Recycling Project” was completed within the scope of sustainability studies. With the implementation of the project at the end of 2019, rainwater collected on the roof of Sevastopolsky Shopping Centre is now treated and used for cleaning car parks, landscape watering and flushing toilets, resulting in saving the natural water sources.

ENERGY EFFICIENCY AND CLIMATE CHANGE

ENKA IS AWARE OF THE NEGATIVE EFFECTS OF CLIMATE CHANGE AND GREENHOUSE GAS EMISSIONS AND CONDUCTS ITS ACTIVITIES WITH EFFORTS TO MINIMISE ITS NEGATIVE IMPACTS ON THE ENVIRONMENT AND CLIMATE.



Climate change risks are assessed by the Early Identification of Risks Committee and Risk Management Working Group at ENKA. Climate change related risks covers multiple high risk types. ENKA implements a risk management approach against climate change related transition risks and physical risks. ENKA carefully follows the legal and technological developments within the scope of transition risks and carries out various practices at the points where there is a risk. Thus, ENKA realizes the importance of good management of all Environmental, Social, Governance (ESG) risks, including climate change, in terms of reputation, foreign investment and financing and it implements appropriate policies and strategies.

Both acute and chronic physical effects of climate change are increasing worldwide day by day. Especially in our country and in all regions where ENKA operates, the intensity of acute effects such as extreme climate events, heatwaves and heavy rains have increased in recent years. Against these risks, scenario analyses are conducted at ENKA İnşaat operations and ENKA Power Plants and weather conditions are carefully monitored. In all ENKA İnşaat projects, assessments are carried out for the environmental and social impacts of the project. Specifically, in the projects where work activities are conducted in close proximity to water bodies, watershed regulations are considered and additional emergency procedures are intently applied against incidents such as flooding.

ENKA keeps regular records of the energy and fuel consumptions of its subsidiaries and it has been regularly calculating its carbon footprint and reduction amounts as a result of improvement efforts and measures undertaken since 2016.

ENKA's fuel and energy consumption in 2019 is summarised in the table below.

REGION/ LOCATION	FUEL CONSUMPTION	ENERGY CONSUMPTION		AMOUNT OF ENERGY SOLD
	FOSSIL FUELS (TJ)	ELECTRICITY (TJ)	HOT WATER CONSUMPTION FOR HEATING & COOLING PURPOSES (TJ)	ELECTRICITY (TJ)
ENKA İNŞAAT	97.47	43.29	-	-
ÇİMTAŞ STEEL & PIPE	32.59	75.12	-	-
ENKA POWER	26,931.18	64.49	-	16,170.56
ENKA REAL ESTATE	146.50	764.96	470.72	403.13
ENKA SCHOOLS KOCAELI	1.58	1.04	-	-
ENKA FOUNDATION	17.57	7.54	-	-
ENKA PAZARLAMA	12.38	3.09	-	-
TOTAL	27,239.28	959.53	470.72	16,573.69

The total energy consumption of the ENKA group companies and projects in 2019 reporting period was 28,669.53 TJ. The distribution of the amounts of primary energy consumed by year is shown in the table below.

TJ	2017	2018	2019
FUEL CONSUMPTION	157,873	146,450	27,239
ELECTRICITY CONSUMPTION	881	893	960
CONSUMPTION FOR HEATING & COOLING PURPOSES	15	16	-
HOT WATER CONSUMPTION	461	482	471
TOTAL	159,230	147,841	28,670

In 2019, the total energy consumption of ENKA group decreased by 81% compared to 2018. The main reason for this decrease was that ENKA Power's natural gas combined cycle power plants, which constitute for the highest energy consumption, stopped their operations in 2019. Within the scope of energy efficiency and saving efforts, ENKA group companies saved 57.86 TJ (4% of the total energy consumption in 2018) of energy in 2019.

In energy intensity calculations, all internal energy expenditure (fuel, electricity, heating, cooling, steam) of all subsidiaries and projects in the scope were included. As indicator of intensity, Terajoules energy expended per US dollars of annual revenue[4] was used. ENKA's energy intensity in 2019 was calculated to as 22.64 TJ / million USD.

■ Energy Intensity by Year (TJ/Million USD)

GREENHOUSE GAS EMISSIONS

ENKA's carbon footprint calculations cover; ENKA Headquarters, ENKA Power Adapazarı, Gebze and İzmir plants, Çimtaş Steel, Cimtas Pipe, ENKA Pazarlama, ENKA Foundation, ENKA Schools Kocaeli, ENKA Sports Club, ENKA TC, CCI, MKH and OMKH and Nizhnekamsk project in Russia and Samawa and Dhi Qar projects in Iraq.

Direct (Scope-1), indirect (Scope-2) and other indirect (Scope-3) greenhouse gas emissions from 2019 activities of ENKA were included in the calculation. Greenhouse gas emissions resulting directly from ENKA's activities are categorised as "Scope-1 – direct greenhouse gas emissions", while greenhouse emissions due to energy consumption from externally sourced electricity, heat and steam are categorised as "Scope-2 – indirect greenhouse emissions due to energy consumption". "Scope-3 – other indirect greenhouse gas emissions" category covers emissions resulting from the purchase of raw and intermediary materials, emissions from procured energy that are not covered by Scopes 1 and 2, disposal of waste (including wastewater), employee transport (shuttles/busses), business travel (flights), delivery of sold products to customers and disposal of sold goods at the end of their life span[5].

Scope-3 emissions were 1,339,682 tCO_2e in 2019. The Scope-1, Scope-2 and Scope-3 greenhouse gas emissions resulting from ENKA's operations in the 2019 reporting period are shown in the table on the right and in the chart on the following page.

[4] Only includes the revenues of the companies covered by this report.

[5] The methodologies used for calculating are the ISO 14064-1 and the GHG Protocol Corporate Accounting and Reporting Standards. For conversion factors IPCC, UNFCC and DEFRA data were used.

■ ENKA 2019 Scope-1 and Scope-2 Emissions

COMPANY/PROJECT	2017 TOTAL	2018 TOTAL	2019 TOTAL
	Scope-1 + Scope 2 tCO_2e	Scope-1 + Scope-2 tCO_2e	Scope-1 + Scope-2 tCO_2e
ENKA POWER	9,358,119	7,993,782	1,525,718
CIMTAS PIPE	5,910	7,698	7,281
CITY CENTER INVESTMENT BV	43,660	41,831	36,741
ÇİMTAŞ STEEL	4,075	6,909	7,274
ENKA GROUP HEADQUARTERS	1,042	931	2,282
ENKA PAZARLAMA	1,239	1,553	1,474
ENKA TC	106,522	112,280	109,918
ENKA FOUNDATION İSTİNYE CAMPUS	2,112	2,086	2,239
ENKA SCHOOLS[6]	909	277	258
MOSKVA KRASNYE HOLMY**	15,821	15,255	19,846
HOTEL MOSKVA KRASNYE HOLMY	8,918	7,812	-
KASHIRSKAYA PLAZA PROJECT	8,707	N/A*	N/A*
SCPX-AREA 81 SITE	2,774	N/A*	N/A*
SCPX-CSG1 SITE	5,132	444	N/A*
SCPX-CSG-2 SITE	9,702	1,203	N/A*
TAIF KAZAN BUSINESS CENTRE PROJECT	-	1,104	N/A***
NIZHNEKAMSK PROJECT	-	-	1,669
SAMAWA PROJECT	-	-	7,022
DHI QAR PROJECT	-	-	6,587
TOTAL	9,574,642	8,193,165	1,728,309

Following footnotes belong to the table on the right:

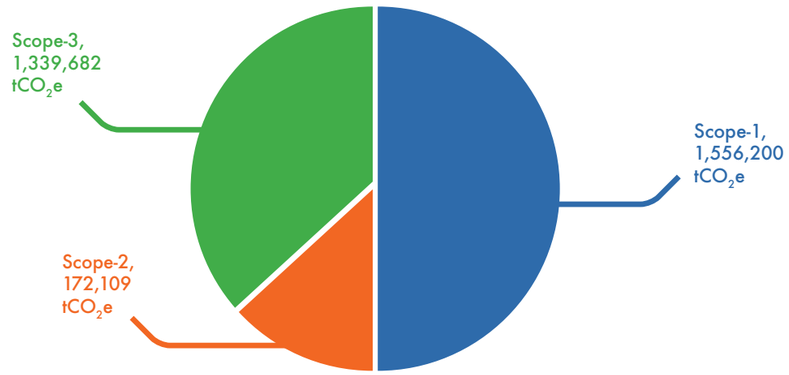
* Project was completed.

** In 2019, Moskva Krasnye Holmy and Hotel Moskva Krasnye Holmy were calculated together.

*** Not included in the scope in 2019.

[6] While the term 'ENKA Schools' denotes the ENKA Schools İstanbul for the 2017 reporting period, for 2018 and 2019 reporting periods ENKA Schools Kocaeli was included in the scope instead.

■ Scope-1, Scope-2 and Scope-3 Greenhouse Gas Emissions (tCO_2e)



The greenhouse gas emission intensity of ENKA activities was measured based on CO_2 equivalent greenhouse gas emissions per annual revenue in million USD (tCO_2e/million USD).

■ Greenhouse Gas Emission Intensity by Company (Scope-1 + Scope-2)

COMPANY	2018 INTENSITY tCO_2e/million USD	2019 INTENSITY tCO_2e/million USD
ENKA POWER İZMİR	6,967.00	4,629.91
ENKA POWER ADAPAZARI	6,900.00	5,201.50
ENKA POWER GEBZE	7,308.00	5,158.16
CIMTAS PIPE	43.00	78.26
CITY CENTER INVESTMENT BV	399.00	318.34
ÇİMTAŞ STEEL	65.30	39.53
ENKA PAZARLAMA	5.60	14.31
ENKA TC	1,076.00	863.10
ENKA SCHOOLS KOCAELİ	35.00	2.66
MOSKVA KRASNYE HOLMY	551.35	420.11
NIZHNEKAMSK COMBINED CYCLE POWER PLANT PROJECT	-	21.15
SAMAWA COMBINED CYCLE POWER PLANT PROJECT	-	69.37
DHI QAR COMBINED CYCLE POWER PLANT PROJECT	-	67.47

Due to the different sectors and activities of the group companies, greenhouse gas emission intensities are also monitored with calculating by operational area (m^2) and number of employees in addition to revenues. In 2019, ENKA group greenhouse gas emission intensities can be examined in the tables below.

■ Intensity of Emissions per Employee (Scope-1 + Scope-2)

COMPANY	2018 INTENSITY tCO_2e/employee	2019 INTENSITY tCO_2e/employee
ENKA POWER	21,260.06	5,735.78
CIMTAS PIPE	9.59	8.47
CITY CENTER INVESTMENT BV	337.35	311.36
ÇİMTAŞ STEEL	8.67	8.50
ENKA HEADQUARTERS	0.09	4.03
ENKA PAZARLAMA	9.19	10.31
ENKA TC	282.82	333.08
ENKA FOUNDATION İSTİNYE CAMPUS	20.25	21.32
ENKA SCHOOLS KOCAELİ	2.80	2.66
MOSKVA KRASNYE HOLMY*	58.84	55.90

■ Intensity of Emissions per Used Area (Scope-1 + Scope-2)

COMPANY	2018 INTENSITY tCO_2e/m^2	2019 INTENSITY tCO_2e/m^2
ENKA POWER PLANTS	13.98	2.67
ÇİMTAŞ STEEL	0.14	0.15
CIMTAS PIPE	0.14	0.13
ENKA TC	0.17	0.17
CITY CENTER INVESTMENT BV	0.26	0.23
ENKA SCHOOLS KOCAELİ	0.02	0.02
ENKA PAZARLAMA	0.06	0.06

*MKH's values are recalculated since MKH and OMKH were calculated separately in 2018 report.

AT ENKA PROJECTS, WE ALWAYS PRIORITISE THE ENVIRONMENT AND WE ALWAYS INCLUDE ENVIRONMENTAL PROTECTION STUDIES IN THE PREPARED RISK ASSESSMENTS AND JOB-SPECIFIC HAZARD ANALYSES.

I have been working as HSE specialist on Bechtel-ENKA joint venture projects, since 2010. I worked for about 8 years at Kosovo Motorway project and 2 years at the Muscat Airport project.

In the projects I worked on, we have constructed transportation facilities and the future of the local communities. While continuing our business in the construction sector in the developing world, I believe that we must also put heart and soul in protecting the environment and minimising any environmental damage. At ENKA projects, we always prioritise the environment and we always include environmental protection studies in the prepared risk assessments and job-specific hazard analyses. Moreover, since there are different environmental factors in the place where the work is conducted, we update these constantly and implement them accordingly.

While we were carrying our work on both Kosovo Motorway project and the Muscat Airport project, we worked hard to minimize the negative impacts on the local community and nature. To this end, we filtered the water we used in our camps, as well as the wastewater we produced and we discharged our wastewater properly. We set up concrete washing pools on the site and built barricades to prevent foreign substances from mixing in the river and in some cases, we carried out projects to clean up the plastic waste left by the local community. We measured the dust which we created on site and used various methods to minimise it. We paid attention to carry out noisy jobs during the hours when the people living around will be disturbed at minimum level possible.

In 2016, we greatly reduced the damage of the 36 hectares of volatile ash to the environment with the "We are Building the Green Corridor" project under which we covered the volatile ash produced by the Kosovo Power Plant with the material from excavations and then we planted seedlings on that cover. In addition to this great project, we minimised the amount of hazardous and non-hazardous waste we produced and ensured that it was recycled through our "Reuse, Reduce and Recycle" programme.

As a result of all these efforts, with our project we were deemed worthy of the Bechtel's Green Footprint Award, the International Road Federation (IRF) 2016 Environmental Mitigation award and "Best Global Motorway Project" award by Engineering News Record (ENR).

Another special task which we undertook, which did not win us any awards but which earned us the appreciation of the local community, was the landscaping of the River Lepenac. After finishing our works on the Kacanik-Hani I Elezit part of the motorway, we landscaped about eight kilometres of the river, setting up benches and fishing spots in places which people had not previously used very much, and arranging nice places where people could go for a picnic. We then opened it up for public use. The brown land in that area now as green as the surrounding hills.

Of course, I would like to state that; when we started these projects, the priority has always been to make sure that the employees are aware of the occupational safety, health and environmental requirements and act in accordance with them. All employees working on a project, regardless of their duties, attend HSE orientation trainings and acquire the necessary basic information. As they continue their work, they also take part in further training activities both environment and occupational health and safety related such as environmental protection trainings, cleaning trainings against oil and diesel fuel leaks and leadership trainings. At our Kosovo Motorway project, we provided more than 100,000 hours of training to ensure that the employees were well informed at all times and become individuals who contribute more to their communities when they return to where they live.

Thanks to all these efforts, these projects, which have been carried out, have been an enormous opportunity not merely to facilitate the transportation of the communities living in the surroundings but also to enhance the training, experience and knowledge level of the individuals in these communities.

▪ Valon Sokoli

HSE Specialist

Kosovo Route 6 Motorway Project

#GrowingBetterTogether

STAKEHOLDER ASPECT

AIR EMISSIONS

Air-pollutant emissions arising from activities of ENKA Power and Çimtaş Steel facilities are carefully monitored using Continuous Emissions Monitoring Systems (CEMS) in keeping with parameters established by regulations. In accordance with the Regulation on the Control of Industrial Air Pollution, ENKA also monitors and reports SO_2, PM and NO emissions, which are not a part of CEMS system for power plants. In 2019, total SO_2 emissions were 0.016 kg, PM emissions were 0.005 kg, NO emissions were 0.073 kg.

■ Aerial Emissions Resulting from ENKA Operations

EMISSION TYPE	2018	2019
NO_x, TONNES	4,501	755.94
CO, TONNES	261	8.66

SO_2 and PM emissions are not subject to continuous measurement for ENKA Power Plants under the Regulation on Air Pollution Caused by Industry.

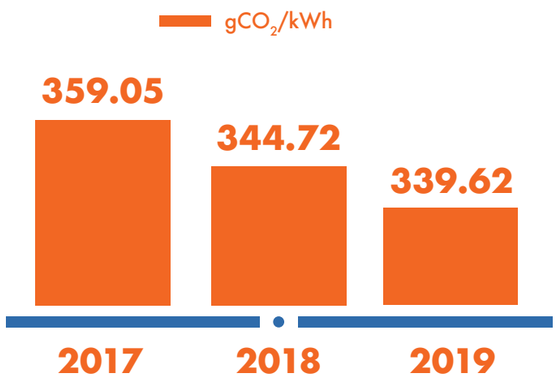
ENERGY EFFICIENCY AND EMISSIONS REDUCTION ACTIVITIES

A reduction of 57.86 TJ was achieved in energy consumption as a result of the savings and efficiency initiatives undertaken by the group companies and the projects in 2019. Compared to the 2018, it was observed that the reduced energy consumption stemming from these initiatives was the equivalent of 4% of the consumption in 2018. Meanwhile, the reduction in greenhouse gas emissions due to savings and efficiency initiatives in 2019 was the equivalent of 0.11% of the previous year's values. As a result of emissions reduction works carried out in 2019, approximately 9 thousand tonnes of carbon dioxide equivalent of greenhouse gas emissions were prevented throughout ENKA.

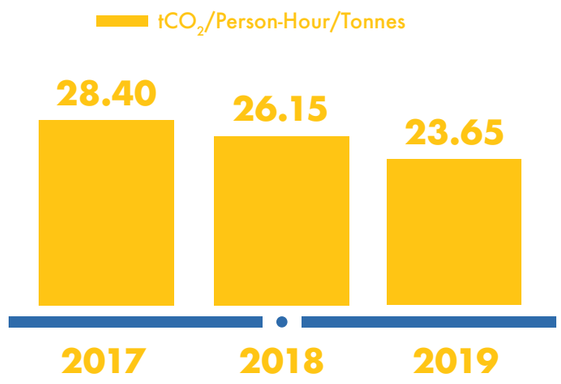
Compared to 2018, total energy consumption at ENKA decreased by 81% and total Scope-1 and Scope-2 emissions decreased by 79% in 2019. The main reason for this significant decrease was that the ENKA Power Plants, which have historically accounted for more than 95% of all Scope-1 and Scope-2 emissions of ENKA, have suspended their operations in 2019. As the operations stopped within the year, Scope-1 and Scope-2 carbon dioxide emissions arising from ENKA Power's activities were 81% less than previous year. With the cessation of the operations of the ENKA Power Plants, approximately 6.5 million tonnes less carbon dioxide equivalent greenhouse gas emissions were released compared to 2018.

Within the scope of ENKA 2027 Sustainability Goals, specific greenhouse gas emissions of ENKA Power Plants and Çimtaş are monitored with company-specific metrics. As a result of efficiency improvement studies in 2019, a reduction of 1.5% was achieved in specific greenhouse gas emissions (grams carbon dioxide released as a result of 1kWh electricity generation) at the ENKA Power Plants.

■ Specific Greenhouse Gas Emissions at ENKA Power Plants by Year



■ Specific Greenhouse Gas Emissions at Çimtaş by Year



Examples from energy saving studies carried out throughout ENKA in 2019 are described in the table below.

■ Energy Saving Efforts Carried Out in 2019

COMPANY	ENERGY SAVING EFFORTS
CIMTAS PIPE	The revision was made on the panel of the lighting fixtures in the halls of the spool facility to allow only a quarter of the fixtures to be lit and the hall lights were started to be used according to the work programme. In this way, 50% energy saving was achieved in this area.
	Another efficiency-enhancing project works has been completed by replacing the existing outdoor lighting projectors with 85 units of 250-Watt and 60 units of 400-Watt halogen bulbs with LED type projectors. By doing so, 65% energy saving was achieved up to 150,000 kWh per year. In addition, the LED panels in Hall-1 and Hall-2 are switched off at night resulting in savings of 175,200 kWh a year.
	An electronic control unit and heat detector sensors were installed in the air conditioning plant used for high hall heating in the existing facility and the conditioning plant unit was set to deactivate when the ambient temperature rises above 16°C.
	The valve of the 18th Hall acid pool scrubber system, whose water supply was previously controlled with an air-controlled valve, was replaced with an electrically controlled valve so that the obligation to operate the compressor was eliminated when there is no work in the hall. Thus, approximately 100,000 kWh electricity was saved annually.
	Unnecessary energy consumption was avoided by preventing the operation of pump motors that enables circulation in the chiller system, when the water temperature is low. This resulted in savings of approximately 18,000 kWh of energy per year.
ÇİMTAŞ STEEL	As part of the ISO 50001 Energy Management System and within the scope of energy efficiency or reduction of energy use; 40 team kaizens, 28 before-and-after kaizens and 16 rapid kaizens; a total of 84 energy-efficient kaizen projects were completed in 2019.
CITY CENTER INVESTMENT BV	Energy savings were achieved with the optimization of time adjustment on heating-cooling and ventilation systems. In addition, the condensers used in the energy filtering equipment were changed and modernised. This led to approximately 300,000 kWh of energy savings in a year even though the occupancy rate of the building is increased compared to 2018.
ENKA INVEST	LED lighting fixtures were renovated and motion sensors were installed in car parking lots to reduce energy consumption. This led to a fall in electricity consumption per m^2 (excluding tenant consumption) from 95.77 kWh/m^2 in 2018 to 90.52 kWh/m^2 in 2019.
ENKA TC	Thanks to the lighting automation, LED transformation, temperature monitoring and improvements in ventilation units, more than 2 million kWh of energy was saved in total.

RENEWABLE ENERGY STUDIES AT ENKA SCHOOLS

Another renewable energy project, which also started in 2019 and was planned in accordance with the ENKA Sustainability Goals, was designed by ENKA Schools Kocaeli students and it will be completed upon the installation of solar panels on the roof of the school cafeteria and meeting the most of the energy needs of ENKA Schools Kocaeli by using solar energy.

RENEWABLE ENERGY STUDIES AT ENKA SCHOOLS

ENKA Schools İstanbul FIRST LEGO League team students have completed their studies and also the prototype of the mechanism that charges rechargeable batteries especially and other rechargeable devices by using solar energy, with the support of ENKA Sustainability Department.

WE HAVE BEEN WORKING WITH ENKA IN RUSSIA SINCE THE END OF 2017 AND DURING THIS TIME WE HAVE ALREADY ACHIEVED IMPRESSIVE RESULTS.

Sphere of Ecology is a part of EcoTechnologies Group of Companies. We provide full cycle services that include waste collection, segregation, transportation, sorting and reprocess of raw materials. Our mission is to create modern and effective waste management system, which guarantees a clean and safe life for us and our children in Russia.

We have been working with ENKA in Russia since the end of 2017 and during this time we have already achieved impressive results. During the past few years, ENKA actively promoted waste separation involving its visitors and tenants of the shopping and business centers. At the moment, ENKA provides us cardboard and paper, plastic, glass and hazardous waste such as power sources and cartridges regularly.

Before sending wastes to reprocessing plant, we perform controls for the wastes at our sites for the quality of separation. We would like to note ENKA shows high awareness in separation process. During the entire period of cooperation with ENKA, no cases of clogging or defective delivery of separated and hazardous waste were detected.

In my view, the fact that ENKA is taking care of its wastes seriously not only because as a company ENKA is responsible for achieving the sustainable development goals, but also as an environmentally responsible business that in practice demonstrates a leading position in the industry. The more large and respected companies will be responsible for the generated waste, clearly and honestly demonstrating their position, the faster and better it will be possible to implement the program of separate collection and processing of waste in all industries.

At the very beginning of our cooperation with ENKA, we were pleasantly impressed by ENKA's approach to the implementation of waste separation system. The main goal of the project was not quantitative or economic indicators, but creating a comfortable atmosphere and eco-friendly environment for both shopping mall visitors and office workers. Proper goal setting, methodical development and involvement of the company's employees at all levels allowed us to take into account all the details and achieve impressive results.

Obviously, this is a confident, worthy approach on the way to success!

Anton Kuznetsov

Deputy General Director
Sphere of Ecology

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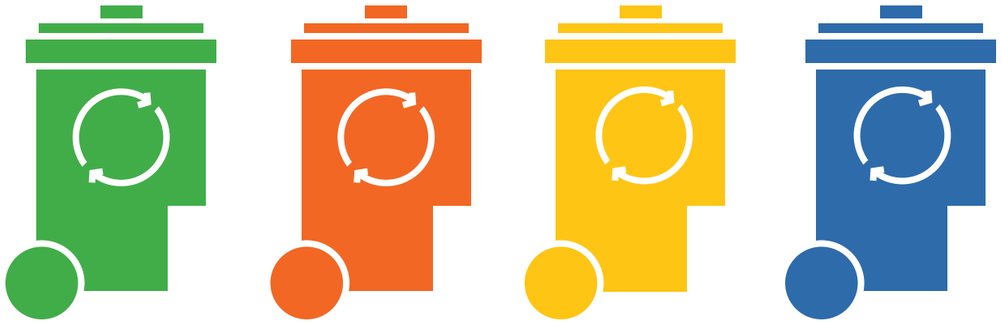
STAKEHOLDER ASPECT

WASTE MANAGEMENT



ALL TYPES OF WASTE RESULTING FROM ACTIVITIES CARRIED OUT BY ENKA ARE MANAGED USING WASTE MANAGEMENT PLANS DEVELOPED IN ACCORDANCE WITH THE REQUIREMENTS OF THE ISO 14001:2015 ENVIRONMENTAL MANAGEMENT SYSTEM AND BY FOLLOWING THE STEPS OF THE WASTE HIERARCHY.

The primary goal for ENKA is to eliminate waste at its source, and where this is not possible, to prevent and reduce the amount of waste generated to the extent possible. For waste which is produced in spite of these initiatives, recycling and reuse options are considered and the environmental impact caused by the waste resulting from activities is minimised.

In cases where the steps described above cannot be implemented due to the circumstances of the country of activity, waste is categorised by type, the amounts are recorded and then disposal is carried out by certified and authorised waste disposal companies.

In order to minimise the environmental impact, the waste arising from ENKA's activities is separated according to their types and their amounts are regularly measured and monitored. All waste arising from ENKA projects is disposed of by only licensed disposal firms and in accordance with the relevant regulations.

The amounts of waste produced at ENKA group companies and projects in 2019 by their disposal methods are summarised in the following table.

■ Amounts of Waste by Type and Method of Disposal

	HAZARDOUS WASTE (KG)	NON-HAZARDOUS WASTE (KG)
RECYCLING	109,863	11,995,398
RECOVERY (ENERGY RECOVERY)	216,480	20,670
DISPOSAL BY LICENSED DISPOSAL FIRMS	8,224	6,116,196
TOTAL	334,567	18,132,264

A total of five leak and spill incidents occurred in the reporting period. These were oil, chemical and petroleum leaks, which account for 2,256 litres in total, are under the Tier II category. In one incident, in which the biggest leak occurred, approximately 2,000 litres of oil was spilled and the oil accumulated on a concrete surface was delivered to the licensed disposal firm with the relevant waste code.

■ Leak and Spill Incidents

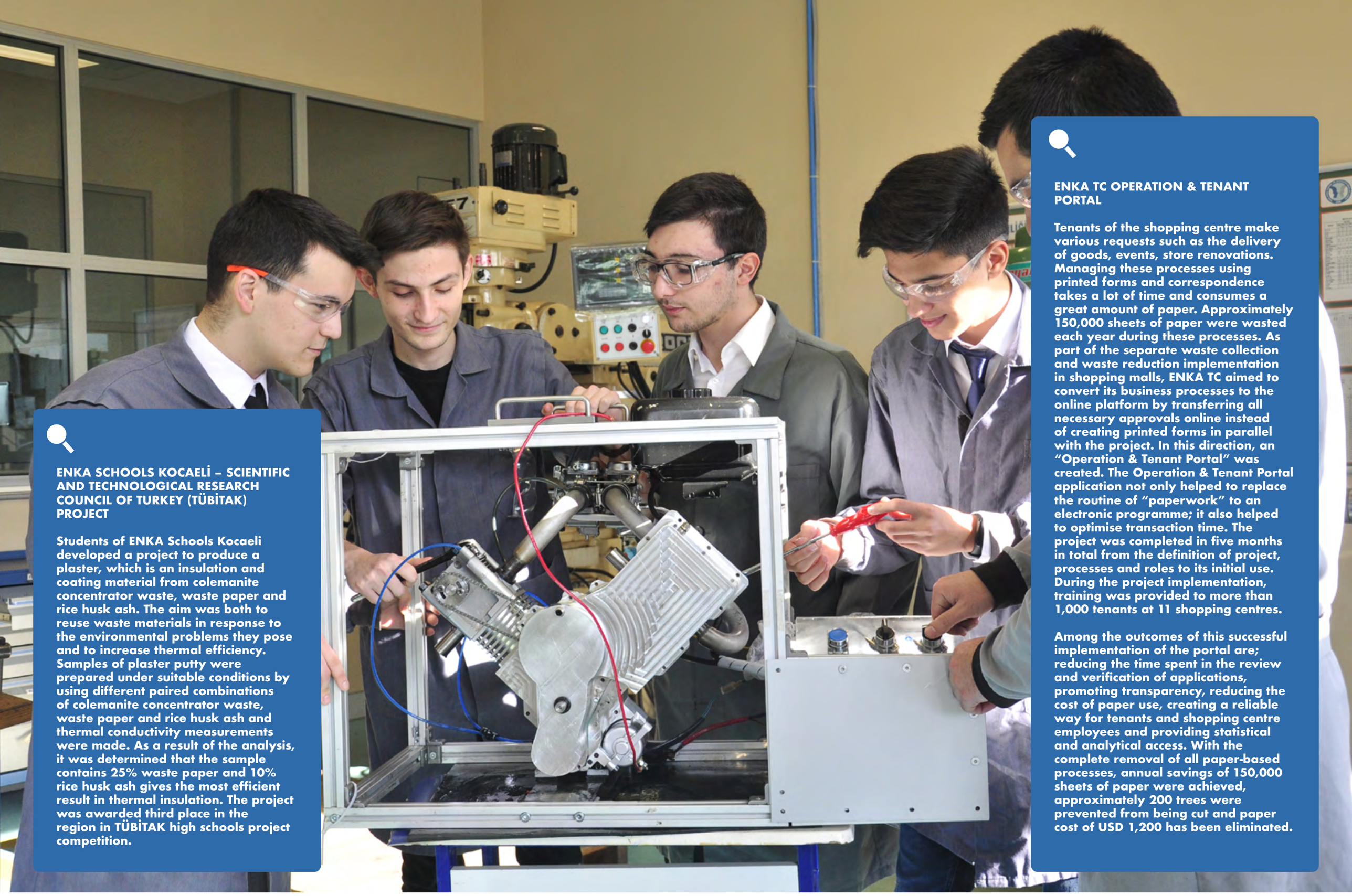
	TIER-I LESS THAN 2 LITRES	TIER-II BETWEEN 2 LITRES AND 20 M^3	TIER-III MORE THAN 20 M^3
LEAK & SPILL AMOUNT	0	2,256 litres	0
NUMBER OF INCIDENTS	0	5	0

WASTE REDUCTION EFFORTS

The policy that bans the use of plastic bottles throughout the ENKA group was strictly adhered in 2019 and fully compliance with waste management, paper use, treatment drinking water use policies implemented in ENKA Schools to reduce environmental impacts was continued. Some of the selected waste reduction projects implemented by ENKA group companies are described in the table below.

■ Waste Reduction Efforts Carried Out in 2019

COMPANY	WASTE REDUCTION EFFORTS
ÇİMTAŞ STEEL	As a result of all environmental related kaizen projects and trainings, the amount of waste per person-hour reduced from 0.44 kg/person-hour to 0.36 kg/person-hour in 2019. A total of 2,400 hours of training was provided in 2019 to increase environmental awareness. Also, 248 hours of point trainings on waste management were delivered. In addition, 283 hours of training was provided to subcontractors on development of environmental awareness and waste management. 110 hours of environmental awareness and 55 hours of waste management training are provided to 221 individuals attending in vocational courses organised in conducted jointly with the Turkish Employment Agency (İŞKUR).
ENKA TC CITY CENTER INVESTMENT BV	ENKA TC and ENKA CCI have implemented a joint waste separation project involving the sorting and collection of waste in common areas and offices as of February 2019. As part of the project, waste sorting bins were placed in common areas of the shopping centres and offices. Besides, the cardboard boxes and other packaging material discarded by stores in the shopping centres were collected by the ENKA TC technical team and sent to recycling projects. 500 tonnes of cardboard packaging is recycled every year with the thanks to this practice.



ENKA SCHOOLS KOCAELİ – SCIENTIFIC AND TECHNOLOGICAL RESEARCH COUNCIL OF TURKEY (TÜBİTAK) PROJECT

Students of ENKA Schools Kocaeli developed a project to produce a plaster, which is an insulation and coating material from colemanite concentrator waste, waste paper and rice husk ash. The aim was both to reuse waste materials in response to the environmental problems they pose and to increase thermal efficiency. Samples of plaster putty were prepared under suitable conditions by using different paired combinations of colemanite concentrator waste, waste paper and rice husk ash and thermal conductivity measurements were made. As a result of the analysis, it was determined that the sample contains 25% waste paper and 10% rice husk ash gives the most efficient result in thermal insulation. The project was awarded third place in the region in TÜBİTAK high schools project competition.

ENKA TC OPERATION & TENANT PORTAL

Tenants of the shopping centre make various requests such as the delivery of goods, events, store renovations. Managing these processes using printed forms and correspondence takes a lot of time and consumes a great amount of paper. Approximately 150,000 sheets of paper were wasted each year during these processes. As part of the separate waste collection and waste reduction implementation in shopping malls, ENKA TC aimed to convert its business processes to the online platform by transferring all necessary approvals online instead of creating printed forms in parallel with the project. In this direction, an "Operation & Tenant Portal" was created. The Operation & Tenant Portal application not only helped to replace the routine of "paperwork" to an electronic programme; it also helped to optimise transaction time. The project was completed in five months in total from the definition of project, processes and roles to its initial use. During the project implementation, training was provided to more than 1,000 tenants at 11 shopping centres.

Among the outcomes of this successful implementation of the portal are; reducing the time spent in the review and verification of applications, promoting transparency, reducing the cost of paper use, creating a reliable way for tenants and shopping centre employees and providing statistical and analytical access. With the complete removal of all paper-based processes, annual savings of 150,000 sheets of paper were achieved, approximately 200 trees were prevented from being cut and paper cost of USD 1,200 has been eliminated.

BIODIVERSITY

AS PART OF ITS POLICY ON PROTECTING BIODIVERSITY UNDER ITS ENVIRONMENT, OCCUPATIONAL HEALTH AND SAFETY AND SOCIAL RESPONSIBILITY POLICY, ENKA İNŞAAT UNDERTAKES ALL NECESSARY MEASURES TO PROTECT THE EXISTING FLORA AND FAUNA AND TO MANAGE ITS IMPACTS IN ALL OF ITS ACTIVITIES.

Foremost among these measures are the preparation of Environmental Impact Assessment (EIA) reports for the projects to be carried out and the identification of the flora and fauna within the impact area of the project that are in need of protection, together with the necessary measures.

The major activities undertaken for the protection of biodiversity in line with the Biodiversity Management and Action Plans at ENKA İnşaat projects in 2019 were as follows:

MORAVA CORRIDOR MOTORWAY PROJECT (SERBIA)

EIA studies started in 2019 within the scope of IFC requirements for the Morava Corridor Motorway Project, the contract for which was signed in 2019 and will start in 2020.

In this context, field visits were organized on the project route with experts including botanists, hydrobiologists, mammalogists, herpetologists, ornithologists and entomologists.

Although nine Level 3 EUNIS habitat areas were identified during these visits, no endemic species were encountered. Among the flora and fauna identified, relocation of Yellow Iris (Iris pseuacorus) which is a species under protection, was decided during construction activities.

In addition, the breeding seasons and regions of the identified fish species and the migration routes of the birds have been identified and these data have been included in the planning of construction activities.

NAMAKHVANI HYDROELECTRIC POWER PLANT PROJECT

The EIA studies carried out within the scope of the Namakhvani Hydroelectric Power Plant project which is planned to start in 2020 in Georgia, was completed in 2019. With respect to the protection of biodiversity, although no endemic species was encountered, studies were carried out on how to protect the fish populations in the river during the operation of the dam and it was decided to use Francis turbines to enable fish to move along in the flow path without harm.

In the analysis carried out, it was determined that with the use of Francis turbines that provides complex three-dimensional water flow, the mortality rate of fish coming into contact with the turbines due to the flow will be less than 5%.

Furthermore, as the upstream swimming of the fish during the breeding season will be prevented after the construction of the dam, ENKA has committed to raise fish species identified during the EIA studies outside of the river and to release them to their natural habitats on the upstream of the dam as well as to monitor the fish populations.

ENKA will also undertake the monitoring of the humidity, temperature, pressure and quality of the production at vineyards where endemic grapes species are grown within 100 meters diameter of the dam reservoir. A commitment has been made to find joint solutions with relevant people in line with expert advices if any negative outcomes are detected.

TENGIZ PROJECTS

Within the projects carried out in the Tengiz region of Kazakhstan, biodiversity management works are being conducted in accordance with the regulations of the Republic of Kazakhstan and IFC requirements.

In the Tengiz region, which is located within the habitats of 34 mammalian, 350 invertebrates, 10 reptiles and 192 bird species, the Steppe Eagle (Aquila Nipalensis), an endangered species with an estimated worldwide population of approximately 150,000 has been observed. In this framework, it was decided and implemented that all power lines to be erected for activities in the Tengiz region would be specially designed to prevent birds from dying due to electrocution.

In addition, ENKA carries out weekly field inspections during the bird migration season to develop measures to reduce potential impacts by recording significant bird activities within or around the study area and Project HSE department provides training to employees to raise their awareness about this issue.

Within the scope of the studies in which bird nesting areas and breeding rates were determined, a total of 97 bird nests of the Barn Swallow in particular and the White Wagtail were encountered and the successful breeding rate was recorded as 71%.

DHI QAR AND SAMAWA COMBINED CYCLE POWER PLANT PROJECTS

Ecological baseline studies were carried out in 2019 at the Dhi Qar and Samawa Combined Cycle Power Plant projects in Iraq.

In the studies covering the natural habitat in and around the River Euphrates, it was attempted to observe the existence of three fish species (Luciobarbus esocinus, Carasobarbus kosswigi, Capoeta barroisi), one mammal (Myotis capaccini) species and one reptile (Rafetus euphraticus) species, all of which are endangered and on the protection lists of the International Union for Conservation of Nature (IUCN).

As a result of the studies carried out with the participation of environmental engineers, hydrobiologists and mammalogists, only the Luciobarbus esocinues was found to be present in the area.

As the water requirements of both projects are to be met partly by drawing water from the River Euphrates, great care needs to be taken not to harm the population of this species.

The points at which water will be drawn were identified based on the suggestions made by the experts, canals were built which will limit the rate of flow to a maximum of 0.15 m/s and wedge wire screens were installed to prevent fish from entering the water drawing system from the river.

HİSARÖNÜ BAY CLEANING WORKS

Since 2011, ENKA has been supporting the efforts of the Turkish Marine Environment Protection Association (TURMEPA) / DenizTemiz Association to clean up Hisarönü Bay in the district of Marmaris in Muğla, Turkey. In 2019, ENKA continued to provide support for clean-up and flora protection activities in a region where 110 fish, 45 mammals, 123 birds, 27 reptiles, 167 terrestrial invertebrates and 4 amphibians species live in.

As part of these activities, 220,000 m^3 of wastewater was collected from private yachts and boats and it was disposed properly to prevent it from spreading within the sea. In addition, with the regular visits made to the boats and yachts and environmental awareness efforts, the disposal of solid wastes from these boats and yachts was prevented contributing to the protection of the flora in the region.

WWF NATURE PIONEERS PROGRAMME SPONSORSHIP

The World Wide Fund for Nature (WWF) is the largest international nature protection organisation in the world operating in more than 100 countries. ENKA Foundation has become the sponsor of the WWF-Turkey Nature Pioneers Programme that will be carried out by the WWF in the 2019-2020 academic year. Schools which have participated in the programme so far have developed projects for the protection of species such as ophisaurus apodus and indian porcupine. By supporting this project, ENKA Foundation aims to ensure that students and teachers to receive trainings on the protection of nature and existing species and this way to create positive change by students in their environments and society.

ENKA SCHOOLS KOCAELİ AND THE SEA TURTLE RESEARCH, RESCUE AND REHABILITATION CENTER (DEKAMER)

Cooperation between the Sea Turtle Research Rescue and Rehabilitation Center (DEKAMER) operated by Pamukkale University on İztuzu Beach and ENKA Schools Kocaeli enabled students and teachers at the school to take part in an educational programme in which they learned about sea turtles and the treatment of wounded turtles and went on to take part in observation and caging work at the night-time egg-laying beach.

"ENKA IS AN EXEMPLARY ORGANISATION WHICH IS HIGHLY SENSITIVE ABOUT THE ENVIRONMENT AND WHICH HAS BEEN SUPPORTING THE TURMEPA'S EFFORTS TO PRESERVE OUR MARINE AND WATER RESOURCES FOR YEARS."

Our seas provide one of every two breaths we take. In other words, we owe one of those breaths to the forests on land and the other one to the sea grass and the plankton. This is what makes the activities of the Turkish Marine Environment Protection Association (TURMEPA) so vital. TURMEPA is a leading non-governmental organisation established in conjunction with the Chamber of Shipping in 1994 with Rahmi M. Koç as its founding chairperson in order to make the protection of Turkey's coasts and seas a national priority and to leave a liveable Turkey embraced by clean seas to future generations. Since its foundation, it has been generating projects that have been taken as a model by the public and private sectors, preparing EU projects and carrying them out arm in arm with its partners, drawing up sample projects for the relevant government ministries, developing environmental awards and gathering all stakeholders together through its international conferences. It has also become a key point of reference on marine and water assets.

ENKA is an exemplary organisation which is highly sensitive about the environment and which has been supporting the TURMEPA's efforts to preserve our marine and water resources for years. As TURMEPA, we have been cooperating with ENKA Schools on the education of students since 2016 and raising the awareness of students of different age groups studying at the ENKA schools in İstanbul and Adapazarı about the conservation of the seas and marine ecosystems, the importance and proper use of water resources, carbon and water footprints, zero waste philosophy and personal responsibilities for a sustainable environment. In addition to trainings, mentoring also provided based on the students' requests for the projects carried out by the students of the ENKA Schools through the academic year.

ENKA is also exemplary company with its projects on reducing its environmental impact. It sets an exemplary behavior on the subject that draws attention to the importance of the environment with both the environment-friendly equipment, green building applications in workplaces and with the meetings and workshops it organizes to draw attention to environmental sustainability. Apart from the training activities carried out by TURMEPA in cooperation with ENKA, the waste collection activities of the Association have been supported with donations from the ENKA Foundation for many years. With its waste-collection boats, TURMEPA offers a mobile service in the bays that are regularly visited by yachts and tourist boats and contributes to reduce the environmental footprint of marine tourism by collecting millions of liters of wastewater for over 10 years. The support of the ENKA Foundation to our association contributes to the prevention of pollution efforts in the open seas of the TURMEPA waste-collection fleet consisting of six boats. Biodiversity in the unique bays of our country is at risk due to the increasing tourism pressure. Thanks to the services provided by the TURMEPA fleet, the liquid waste generated by the yachts and tourist boats in Çeşme, Göcek, Marmaris and Hisarönü bays are prevented from being discharged into the sea.

I regard our ongoing cooperation with ENKA as a very important example for the private sector. In every endeavour to transform society, it has become essential to form partnerships with non-governmental organisations (NGOs) and to increase support for their work. The longer these collaborations last, of course, the more beneficial they become. In this respect, our cooperation with ENKA is even more significant. Because as time goes by, the institution concerned becomes more familiar with what is required in the area in which it invests, and is able to augment its positive influence through investments in forms such as expertise, human resources and technology transfer, over and above the financial resources it provides. In consequence, we feel stronger in terms of solving the problem.

▪ Şadan Kaptanoğlu
Chairwoman of the Board
DenizTemiz Association TURMEPA

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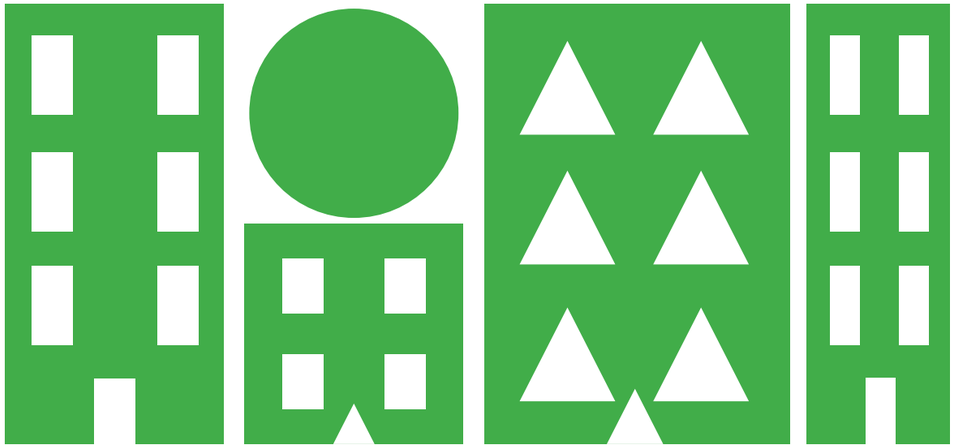
STAKEHOLDER ASPECT

ENVIRONMENT-FRIENDLY MATERIALS, EQUIPMENT AND GREEN BUILDINGS



ENVIRONMENT-FRIENDLY BUILDINGS USE RESOURCES MORE EFFICIENTLY AND THEREFORE HAVE LOWER OPERATING COSTS AND OFFER THEIR USERS MORE COMFORTABLE SPACES. ALTHOUGH THE INVESTMENT COSTS OF ENVIRONMENT-FRIENDLY BUILDINGS ARE HIGHER THAN CONVENTIONAL BUILDINGS, THEY SOON REDEEM THE INITIAL COSTS THROUGH THE SAVINGS THEY ENSURE.

In recent years, ENKA has begun to undertake activities to transform older buildings to meet modern requirements and transform them into more environmentally-sensitive new buildings. ENKA aims to use its very high level of expertise, science and technology in its investments to minimise adverse impacts on humans and nature. Within the projects ENKA has completed until today, 14 projects have been awarded with LEED certificates.

ENKA's Kuntsevo Plaza Project, which was commissioned for operation in 2015, won the first Russian Green Building Certification (the Green Standard) in 2013. The Kashirskaya Multi-Functional Shopping Centre project in Moscow, which was completed in 2018, also received the Russian Green Building Certificate. As they are multi-purpose shopping centres, these projects have set precedents and become pioneers in the sector.

Cimtas Ningbo Modular Skids Pipe Spools received the LEED Gold certificate for its new facilities in 2019. Cimtas Pipe already holds this certificate. Following the announcement of the award, Cimtas Pipe employees took part in a ceremony to celebrate "World Green Building Week". The employees were provided with information about environment-friendly buildings and a donation was made to the TEMA Foundation in their name for use in planting trees.

ENKA is aware that the energy sector needs to switch to a low-carbon growth process in order to prevent global climate change. However, in order to ensure reliable energy supply, the efficient use of relatively clean-burning, constantly available and reliable fuels, such as natural gas, is a necessity for the future of the energy sector. This is why one field of specialisation of ENKA is transforming open phase simple-cycle natural gas power plants to the modern and far more efficient two-phase combined cycle power plants. This way, while ensuring a secure supply of energy, electricity production per unit of fuel and facility efficiency increase and environmental impacts decrease.

ENKA's contribution to the transition to renewable energy and a low-carbon economy towards supporting the economy and leading to a sustainable future continues with the production of wind turbine towers and parts at Çimtaş Steel. In recent times, gradually rising demand for wind energy and the incentives for locally produced goods have created a market for local suppliers. Çimтаş Steel, which is increasing its activities in this direction and is Turkey's the first wind tower manufacturer without compromising on quality, broke its own annual production record in this field by producing 24,300 tonnes of wind power equipment in 2019.

In the ongoing Nizhnekamsk Combined Cycle Power Plant project in Russia, materials and equipment have been chosen carefully in order to keep the environmental impact to a minimum. The SGT5-200 gas turbine used at the project outperforms comparable turbines as it works emissions-compliant up to 45% at stable exhaust temperature and keeps NO_x emissions stable and below 25 ppmvd in the total exhaust despite the increased power generation. Furthermore, as hydrogen is used by preferring these turbines, carbon emissions are reduced and emission limits are complied with.

ENKA's performance in 2018 and 2019 against "Reducing Environmental Impact" section of its 2027 Sustainability Goals is presented below.

REDUCING ENVIRONMENTAL IMPACT

	ENKA 2027 SUSTAINABILITY GOALS	2018	2019
ENKA POWER	We aim to keep ENKA Power Plants' greenhouse gas emissions per unit energy that is produced, under 400 gCO_2e/kWh.	344.72 gCO_2/kWh	339.67 gCO_2/kWh
ÇİMTAŞ	We aim to keep Çimtaş's greenhouse gas emission per person-hours for each tonne of production under 25 tCO_2e/(person-hours/tonnes).	26.15 tCO_2e/(person-hours/tonnes)	23.65 tCO_2e/(person-hours/tonnes)
	We aim to keep Çimtaş' domestic water consumption under 15 liters/person-hours.	20 liters/person-hours	14 liters/person-hours
ENKA GROUP	We are committed to never encounter a Tier III (>20m^3) environmental incident in any ENKA company.	Target met	Target met
	We will undertake at least two projects to reduce blue water footprint.	2 Projects	2 Projects
	We will undertake at least two projects at ENKA Group to increase renewable energy use rate.	1 Project	2 Projects
	We will contribute to at least one afforestation project every year to contribute to carbon neutralisation.	2 Projects	2 Projects
	We will make no compromises on the policy of banning plastic bottle use throughout ENKA Group that was initiated in 2018.	Target met	Target met
ENKA SCHOOLS	We will continue to adhere to ENKA Schools' waste management practices, paper and purified drinking water use policies.	Target met	Target met