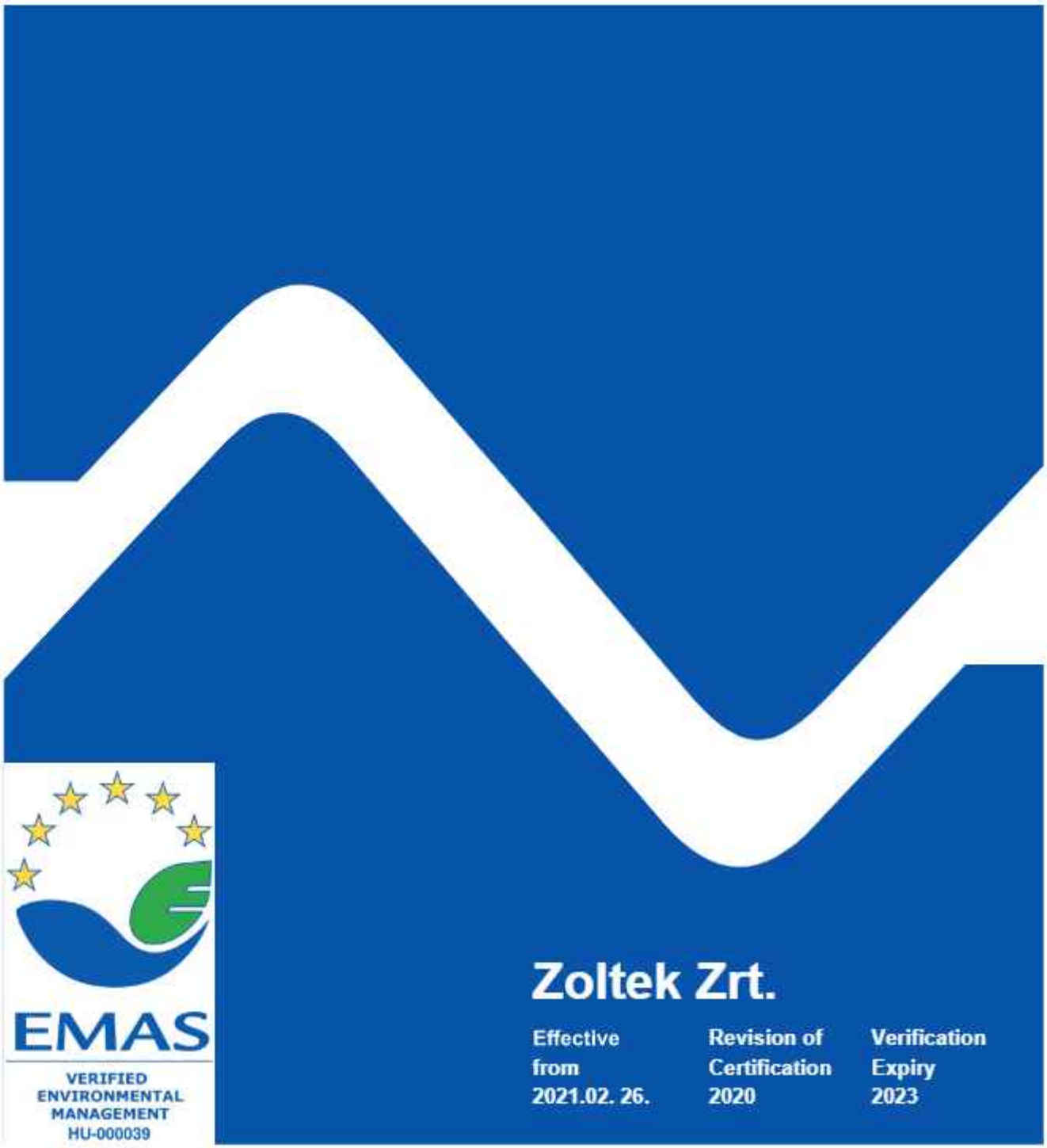
Environmental Statement



Zoltek Zrt.

Effective from	Revision of Certification	Verification Expiry
2021.02. 26.	2020	2023

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First of all, we would like to thank you for your interest in our Company and our environmental performance.

Zoltek Zrt.
Basic data

Company name	—	Zoltek Vegyipari Zártkörűen Müködő Részvénytársaság
Short company name	—	Zoltek Zrt.
Company seat	—	2537 Nyergesújfalu, Varga József tér 1.
Taxt no	—	11186542-2-11
"Green" Client Number (KÜJ no)	—	KÜJ ZOLTEK ZRT. 100219276

"Green" Area Number (KTJ No):

TH KTJ (plants producing plastic raw material and finished goods)	100376880
EH KTJ aboveground heating and diesel oil containers (1 x 5000 m³, 1 x 500 m³, 1 x 4.5 m³)	100331797
EH KTJ chemicals warehouse (39.)	100331834
EH KTJ aboveground (ACN, DMF, MA) tank farm, containers and barrels of sulphuric acid	100331856
KTJ Boiler house	101625231
KTJ Chemical plant	101625220
KTJ Pultrusion technology	102713966

Headcount	—	1282
Area	—	616 741 m²
Built-up area	—	130 431 m²
EMAS area of activity	—	616 741 m²
TEÁOR No	—	2060 '08
Person in Charge	—	Mr. Shuichi Yamanaka (Plant Manager)
EHS Manager	—	Mr. Katona Ivan (EHS Manager)
Founded in year	—	1993
Telephone	—	+36-33-536-000
Fax	—	+36-33-536-150
Webpage	—	www.zoltek.com
E-mail	—	info@zoltek.hu

Date of EMAS registration	—	21 Jun 2017
Document valid	—	17 May 2023
Registration No	—	HU-000039
Certifying Organization	—	Lloyd's Register EMEA Niederlassung Wien
Accreditation No of the Certifying Authority	—	AT-V-0022

02
Introduction

01

First of all, we would like to thank you for your interest in our Company and our environmental performance.

Nowadays, the protection of environment becomes more and more important. The owners of our Company, the Toray Group and all Zoltek Zrt. employees regard environment protection as a matter of high importance.

Through this Environmental Statement you can get to know our Company, and also, you receive some introductory information about the environmental policy of our Company and our strategy of continuous development. This Statement also contains the indicators of our environmental performance.
Since 1995 we have run a separate department of work safety and environmental protection. In 2016 we introduced and received certification for our environmental management system according to ISO 14001 standard; our safety management system according to OHSAS 18001 (ISO 45001 from 16 November 2019) standard, which is integrated with the energy management system according to ISO 50001 standard – these activities demonstrate our dedication to environmental protection, and we consider them as a strong ground for further development.

A major step in our development process is that our Company introduced, and in March 2017 certified the EMAS (Eco-Management and Audit Scheme) system, thanks to which we continue to improve our environmental performance and increase our environmental awareness.
We plan to modify and re-publish our environmental statement in case of major changes in the processes of our Company, which processes might affect our environmental performance, goals and environmental factors to a greater extent. Furthermore, our management team reviews our statement annually within the framework of our integrated management system, and if necessary, we make adjustments.

The **EMAS** system is supervised by **Mr. Iván KATONA, EHS Manager.** If you have any comments, please send them to info@zoltek.hu.

If you have any comments related to environmental issues and EMAS system, please call:
Mr. Iván KATONA, EHS Manager on +36 (33) 536-000.

The date of our next updated environmental statement: March 2022.

03

Our Group and Company Policy

3.1 Environment Protection

The main activity of Zoltek Zrt. is the manufacture of high purity chemical fiber (trade name: Precursor fiber), and the further processing of the oxidized fiber (trade name: PN) and carbon fiber (trade name: PX) produced from precursor. By processing the previously mentioned fibers, we manufacture textiles, fabrics, yarns and threads. The products of our Company are mainly used in the industry of renewable energies – more specifically in the production of wind turbine blades (wind power stations). As our products are used in "green" investments to a great extent, during their production, the enforcement of environmental regulations is of high priority.

Our Company considers the preservation of natural resources, supervision and monitoring of environmental risks related to its activities as of high importance. We protect human health and the environment by handling the chemicals and chemical products properly and by organizing the production operations with great responsibility.

The main goal of our Company is to protect the surrounding environment and to improve our environmental performance continuously. In order to reach this goal, we keep on searching newer and better – the best available – technologies, which decrease the environmental load during the production and processing of precursor, oxidized and carbon fiber. To the extent of our possibilities we try to choose raw materials, auxiliary materials and energies (as natural resources), which charge the environment to a lesser extent or pollute the environment to a lesser extent.

3.2 Customer-oriented Attitude

The quality of our products is determined by the requirements of our customers. The delivery on time, competitive price, technical content and the related commercial services are also the part of the quality. Our goal is to achieve and maintain high customer satisfaction.

3.3 Involving Employees

The opinion of our employees is important for us, so we strive to involve our employees in the preparatory phase of our decisions. We provide trainings to improve and use the abilities of our Employees. These trainings are not only to reach employee satisfaction, but also to promote and improve the effective operation of our Company.

3.4 Continuous Development

We continuously and periodically review the production processes of precursor fiber, carbon fiber and oxidized fiber and also the processing of carbon fiber and we continuously look for opportunities to improve.

04

Introduction to the Activities of our Company

The Magyar Viscosa was founded as a share company on 7 April 1941, with the capital stock of 9 million Pengo. The aim of the Company was to produce viscose rayon, viscose staple fiber and cellophane. Following the nationalization in March 1948, the Company was renamed to Magyar Viscosagyár. From 1 July 1993, the Company was transformed to a share company again as: Magyar Viscosa Rt.

The Company was privatized on 8 December 1995, the Magyar Viscosa Rt. became the Hungarian subsidiary of the St. Louis based (US) ZOLTEK Comp., Inc. Group. The new name of the Company was ZOLTEK Magyar Viscosa Rt., which was changed to ZOLTEK Vegyipari Részvénytársaság on 21 October 1997. From February 2006, the Company has been called Zoltek Vegyipari Zártkörűen Működő Részvénytársaság (Zoltek Zrt.).
In 2014, the Zoltek Companies Inc. was acquired by the Tokyo-based (Japan) Toray Industries.

The factory with more than 60 years of history was the center of chemical fiber production in Hungary for decades. They produced various synthetic fibers (polyacrylonitrile textile fibers, polyamide 6 filaments, viscose fibers) and chemical products (polyamide 6 granule, carboxymethylcellulose, plastic nets and grids). The product range of the Company was constantly transformed. The production of less advanced products was gradually ceased.

The privatization opened new perspectives for the Company. The new owner was one of the world's biggest carbon fiber manufacturers and he created a significant precursor and carbon fiber capacity in Nyergesújfalu, which had international significance. In 1996, the related development and investment works began.

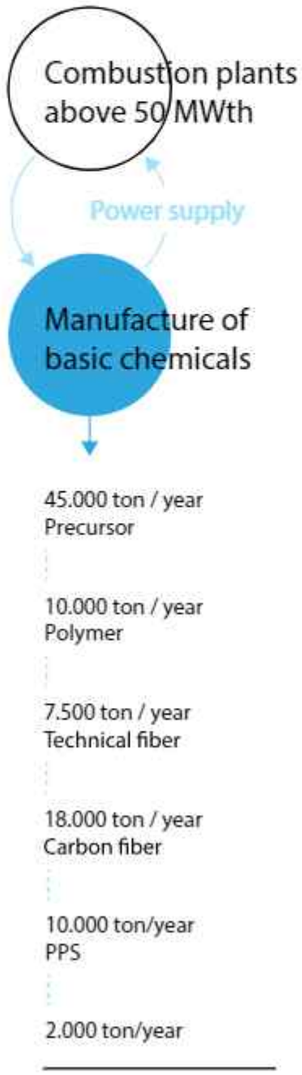
The task of Zoltek Vegyipari Zrt. was to become the largest European carbon fiber manufacturer and to supply the American and the European market with carbon fiber, oxidized fiber and textile products.

The Company has four major production units: Precursor Plant, Technical Fiber Plant, Carbon Fiber Plant and Carbon Fiber Processing Plant. In 1997, the test production was started in the Carbon Fiber Plant and in the Textile Plant. In the Textile Plant, the operational production started later this year, while in the Carbon Fiber Plant in mid-1998. By August 1999 we developed and produced the raw material of carbon fiber and technical fiber (oxidized fiber) – the precursor tow. The Pultrusion Plant, processing carbon fiber, started standardized serial production in 2016.

The product range of the Company has expanded steadily after the investments. It current capacity is **45 000 MT/year of precursor, 18 000 MT/year of carbon fiber, 7 500 MT/ year of technical fiber, PPS technology 10 000 MT/year, KASSEN technology 2 000 MT/year while 10 000 MT/year of processed carbon fiber.**

In order to meet market demands, expansion and construction began in 2018. As a result, production is expected to increase and additional jobs will be created.

4.1 Main products



Precursor Production Department

Precursor tow: made from poli-acrylonitrile polymer fiber, filament quality: 1,5; 1,7; 2,2; 5,0 dtex, 50k continuous fiber what is raw material of carbon fiber production.

Carbon Fiber Production Department

Carbon fiber: poli-acrylonitrile base 50k continuous fiber, with different amount of sizing content, length: 1 500-3 000 m on papercore. Carbon content is 95%, high density, with good heat stability and chemical resistance.

Technical Fiber Production Department

Oxidized cable: poli-acrilnitrile base 300 or 320k oxidized fiber with different amount of sizing, in paper box for textile industry. carbon content: approximately 62%, good heat stability and chemical resistance.

Oxidized twisted yarn: made from oxidized fiber, with different filament content and quality.

Oxidized fabric: made from oxidized fiber, maximum width is 2 000 mm, gross weight: 50-460g/m².

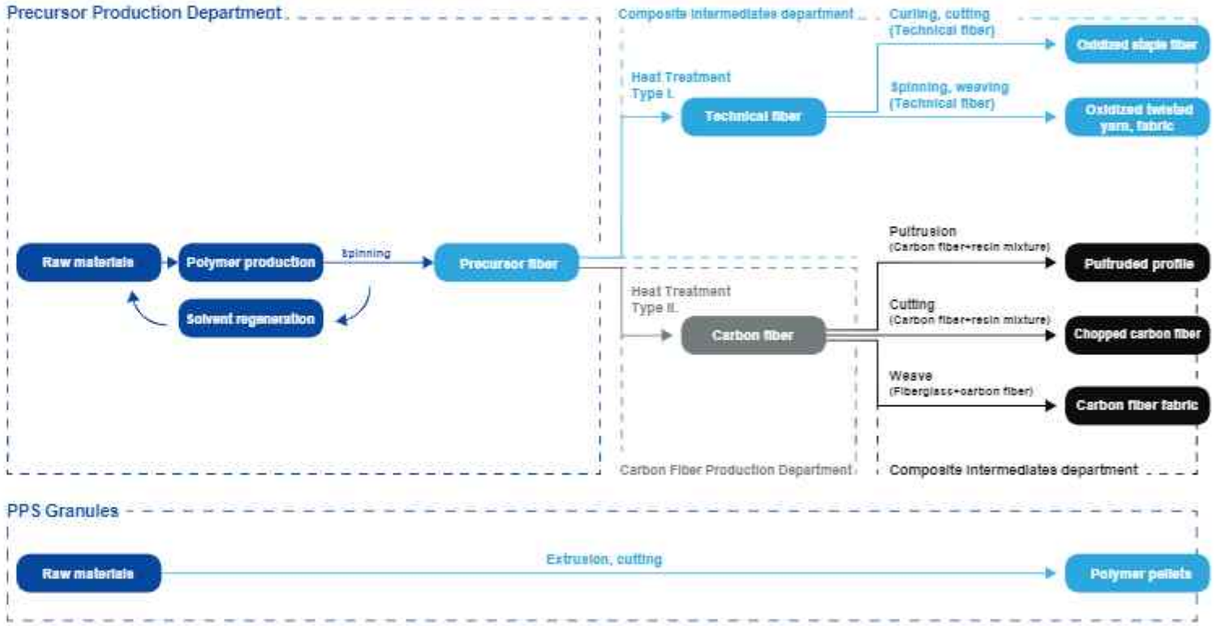
Oxidized staple fiber: crimped oxidized fiber, chopped to different size, packed in cardbox.

4.3
Introduction of the Company Seat

The town of Nyergesújfalu is situated in the northern part of Transdanubian Mountains, in Komárom-Esztergom County, in the subregion of Esztergom, on the right bank of the river Danube.

The large company seat of ZOLTEK Zrt., which has totally 616 741 m², is located in the north-eastern part Nyergesújfalu, in the industrial zone along the southern coastline of Danube river.

4.2
The main products and production equipments



05

The environmental policy of Zoltek Zrt.

Zoltek Zrt's core activity is producing and processing precursor, oxidized fiber, carbon fiber and various textile and composite intermediate and PPS granulate products.

At Zoltek, we are dedicated to protecting the environment, growing in a sustainable way and providing a safe and healthy work environment for our employees, visitors and contractors.

It is responsibility of each employee and contractor to work with a mindset of Zero incidents and accidents, to eliminate all unsafe conditions, to prevent all unsafe acts, and conduct all operations minimizing the negative impact to the Environment with a continual improvement and energy efficiency approach.

We are committed to compliance with all applicable Regulations to our operations and all Toray Industries Requirements on Environmental, Health and Safety and increasing energy efficiency.

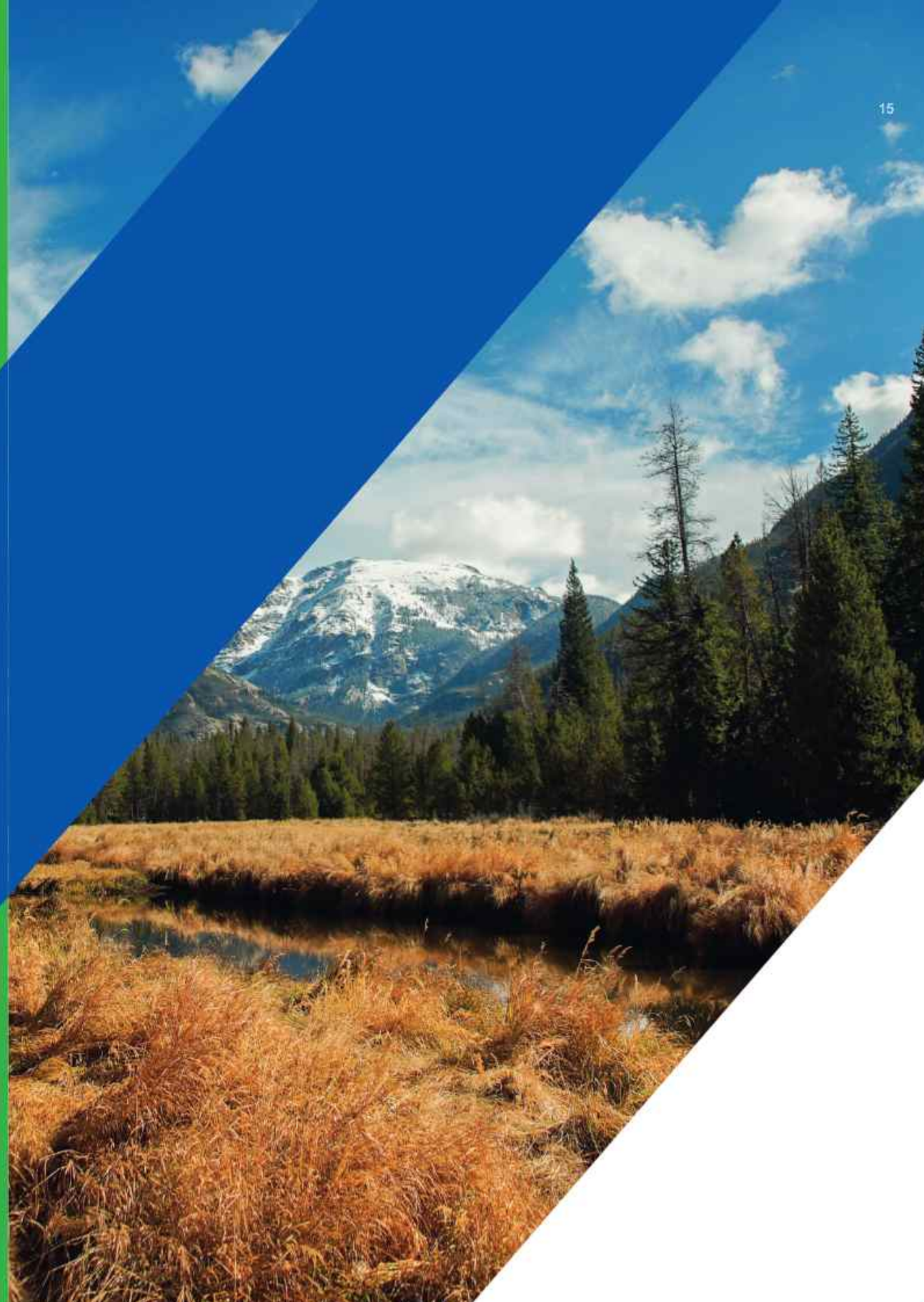
Environmental, health and safety, and energy principles

Zoltek will continue to recognize and exercise our responsibility to:

- Assure that our facilities and products are in compliance with the Local EH&S and energy management requirements and in conformance with other applicable EH&S and energy efficency obligations.
- Provide methods of communication between the management and worker effecting continual improvement of safety and environmental protection and energy efficiency.
- Ensuring safe work practices and energy efficiency workflows through awareness and mentoring.
- To conduct operations in a manner that demonstrates respect for the environment and human health by applying the best-available technology to solve our own EH&S and energy conservation problems.
- To respond effectively to EH&S and energy concerns involving Zoltek operations and to develop products that support sustainable growth and to promote continuous improvement of energy efficiency.
- To conserve natural resources and eliminate waste generation in our operations by applying the techniques of Reduce, Reuse, Recycle and Replace.
- To make our employees aware that it is the individual's responsibility for sound EH&S and energy efficiency decisions and to foster continual improvement through company and employee initiatives.
- To assist, whenever possible, governmental agencies and other official organizations engaged in Environmental, Health and Safety activities.

Nyergesújfalu, July 2019

Shuichi Yamanaka
Plant Manager



The Structure of the Integrated Management System

06

The Structure of the Integrated Management System

Our Company has introduced, certified and operates an Integrated Management System, which meets the requirements of ISO 14001 and ISO 45001 (formerly OHSAS 18001) and ISO 50001 standards, and also the requirements of the European Parliament and Decree of the Committee No 1505/2017/EC on EMAS requirements. The integrated management system is made up of documentation, so the EMAS is built from the following documents:

6.1. The Policy of Integrated Management System (IMS)

The Toray Group issued a uniform EHS (Environmental, Health and Safety) policy for the Zoltek Companies within the Group. Taking into account this unified policy, the Zoltek Zrt. has defined an actual integrated management system as a part of the IMS, which complies with ISO 14001 and EMAS requirements, and also the ISO 45001 (formerly OHSAS 18001) and ISO 50001 requirements.

6.2. Manual to Integrated Management System (IIRK)

It is the highest level of ZOLTEK Zrt. KIR (EMAS), MEBIR and EIR integrated management system documents, which contains the IMS policy and gives a concise introduction to the IMS. The Manual comprises all the related internal and external documents and records into a uniform system.

6.3. Processes of Integrated Management System (IIE)

Prescriptive written documents, which record the rules of activities, processes of integrated management, and appoint the persons in charge with the scope of authority and refer to the notes and databases used.

6.4. Work Instruction in the Integrated Management System (IIMU)

If the description of the activity would be too complicated in processes, the processes refer to the more detailed work instructions. The work instructions are such prescriptive written documents, which report the detailed and controlled steps of an activity.

6.5. Technical Documents

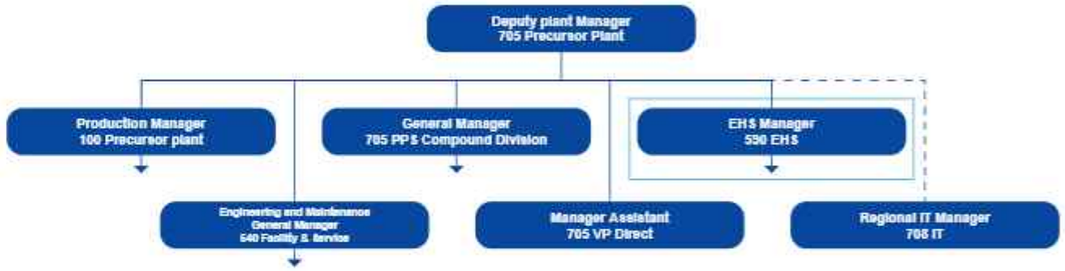
Documents relating to the organizational unit or specific areas required for the activities performed in the framework of IMS (technical specifications, inspection instructions, handling manuals, maintenance and user manuals, manuals required by law e.g. work safety, fire protection, chemicals handling, waste management etc.)

6.6. Records, Databases (IIF)

Documents of evidence. Registered objective proves of performed activities or achieved results (reports, analyses, protocols, records, evaluations etc.).

EHS organization

Organizational structure



07

08

Environmental facts and data

Preservation of natural resources and monitoring the environmental risks associated with our activities are high priority issues for our Company. We protect human health and the environment by handling the chemicals and chemical products properly, according to the rules and by organizing the manufacturing process with great responsibility.

In order to achieve and maintain customer, user, partner, public and employee satisfaction:

We minimize the generation of waste and ensure the most efficient production by development of manufacturing operations.

We meet all legal and environmental requirements that apply to Zoltek.

We keep on developing the environmental awareness among our employees and we encourage them to work in the 'green' way, with the sense of responsibility.

We pay attention to the economical use of materials and energy during production.

We minimize the negative effects on the environment, within this we treat the resulting waste with special care and strive to recycle.

We cooperate with the local authorities in order to solve the environmental problems of the town and the region.

We pay particular attention to avoiding the usage of dangerous and harmful substances and products – and where possible, we replace them with substitutes.

8.1
Waste management

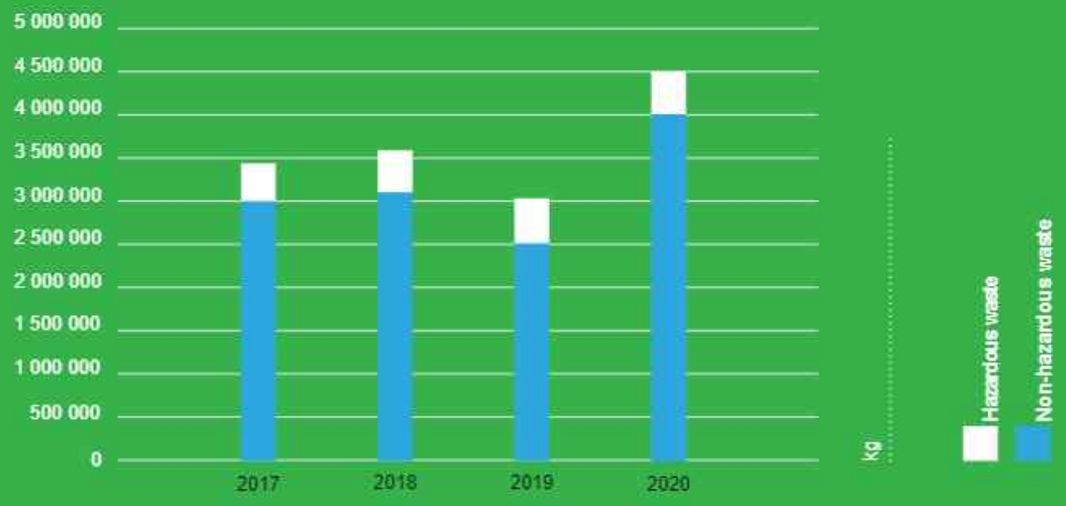
We manage and keep records of the waste generated during our Company's activities according to the legal requirements related to waste management. We regularly have the compliance assessment of non-hazardous industrial landfill waste prepared. Based on this assessment we manage the waste collection and waste treatment in our plants, and also the waste disposal.

We fulfil our environmental product fee obligation and waste recovery obligation arising from the respective legislation in cooperation with the coordination bodies. We regularly report data to the National Tax and Customs Office – based on a central computerized registration system designed specifically for this purpose.

Waste handed over for disposal or recycling

	Unit	2017	2018	2019	2020	Change 2019-2020 (%)
Non-hazardous waste	**kg**	**2 958 339**	**3 128 530**	**2 518 546**	**4 063 641**	**+61***
Hazardous waste	**kg**	**502 328**	**510 971**	**502 780**	**452 768**	**-10**
Hazardous/non-hazardous	**ratio**	**0.17**	**0.16**	**0.20**	**0.11**	**-44**
Totalt	kg	3 460 667	3 639 501	3 021 326	4 516 409	+49

** Residual investment and pilot production wastes (mainly packaging materials)*



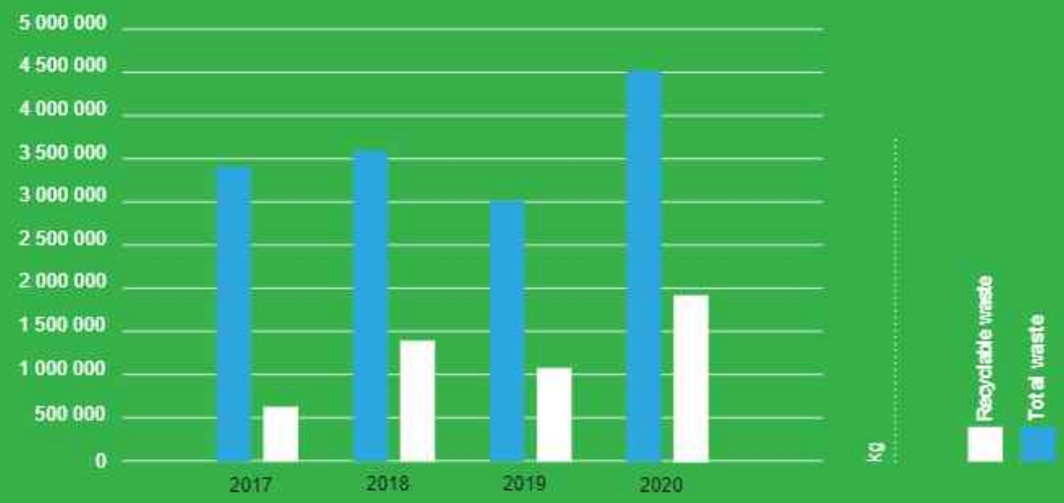
Volume of waste per working hours

	Unit	2017	2018	2019	2020
Total waste	**kg**	**3 460 667**	**3 6 39 501**	**3 021 326**	**4 516 409**
Working hours	**hour**	**2 127 468**	**2 005 971**	**2 021 161**	**2 235 876**
Ratio	**kg/hour**	**1.6**	**1.8**	**1.5**	**2.0**

Total waste

Proportion of recyclable waste

	Unit	2017	2018	2019	2020
Total waste	kg	3 460 667	3 69 501	3 021 326	4 516 409
Recyclable waste	kg	613 378	1 434 996	1 043 089	1 947 204
Proportion of recyclable waste	%	18	39	35	43



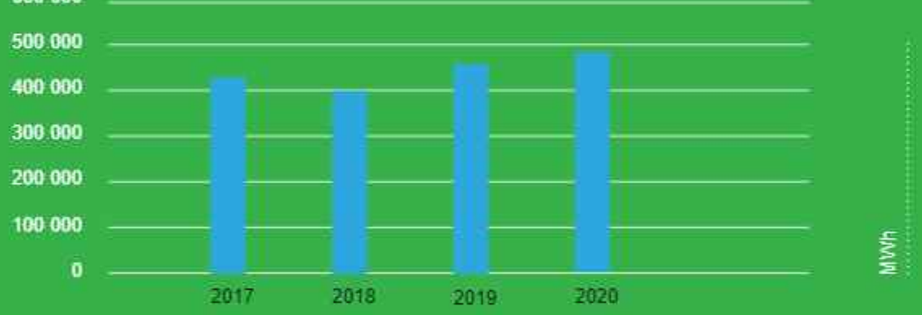
8.2
Energy consumption

Both in our Company and in Toray Group, energy efficiency and sustainable energy supplies have been key areas for years. As a result to achieve these goals, we have developed and implemented numerous ideas to increase energy efficiency.

Total yearly consumption (electricity and natural gas)

	Unit	2017	2018	2019*	2020
Total	MWh	**428 294**	**397 729**	**454 793**	**481 068**

Total yearly consumption (electricity and natural gas)



**Values have increased as construction and expansions began in 2018 and will only be fully completed in the coming years.*

Total yearly consumption per work hour

	Unit	2017	2018	2019	2020
Number of work hours	hour	2 127 468	2 005 971	2 021 161	2 235 876
Total yearly consumption	kWh	428 294 058	397 729 931	224 146 495	261 089 150
Total yearly consumption per work hour	kWh/hour	201.3	198.3	110.9	116.8

8.3
Protection of Ambient Air

Zoltek Zrt. has such point sources, which are monitored regularly and periodically, as the applicable legal regulations stipulate. We order the measurement of air pollutants by a certificated laboratory, based on the decision of the Inspectorate.

The emissions are always below the threshold values.
Furthermore, we also implemented, developed and implemented a number of other measures recently, which resulted in lowering the emission of air pollutants.

Yearly stack measurement results in 2020

	Environmental limits (mg/m³)	Average over all stacks (mg/m³)
Dimethylformamide	100	2.077
Acrylonitrile	20	0.742
Carbon monoxide	500	11.21
Nitrogen oxides	500	157.8
Ammonia	500	10.69
Hydrogen cyanide	5	2.23
Solid (dust)	150	4.45
Sulfur-dioxide	35	2.9

CO_2 emission

	Unit	2017	2018	2019*	2020
CO_2	TON	44 523	40 619	44 824	43 723
CO_2 emission /employee	TON/employee	36.7	35.4	38.4	34.1

**Values have increased as construction and expansions began in 2018 and will only be fully completed in the coming years.*

8.4
Protection of Water Quality

In order to control the quality of the groundwater in the Company area, we have the sampling and testing of our three monitoring wells performed according to our testing program. The measurement results were in all cases satisfactory.

Industrial water comes directly from river Danube, usage of the amount of raw water to produce desalinated and several quality of industrial water for technologies.

Amount of industrial water

	Unit	2017	2018	2019	2020
Usage of industrial water	**m³**	**1 416 486**	**1 357 487**	**1 491 035**	**1 484 799**
Ratio	**m³/employee**	**1 167.75**	**1 182.48**	**1278.76**	**1 158.19**

Treated waste water measurement results

We pass on the resulting industrial and municipal waste water to Nyergesi Vízszolgáltató és Szennyvízkezelő Kft. (company) for waste water treatment. The monitoring of the water quality is done according to Zoltek Zrt's "Self-monitoring Plan" approved by the Inspectorate.

The monitoring of the treated waste water, which is eventually flown into Parshall-channel is performed according to the Nyergesi Vízszolgáltató és Szennyvízkezelő Kft.'s approved "Self-monitoring Plan".

The quality of the waste water in the Parshall-channel is checked daily at selected sampling points for the following parameters: pH, CODCr, and ammonium-N; and weekly for the BOI5 parameter.

	Environmental limits	Latest measurement results (07.08.2020)	Average (2020)
pH	6-9,5	7.57	7.96
Chemical oxygen demand	150 mg/l	37 mg/l	47.50 mg/l
5-day biochemical oxygen demand	50 mg/l	8 mg/l	17.25 mg/l
Total nitrogen	55 mg/l	53.9 mg/l*	26.75 mg/l
Ammonia-nitrogen	20 mg/l	0.25 mg/l	2.17 mg/l
Total phosphorus	10 mg/l	0.85 mg/l	0.67 mg/l
Total inorganic nitrogen	50 mg/l	39.5 mg/l	19.56 mg/l
Toxicity (Daphnia)	8	0	0
Organic solvent extract (e.g.: oils, greases)	10 mg/l	2 mg/l	2 mg/l

**pilot plant for the development of sewage plant took place*

On April 18, 2020, as a result of an operational failure, a hazardous substance (DMF-containing liquid) escaped from system (through the overflow of the membrane filter emergency tanks) and entered the wastewater treatment plant. At the wastewater treatment plant, almost the entire amount of runoff was captured. Minimal hazardous material escaped from the wastewater treatment plant, which did not reach the lower limit of environmental damage due to dilution.
We reported the incident to the competent authorities and, in cooperation with them, took the necessary technical and organizational countermeasures to prevent the recurrence of similar incidents.

The following measures were taken to avoid reoccurrence:
- **Investigation of DMF involuntary outflow possibilities (HAZOP analysis)**
- **Time and personal limitation of the membrane filter wash cycle**
- **Automated DMF balance preparation**
- **Use of "Open - Closed" signs**
- **Review and training of machine operating instructions**
- **Review and supplement of notification lines**
- **Establishment of an online sampling and signaling system**
- **Expansion of emergency wastewater buffer capacity (350 m3 -> 1350 m3)**

The measures were 100% implemented.

8.5
Biodiversity

Environmental protection and the preservation of flora and fauna are of crucial importance in the Company's life.

In order to increase the environmental awareness of our employees, we have quarterly lectures about the importance of protecting nature and by planting trees and plants we keep on increasing the size of natural areas.

Zoltek Zrt. area breakdown

	Unit	2017	2018	2019	2020	Change 2019-2020(%)
Total area	m²	616 741	616 741	616 741	616 741	0.00
Built-up area	m²	110 144	108 254	108 254	130 431	+17.00
Useful floor-space	m²	134 641	132 751	132 751	156 618	+15.24
Green area ratio	%	81.07	82.45	82.45	78.85	-4.57

Zoltek Zrt. planting (trees and plants) expenditures

2017	2018	2019	2020
HUF 4.1 million	HUF 1.8 million	-*	-*

** Following the hand over of new plants at the Precursor and Carbon Production Department, the green areas of the plants will be planted.*

8.6
Safety equipment

While considering new investments in the area of Zoltek Zrt., the relevant enviromental and safety regulations play a major role. In connection with the new investments, several offical inspections took place, during which no deficiencies or non-conformities were found.

The Facility Fire Brigade is continuously developing. The Garage, Training Center, Training Room and Warehouse of the Facility Fire Department were handed over and new equipment and tools were purchased.

8.7
Disaster drills, official controls

The Directorate of the Komárom-Esztergom County Disaster Management annually reviews the compliance of our Company's Internal Emergency Plans by conducting an on-site drill and evaluation.

In 2016, 2017, 2018, 2019 and 26 Aug 2020 we had a coordinated drill of internal and external emergency plans. Thanks to our appropriate professional and technical preparedness, the disaster drills – in all cases – were successful and efficient.

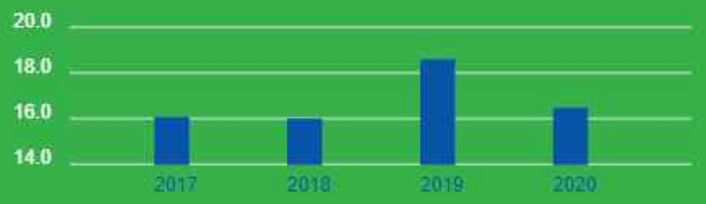
8.8
Usage of chemical compounds, solvents and chemical raw materials

Zoltek Zrt. is operating with hazardous chemical compounds and mixdures, because of it Zoltek Zrt takes care during this activity and organizes the production procedures to eliminate the chance of an environmental accident and protect the community.

Usage of hazardous chemicals as raw materials

	Unit	2017	2018	2019*	2020
Chemical compounds	TON	19 512	18 379	21 808	21 247
Number of employees	Nr. of employee	1 213	1 148	1 166	1 282
Ratio	TON/employee	16.1	16.0	18.7	16.6

Usage of chemicals as raw materials (TON/employee)



**In 2018, due to market and shipping conditions, only the amount needed for us was procured, and in 2019 a buffer stock was generated.*

09

Definition of Environmental Factors in the Integrated Management System

We evaluate the importance of individual factors based on 7 criteria – similarly like in case of plant risk analysis. These criteria are the followings:

a)
the significance of environmental impact caused by the factor (seriousness; manageability),

b)
effect frequency,

c)
economical factor (the proportion of cost and result),

d)
external image of the Company,

e)
internal image of the Company,

f)
risk probability and the extent of impact in case of incidental operation,

g)
probability of emergency situations and extent of the impact.

Each individual aspect may get a value between 0 and 5 points, and if the sum of these points reaches 23 points, then they are regarded as significant factors. If there is no such factor that reached the total of 23 points, then it is necessary to lower the threshold scores until it reaches the level of the currently highest factor(s).

We have set specific goals to develop our environmental performance related to significant environmental factors. In order to reach these goals we work out our environmental management programs, which are monitored and followed up continuously.

We continuously monitor and measure each and every environmental factor, based on which the environmental performance of our Company can be exactly assessed.

We pay special attention to keeping and maintaining the registry of environmental regulations updated and complying with them.

We constantly monitor the compliance of our system; if necessary we make changes to meet the legal requirements, the expectations of the stakeholders and our own targets.

10 Environmental factors

Activity	Casual factors	Environmental impact	Evaluation (points)	Related targets
SIGNIFICANT ENVIRONMENTAL ASPECTS				
Carbon Fiber Plant				
Oxidation	Thermal treatment of the precursor fiber	Thermal load, air pollution (at workplace)	24	LE03
Technical Fiber Plant				
Oxidation	Thermal treatment of the precursor fiber	Thermal load, air pollution (at workplace)	24	LE03
Zoltek Zrt. general issues				
Usage of PPE	Used PPE (filter cartridge, dirty clothes, materials related to PPE maintenance)	Generation of hazardous waste	23	-
Precursor Plant				
Unloading of raw material	Evaporation (container), wagon cleaning	Air pollution at workplace	23	-
Unloading of raw material	Absorbent material used at spills	Generation of hazardous waste	23	-
Unloading of raw material	Soil contamination during spills (emergency situation)	Contamination of soil and generation of hazardous waste	23	-
Regeneration	Treatment of wastewater from regeneration	Generation of industrial effluents	23	-
Carbon Fiber Processing Plant				
Production activities (usage of PPE)	Used PPE (filter cartridge, dirty clothes)	Generation of hazardous waste	23	-
Laboratory tests	Textiles, rubber gloves, cloth, PPE contaminated with resin	Generation of hazardous waste	23	-
OTHER ENVIRONMENTAL ASPECTS				
Zoltek Zrt. general issues				
Maintenance of Plant equipment	Lubricant change	Generation of hazardous waste	22	-
Maintenance of Plant equipment	Paint residues / spray cans / used plastic jars with lubricant residues	Generation of hazardous waste	21	-
Warehousing	Containers polluted with hazardous waste	Generation of hazardous waste	21	-
Precursor Plant				
Unloading of raw material	Empty nut release spray	Generation of hazardous waste	21	-
Carbon Fiber Plant				
Incineration at oxidation	Further thermal treatment	Thermal load, air pollution (at workplace)	21	LE03
Carbon Fiber Processing Plant				
Setting and positioning of auxiliaries	Textiles, rubber gloves, cloth, PPE contaminated with resin	Generation of hazardous waste	21	-
Sizing	Cloth waste contaminated with resin / contaminated filament / dirty cardboard waste	Generation of hazardous waste	21	-
Drying	Filament contaminated with resin	Generation of hazardous waste	21	-
Separation	Filament contaminated with resin	Generation of hazardous waste	21	-

11 Comprehensive Environmental Targets and Programs

Target	No	Environmental program	Target value	Year of Completion	Status
01 // Waste Management					
Zoltek Zrt. general					
	HU01	Extended communication about the topic of waste management (trainings, events)	-	2017-continuous	100%
	HU09	New non-hazardous waste storage area	-	2019	100%
	HU11	Launch of a new non-hazardous waste storage facility	-	2021	30%
Zoltek Zrt. general /office building					
	HU04	Color Coding of Waste Containers	-	2017-2020	100%
Carbon Fiber Plant					
	HU05	Development of Waste Sorting Points	-	2017-2020	100%
Technical Fiber Plant					
	HU06	Development of Waste Sorting Points	-	2017-2020	100%
Biological Waste Water Treatment Plant					
	HU12	Flood lift reconstruction (flood protection)	-	2020	100%
PPS technology					
	HU10	Installing of spill containment	-	2020	85%
	HU13	Environmental noise reduction using a noise reducer	-	2022	30%
WaterWorks					
	HU14	Optimization of chemical dosing by continuous re-measurement	-	2021	75%
	HU15	Upgrade of industrial water pumps	-	2021	90%
	HU16	Upgrade of water pump	-	2023	90%
02 // Energy					
Zoltek Zrt. general					
	EN01	Extended communication about the topic of energy efficiency (trainings, events)	-	2017 continuous	100%
Carbon Fiber Plant					
	EN05	Narrowing the EPI (Energy Performance Index) error margin by improving the measurement methodology	to ±10%	2017 - 2019	100%
	EN06	Using exhaust gas in the carbonization incinerators to produce steam	0.8t steam/h/line	2017 - 2021	55%
	EN07	Narrowing the EPI (Energy Performance Index) error margin by measurement results for every single line	to ±5%	2017 - 2021	75%
	EN08	Extension of the measurement system to main groups (OX ovens, LT,HT furnaces)	-	2018 - 2021	40%
	EN09	Recovery by installing pressure rollers	30%	2017 - 2021	75%
Technical Fiber Plant					
	EN10	Narrowing the EPI (Energy Performance Index) error margin by improving the measurement methodology	to ±10%	2017 - 2021	45%
	EN12	HVAC drive upgrade	-20%	2017 - 2021	45%
Prekursor Plant					
	EN15	Upgrade of pumps and electric drives	-	2018- 2020	100%
	EN16	Narrowing the EPI (Energy Performance Index) error margin by improving the measurement methodology	to ±10%	2017 - 2021	60%
	EN17	Reduction of distribution losses (substitution analysis and design of remote energy consuming devices, I ncrease the efficiency of insulation)	-3%	2018 - 2021	95%
Boiler House					
	EN20	Increase the efficiency of insulation	-	2017 - 2021	75%
Electricity Provider					
	EN21	Reduction of distribution losses by phase correction (installation of 870 kVAr capacity condenser)	-	2017 - 2021	75%
	EN22	Increase the usage of renewable energies (purchasing green energy – using renewable energy /solar panels/)	-	2018 - 2022	45%
Cooler Engine Room					
	EN23	Automatization upgrade, optimizing the plant condition	1%	2016 - 2021	55%
	EN24	Refurbishment/change of equipment for greater efficiency	1%	2018 - 2022	45%

Target	No	Environmental program	Target value	Year of Completion	Status
		Cooling Towers			
	EN26	Drive upgrade and fan change	1%	2017 - 2021	75%
		Zoltek Office building			
	EN28	Renovation / replacement of doors and windows	-	2021	95%
03 // Water protection					
	VI01	Extended communication about the topic of water protection (trainings, events)	-	2017 - 2021	95%
03 // Air protection					
	LE01	Working out a communication strategy (External stakeholders)	-	2017 - 2021	95%
	LE03	Treatment of hotspot exhaust gases by incinerator (test) in the production plants	-	2017-2021	70%
	LE04	Reduction of NOx emissions at carbonizing gas burner chimneys (CF plants)	-	2022	50%
05 // Nature protection					
	TE01	Increasing environmental awareness by lectures	quarterly	2016-continuous	100%
	TE02	Planting trees and flowers	-	2017 - 2021	60%
06 // Handling hazardous materials					
		Zoltek Zrt. general			
	VA03	Extensive communication about chemical treatment (trainings, actions)	-	2021-continuous	100%
		Prekursor Plant			
	VA04	Construction of a safety overflow system	-	2020	100%
	VA05	Safety level sensor installation in a the system (inlet line of DMF membrane filter receiving tank inlet line)	-	2020	100%
	VA06	SCADA (Industrial Control System) integration into the system	-	2020	95%
	VA07	Installation of a 24-hour online sampling and signaling system i n the "acid" sewer system	-	2021	95%
07 // Environmental management system					
	KR04	Working out the ecological performance profile of production areas, building up a motivation system	-	2017-2021	90%
	KR05	Increasing environmental awareness by lectures	quarterly	2016-continuous	100%
	KR06	Development of the communication strategy (external stakeholders)	-	2021	60%

12

Compliance with Legal Regulations Related to Environmental Protection

Compliance with the legal regulations is treated as a matter of high priority. The changes in regulations are monitored and we have documented procedures prepared, as a part of IMS. We publish these procedures to raise awareness of legal or other requirements.

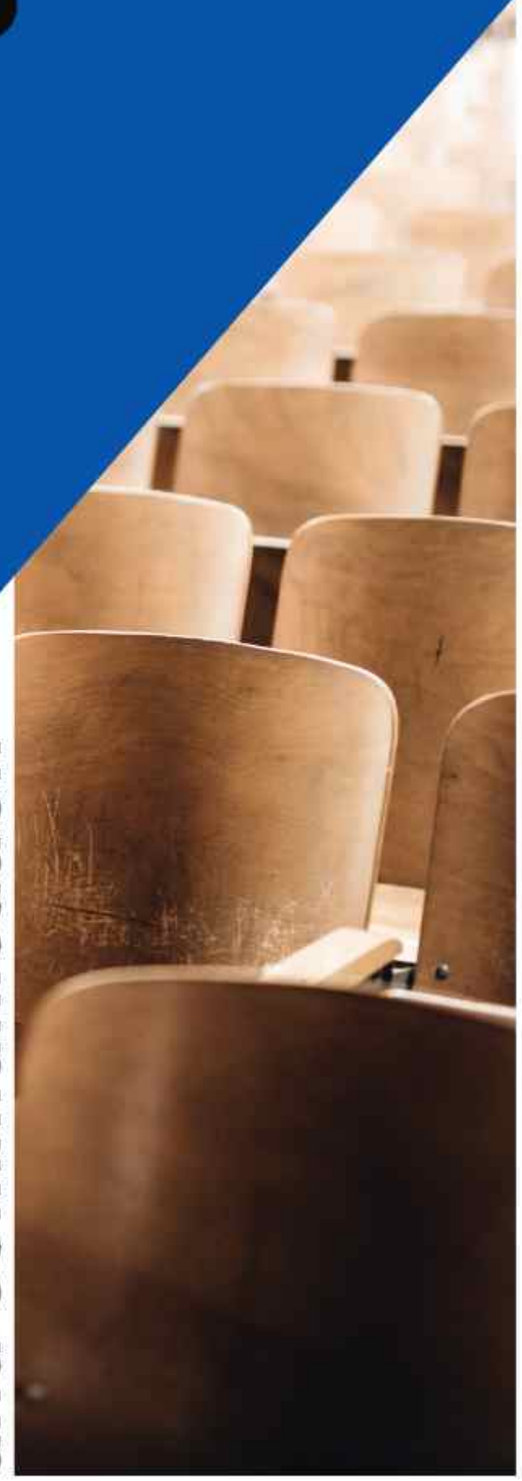
We have the compliance of implementation regularly checked during environmental audits and during the monthly executive-level plant patrols. We continually evaluate our experiences and intervene if necessary.

Since the introduction of the Integrated Management System, which includes the ISO 14001 system and the EMAS, we have not received any reprimand or no fines were imposed during the inspection of the environmental authorities.

The actual and updated environmental regulations related to Zoltek Zrt. are listed in the attached file.

13

Trainings and communication



Our Company supports open and clear communication with all its partners in order to introduce our chemical company, its environmental performance and continuous development in the best possible way and also to make it possible for the partners to express their opinion on a topic.

For this purpose, we published our environmental statement on our Company's website, so it is accessible for everybody. As a part of IMS, we have worked out and maintained an IMS procedure to set the methods communication with the stakeholders, and by which means the handling and filing of these documents are precisely controlled and uniformly treated.

In addition, we pay special attention to any complaints about the environmental performance of our Company. Until the closure of this statement we did not receive any complaints.

In addition to external communication, the internal communication, training and competence are important parts of our communication strategy. In order to maintain competence and qualification, we have introduced and maintained a procedure – as a part of IMS – to measure and develop the competence of our employees. Based on the result of measurements we draw up and conduct our training plans.

It is an important aspect to involve our employees in the continuous improvement of the EMAS – and our environmental performance.

Everybody has the possibility to submit an idea on the "idea-sheet". The evaluation of these idea-sheets is regulated in a separate manual.

14

Trademark Usage

Zoltek Zrt. uses the EMAS trademark in internal and external documents, prospects and promotional materials in compliance with the EMAS requirements.

Lloyd's Register

ENVIRONMENTAL VERIFIER'S DECLARATION ON VERIFICATION AND VALIDATION ACTIVITIES

Lloyd's Register Quality Assurance Ltd., with EMAS environmental verifier registration number AT-V-0022 and accredited for the scope:

Production and processing of precursor, oxidized fiber, carbon fiber and various textile and composite intermediate products

NACE Code: C20.6.0 - Manufacture of man-made fibres

declares to have verified:

Zoltek Zrt.
2537 Nyergesújfalu, Varga József tér 1.
Hungary

meets all requirements of Regulation (EC) No 1221/2009 of the European Parliament and of the Council of 25 November 2009 on the voluntary participation by organisations in a Community Eco-Management and Audit Scheme (EMAS) amended by commission regulation (EU) 2017/1505.

By signing this declaration, LRQA declares that:

- the verification and validation has been carried out in full compliance with the requirements of Regulation (EC) No 1221/2009,
- the outcome of the verification and validation confirms that there is no evidence of non-compliance with applicable legal requirements relating to the environment,
- the data and information presented in the Environmental Statement of the organisation reflect a reliable, credible and correct image of all the organisation's activities within the scope mentioned in the environmental statement

This document is not equivalent to EMAS registration. EMAS registration can only be granted by a Competent Body under Regulation (EC) No 1221/2009. This document shall not be used as a stand-alone piece of public communication.

LRQA Ref No BUD6019538

Date of verification:	18 May 2020
Verification Expiry:	17 May 2023
Date of validation:	12 April 2021
Validation Expiry:	11 April 2022

DI Dr. Maximilian Lackner, Lead Verifier
Lloyd's Register EMEA, Niederlassung Wien
1010 Wien, Opernring 1/R/741-744, Austria
on behalf of Lloyd's Register Quality Assurance Limited

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