EMAS
VERIFIED ENVIRONMENTAL MANAGEMENT
HU-000039

EFFECTIVE FROM: 18 MARCH 2024

Year of Certification: 2023
Verification Expiry: 2026

ZOLTEK Zrt. 2537 Nyergesújfalu, Varga J. tér 1.

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1. Zoltek Zrt. basic data

Company name: Zoltek Vegyipari Zártkörűen Működő Részvénytársaság
Short company name: Zoltek Zrt.
Company Seat: 2537 Nyergesújfalu, Varga József tér 1.
Tax No: 11186542-2-11

"Green" Client Number (KÜJ No):

ZOLTEK ZRT.	100219276

"Green" Area Number (KTJ No):

Plants producing plastic raw material and finished goods	100376880
Aboveground heating and diesel oil containers (1 x 5000 m^3, 1 x 500 m^3, 1 x 4.5 m^3)	100331797
Chemicals warehouse	100331834
Aboveground tank farm, containers and barrels of sulphuric acid	100331856
Boiler house	101625231
Chemical plant	101625220
Pultrusion technology	102713966
Sulfuric acid tanks	103065248
ACN 5001 container	103069017
5-tank raw material storage system	102859921

Headcount: 1197
Area: 616 741 m^2
Built-up area: 131 290 m^2
EMAS area of activity: 616 741 m^2
TEÁOR No: 2060 '08
Person in Charge: Mr. Adam Ferencz (Plant Manager)
EHS Manager: Mr. Ivan Katona (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
Verification Expiry: 21 Jun 2026
Registration No: HU-000039
Certifying Organization: Lloyd's Register EMEA Niederlassung Wien
Accreditation No of the Certifying Authority: AT-V-0022

2. Introduction

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 ISO 45001 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. Ivan 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. Ivan Katona, EHS Manager on +36 (33) 536-000.**

The anticipated date of our next updated environmental statement: March 2025.

3. Our Group and Company Policy

3.1. Environment Protection

The main activity of Zoltek Zrt. is the manufacture of high purity chemical fiber (Precursor fiber), and the further processing of the oxidized fiber (trade name: OX) 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.

4. 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.

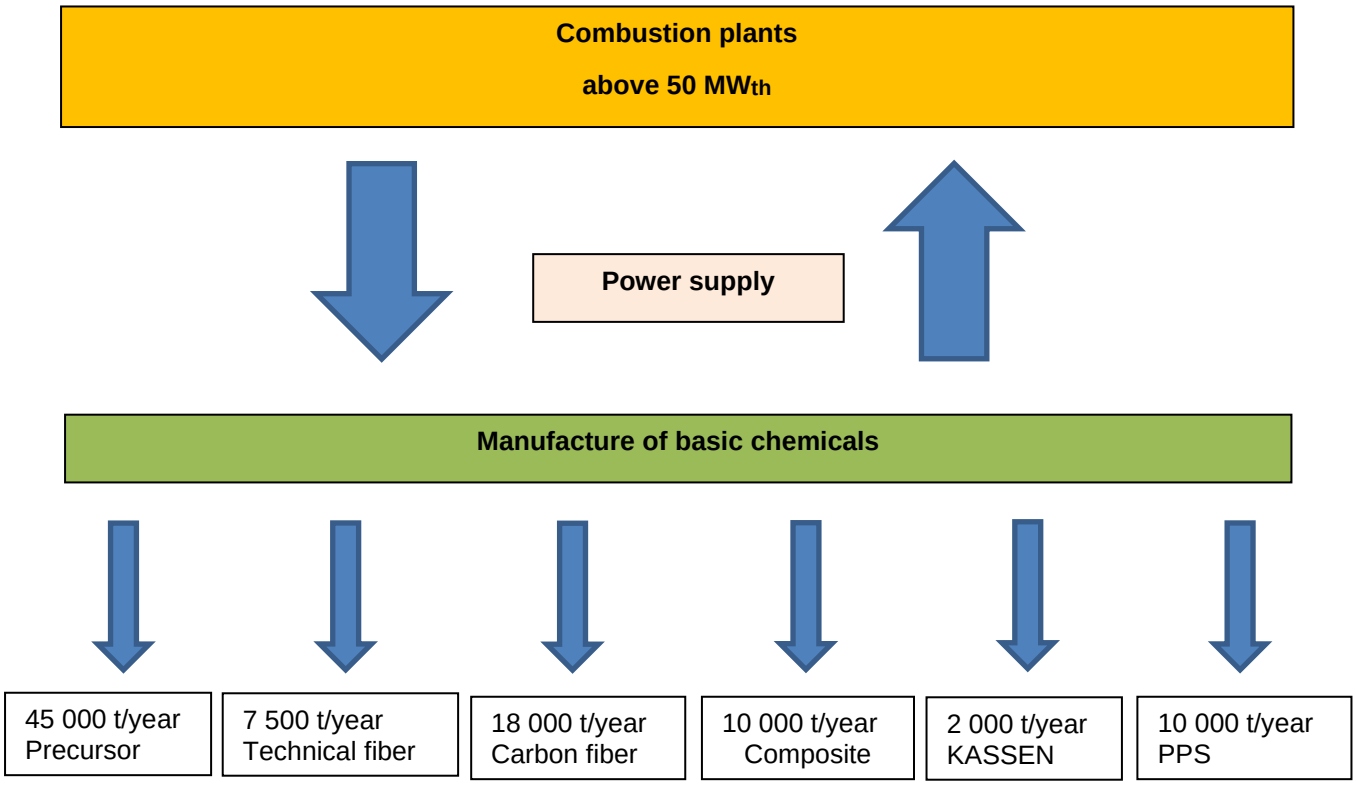
The privatization opened new perspectives for the Company. The new owner was one of the world's biggest carbon fiber manufacturers and he created a significant precursor and carbon fiber capacity in Nyergesújfalu, which had international significance. In 1996, the related development and investment works 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 **five** major **production units**: Precursor Plant, Carbon Fiber and Technical Fiber Plant, Pultrusion Plant, AVP (Advanced Value Products) and PPS Plant.

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.**

The expansion activities and construction works generated by the market needs, started in 2018, successfully completed.



4.1. Main products

Precursor Production Department:

Precursor tow: made from poly-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- and Technical Fiber Production Department:

Carbon fiber: poly-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.

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

AVP Department:

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

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

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

Chopped carbon fiber: chopped carbon fiber with sizing, packed in cardbox.

Carbon fiber fabric: Unique fiber spreading techniques enable a wide range of fabric weights and constructions for composite part applications, areal weight: 900-1 800g/m^2.

UD/MD fabric: Quick composite part build-up is cost effectively achieved with our cosmetically attractive carbon fiber fabrics. Applications include large composite tooling parts and aesthetically appealing finished composite components. Area weight: 150-900g/m^2.

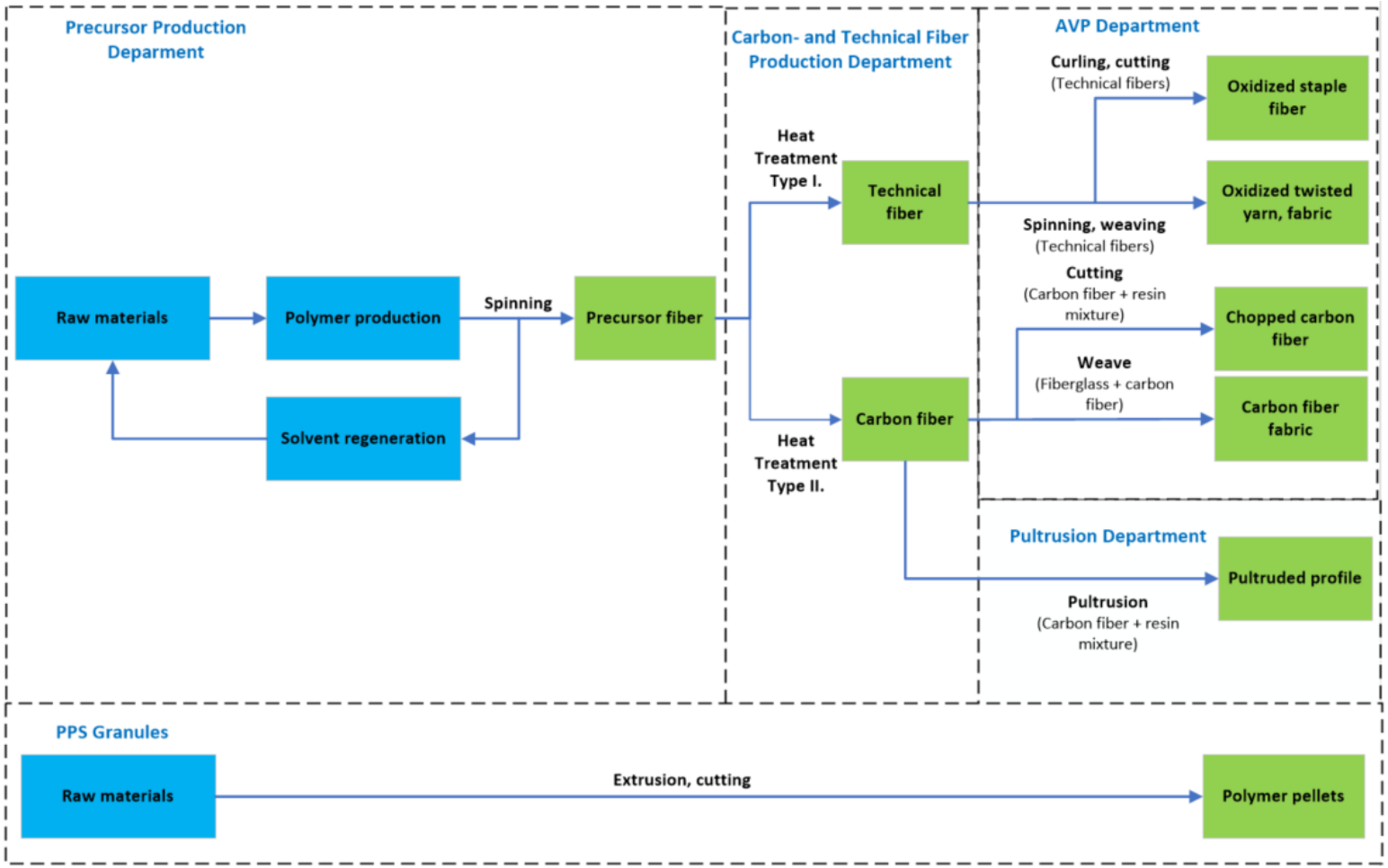
Pultrusion Production Department

Pultruded profile: high stability, high modulus carbon fiber based composite profile.

PPS Granules:

PPS granules: Polyphenylene-sulfide raw resin is compounded with glass fiber and other additives in order to have PPS pellets with excellent heat resistance and mechanical properties.

4.2. The main products and production equipments:



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 m^2, is located in the north-eastern part Nyergesújfalu, in the industrial zone along the southern coastline of Danube river.

5. The environmental policy of Zoltek Zrt.

ZOLTEK
Toray Group

Environmental, Occupational Health and Safety and Energy Management Policy

(IMS Policy)

The core activities of ZOLTEK Zrt. are the **manufacturing of precursor, oxidized fibre, carbon fibre, PPS granulate as well as the production and processing of various textile and composite products**.

We are committed to protecting the environment, energy efficient operation, creating and maintaining a healthy working environment and a safe workplace for our employees, visitors and partners.

All employees and business partners are responsible for working with a focus on "zero" incidents and accidents. Avoid unsafe conditions, eliminate unsafe activities and carry out all works in a way that reduces its negative impact on the environment and energy efficiency through continuous improvement.

We are committed to ensuring that our operations comply with all applicable laws and regulations as well as all environmental, occupational health and safety and energy efficiency requirements of the Toray Group.

ENVIRONMENTAL PROTECTION, HEALTH AND SAFETY, ENERGY MANAGEMENT PRINCIPLES

Zoltek Zrt. is responsible for:

- Facilities, products and activities complying with legislation, local EHS and energy management requirements.
- Communication between management and employees which supports continuous improvements in occupational safety, environmental protection and energy efficiency.
- Consciously and continuously improving the safety and energy efficiency of processes.
- Ensuring that its activities are in line with the Best Available Technologies, respecting the environment, people and sustainability.
- Providing answers to the issues affecting its activities and developing products that support sustainable growth and promote energy efficiency.
- Conserving natural resources and reducing waste by applying the principles of reuse, recycling and recovery.
- Making its employees aware of their individual responsibility for the continuous improvement of EHS and energy efficiency. Encouraging and supporting individual initiatives.
- Supporting, where possible, the work of the relevant authorities to improve environmental protection, occupational safety and energy management.

October 2022

Ádám Ferencz
Plant Manager

6. 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 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 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

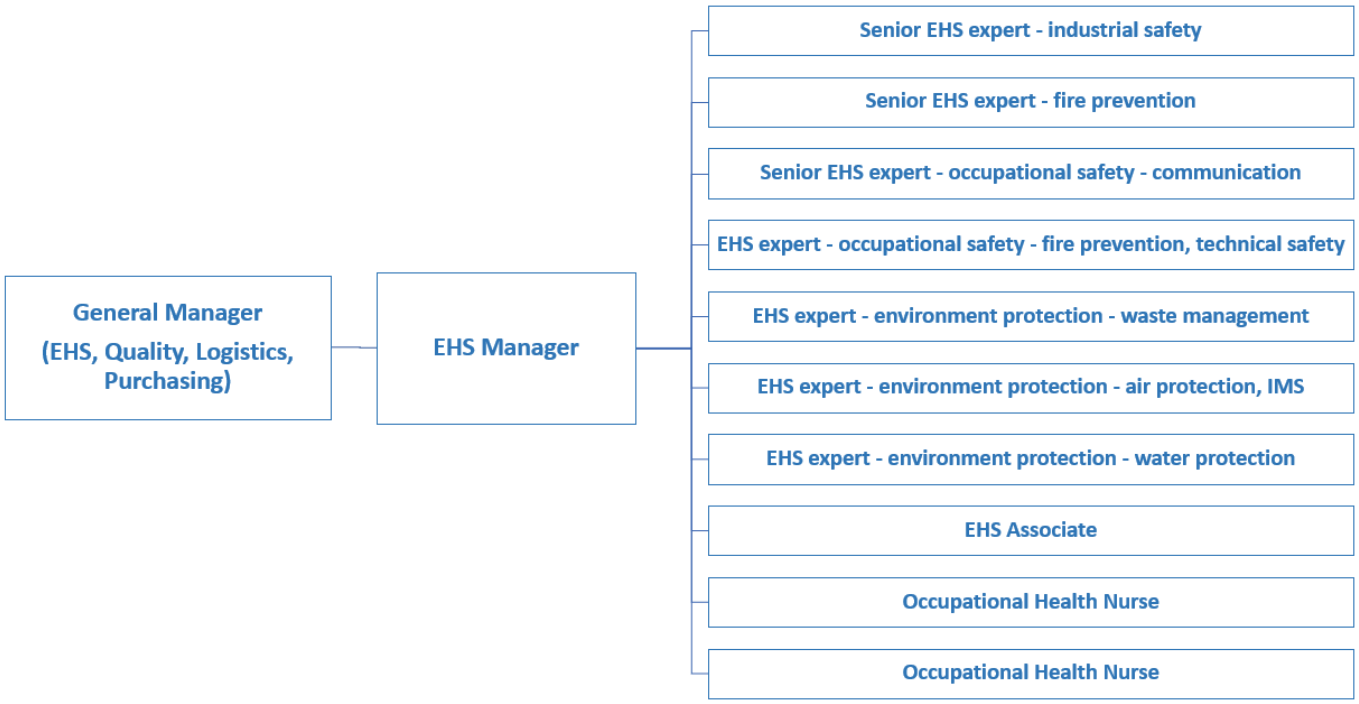
Documents relating to the organizational unit or specific areas required for the activities performed in the framework of IMS (technical specifications, inspection instructions, handling manuals, maintenance and user manuals, manuals required by law e.g. work safety, fire protection, chemicals handling,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

7. Organizational structure

EHS organization:



8. Environmental facts and data

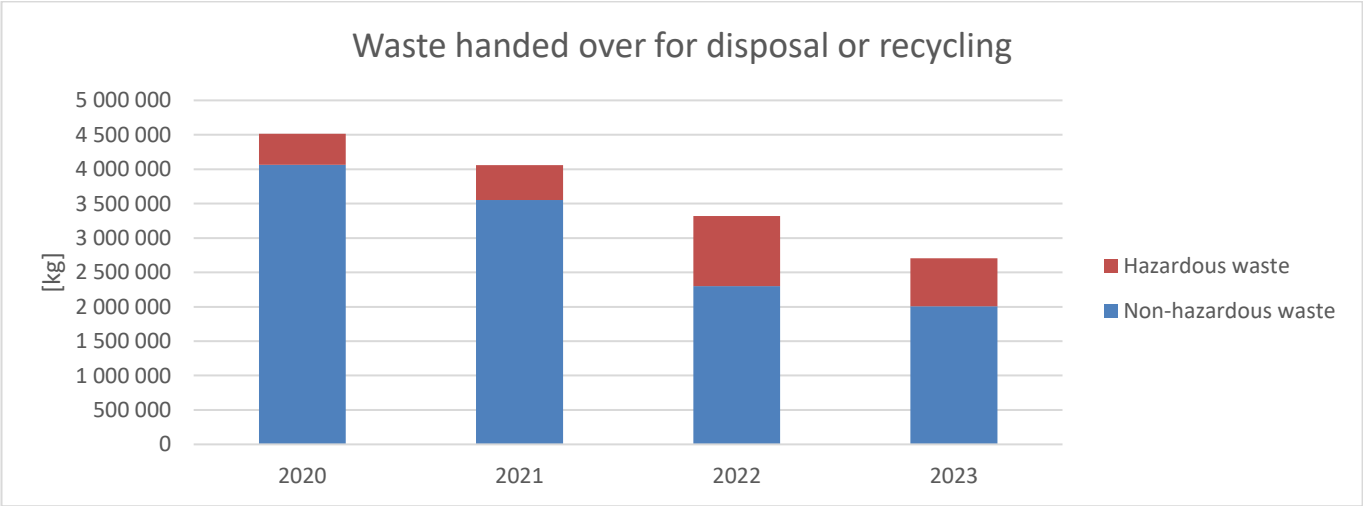
Preservation of natural resources and monitoring the environmental risks associated with our activities are high priority issues for our Company. We protect human health and the environment by handling the chemicals and chemical products properly, according to the rules and by organizing the manufacturing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

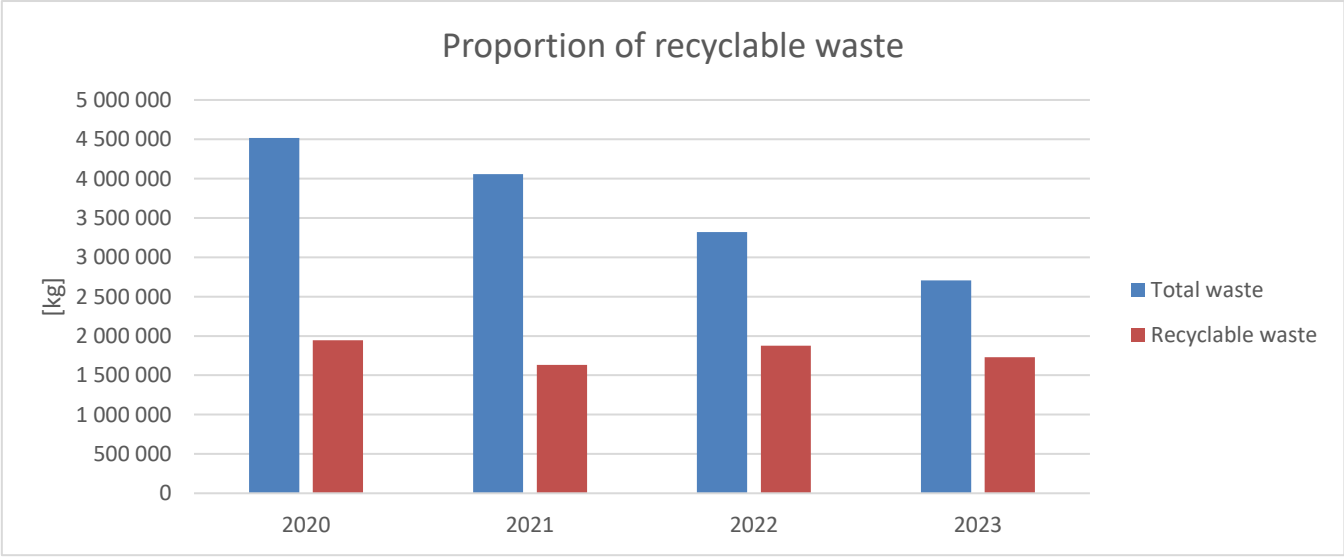
We manage and keep records of the waste generated during our Company's activities according to the legal requirements related to waste management. We regularly have the compliance assessment of non-hazardous industrial landfill waste prepared. Based on this assessment we manage the waste collection and 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	2020	2021	2022	2023	Change 2022-2023 (%)
Non-hazardous waste	kg	4 063 641	3 550 578	2 300 571	2 005 425	-13%
Hazardous waste	kg	452 768	506 324	1 018 476	701 762	-31%
Hazardous/non-hazardous	ratio	0.11	0.14	0.44	0.35	-21%
Total	kg	**4 516 409**	**4 056 902**	**3 319 047**	**2 707 187**	-18%



Volume of waste per working hours					
	Unit	2020	2021	2022	2023
Total waste	kg	4 516 409	4 056 902	3 319 047	2 707 187
Working hours	hour	2 235 876	2 276 885	2 392 193	2 053 676
Ratio	kg/hour	2.02	1.78	1.39	1.32

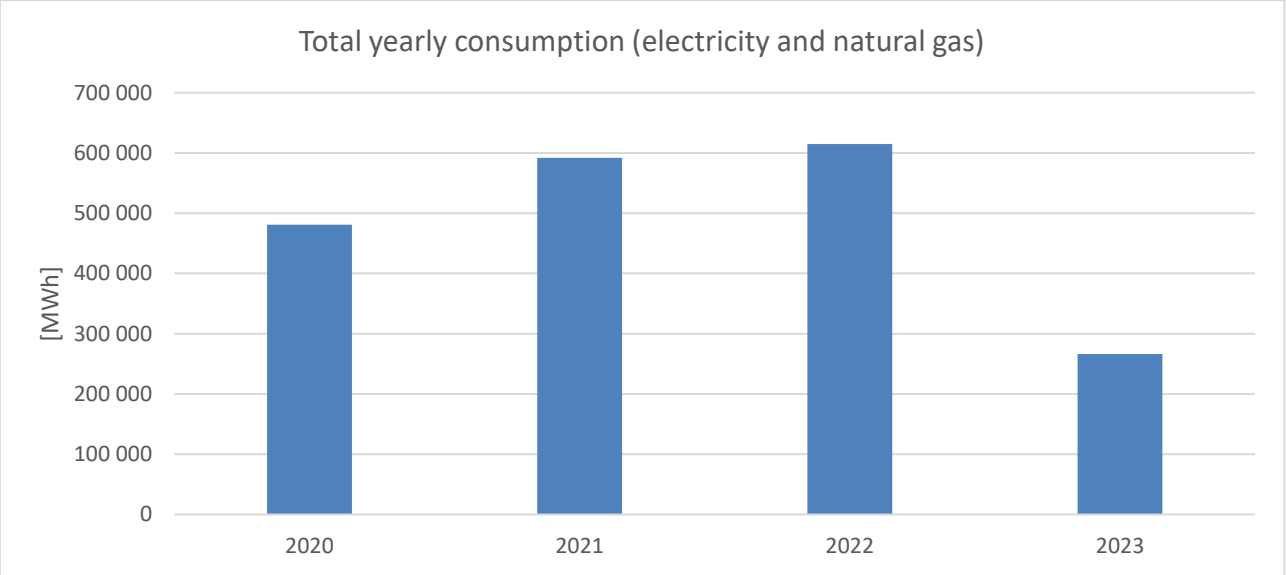
Proportion of recyclable waste					
	Unit	2020	2021	2022	2023
Total waste	kg	4 516 409	4 056 902	3 319 047	2 707 187
Recyclable waste	kg	1 947 204	1 630 628	1 876 166	1 729 365
Proportion of recyclable waste	%	43%	40%	57%	64%



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	2020	2021	2022	2023
Total	MWh	481 068	591 947	614 825	266 451



Total yearly consumption per work hour					
	Unit	2020	2021	2022	2023
Number of work hour	hour	2 235 876	2 276 885	2 392 193	2 053 676
Total yearly consumption	kWh	261 089 150	301 559 219	311 408 255	132 803 712
Total yearly consumption per work hour	kWh/hour	116.8	132.4	130.2	64.7

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 a number of other measures recently, which resulted in lowering the emission of air pollutants.

Main yearly emission measurement results in 2023		
	Environmental limits	Average over all stacks
	[mg/m^3]	
Carbon monoxide	**500**	26.33
Nitrogen oxides	**500**	295.89
Solid (dust)	**150**	10.05
Sulfur-dioxide	**35**	2.49

CO_2 emission					
	Unit	2020	2021	2022	2023
CO_2	TON	43 723	58 126	61 262	27 213
CO_2 emission/employee	TON/employee	34.1	44.1	44.4	22.7

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	2020	2021	2022	2023
Usage of industrial water	m^3	1 484 799	2 034 365	1 932 504	1 075 294
Ratio	m^3/employee	1 158	1 545	1 400	898

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, COD_{Cr}, and ammonium-N; and weekly for the BOI5 parameter.

Treated waste water measurement results			
	Environmental limits	Latest measurement results (07.11.2023)	Average (2023)
pH	**6-9.5**	7.89	7.7
Toxicity (Daphnia)	**8**	0	3.03
	[mg/l]		
Chemical oxygen demand	**150**	14	18.5
5-day biochemical oxygen demand	**50**	2.6	5.58
Total nitrogen	**55**	18	23.45
Ammonia-nitrogen	**20**	<0.04	0.29
Total phosphorus	**10**	0.1	0.1
Total inorganic nitrogen	**50**	15.3	20.48
Organic solvent extract (e.g.: oils, greases)	**10**	4.9	4.05

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. To continuous protect and develop the Company's flora the company employs gardeners.

Zoltek Zrt. area breakdown					
	Unit	2020	2021	2022	2023
Total area	m^2	616 741	616 741	616 741	616 741
Built-up area	m^2	130 431	130 431	131 290	131 290
Useful floor-space	m^2	156 618	156 618	157 501	157 501
Green area ratio	%	78.85	78.85	0.79	0.79

Zoltek Zrt. planting (trees and plants) expenditures			
2020	2021	2022	2023
-	HUF 1.3 million	-	HUF 5.5 million

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.

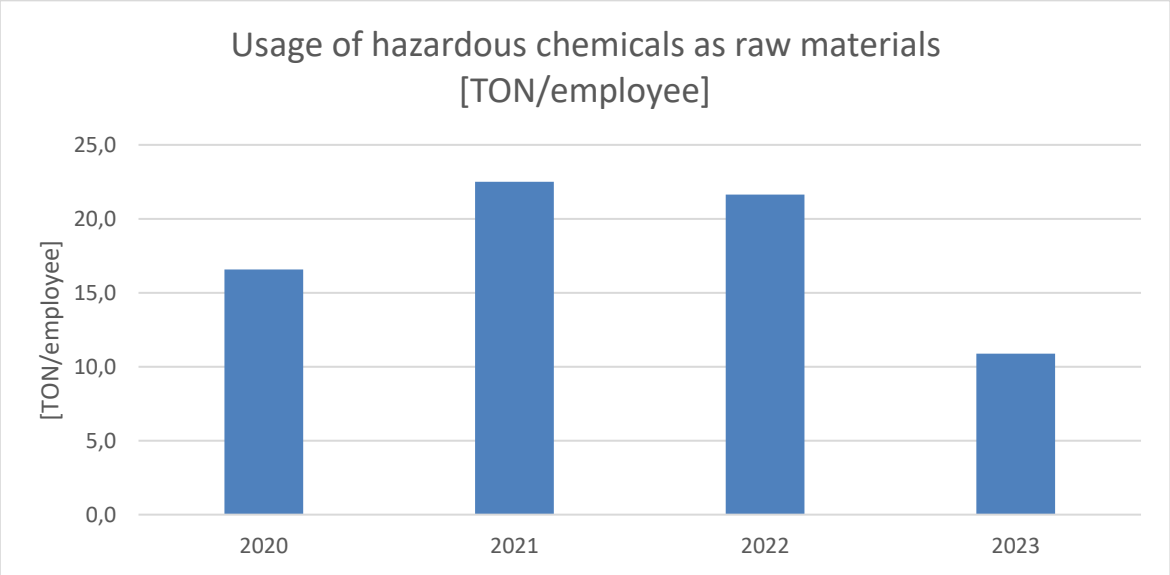
8.7. Disaster drills, official controls:

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. Annually and most recently 18 Aug 2023 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 mixtures, because of it Zoltek Zrt. takes care during this activity and organize the production procedures to eliminate the chance of an environmental accident and protect the community and it strives to recover solvents through developments.

Usage of hazardous chemicals as raw materials					
	Unit	2020	2021	2022	2023
Chemical compounds	TON	21 247	29 641	29 852	13 019
Number of employees	Nr. of employees	1 282	1 317	1 380	1 197
Ratio	TON/employee	16.6	22.5	21.6	10.9



9. 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

SIGNIFICANT ENVIRONMENTAL FACTORS				
Activity	**Factors causing effects**	**Environmental impact**	**Rating (points)**	**Related objectives, programmes**
Precursor Production organisation				
DMF membrane filtration	DMF regeneration	industrial waste water generation	23	VI01 and VI02
Carbon and Technical Fibre Production Organisation				
Oxidation	Heat treatment of precursor fibres	Heat load, (workplace) air pollution emissions	23	LE03 and LE04
Pultrusion Production Organization				
Waxing bath	resin dosing, use of tub (resin and acetone)	ambient air pollution workplace air pollution	23	TE01
OTHER NON-SIGNIFICANT ENVIRONMENTAL ACTIVITIES (these are already associated with targets as they are close to the threshold of significant factors)				
Activity	**Factors causing effects**	**Environmental impact**	**Rating (points)**	**Related objectives, programmes**
Zoltek Zrt. general				
Maintenance of operational equipment	Changing the lubricating oil	Hazardous waste generation	22	HU01, HU17 and HU-19
Maintenance and cleaning of operating equipment	Return of a container contaminated with a hazardous substance	Hazardous waste generation	22	HU01, HU17 and HU-19-
Precursor Production Organisation				
Raw material extraction	Evaporation (tank), wagon skimming	(Occupational) air pollution	22	TE01-
Raw material extraction	In the case of spillage of liquids, the leachate used for the spillage	Hazardous waste generation	22	HU01, HU17 and HU-19
Raw material extraction	Soil contamination from spills of liquids (emergency situation)	Soil contamination and hazardous waste generation	22	HU01 and VI01-
Mavilon I-III washing machine stretching	DMF aqueous vapour avoidance	workplace air pollution	22	TE01
Mavilon II-fiber-optic extraction	DMF aqueous vapour avoidance	ambient air pollution air pollution	22	LE03
Carbon and Technical Fibre Production Organisation				
Oxidation	oxidation of precursor fibre	Heat stress, (workplace) air pollution	22	LE03
AVP Production organisation				
maintenance of plant equipment	Maintenance replaced lubricant tired oil	Hazardous waste generation	22	HU01- EN 19
Pultrusion Production organization				
Resin mixing	components additives handling	Hazardous waste generation	22	HU01, HU17 and HU19
Drying in the mould	air pollutants released (during cooking)	(Occupational) air pollution	22	TE01-
PPS granules manufacturing organisation				
Implementation of the extrusion process	Setting up and operating the machine Performing an operation	hazardous waste generation	22	HU01 and HU10
Inter-operational surveillance	machine noise	mainly noise at work	22	HU13

11. Comprehensive Environmental Targets and Programs

Target	No.	Environmental Program	Target Value	Year of Completion	Status
1. WASTE MANAGEMENT					
	Zoltek Zrt. General				
	HU01	Extended communication about the topic of waste management (trainings, events)	-	ongoing	100%
	HU11	Commissioning a new non-hazardous waste container	-	2023	100%
	HU17	Weighbridge commissioning	-	2024	80%
	HU19	Increasing the recycling of by-products	-	2024	40%
	PPS technology				
	HU10	Installing of spill containment	-	2023	100%
	HU13	Environmental noise reduction using a noise reducer	-	2024	50%
2. ENERGY					
	Zoltek Zrt. General				
	EN01	Extended communication about the topic of energy efficiency (trainings, events)	-	ongoing	100%
	Carbon- and Technical Fiber Production Department				
	EN09	Recovery by installing pressure rollers (CF)	30% usage of chemical	2024	50%
	EN30	Installation of heat recovery ventilation (CF)	22,6 GWh/year	2025	10%
	EN31	Heat utilization of flue gas from carbonization (CF)	300 kW/line	2024	90%
	EN32	CF3 RTO heat utilization (CF)	2000kW	2023	100%
	EN12	HVAC drive upgrade (TF)	-20% electricity consumption	2023	100%
	EN33	Installation of heat recovery ventilation (TF)	3,4 GWh/year	2024	10%
	Precursor Plant				
	EN34	Installation of heat recovery ventilation	14,8 GWh/year	2024	15%
	EN37	Technological waste heat recovery	-	2024	70%
	Electricity Provider				
	EN22	Increase the usage of renewable energies (purchasing green energy – using renewable energy /solar panels/)	6600 kW	2024	80%
	Cooler Engine Room				
	EN23	Automatization upgrade, optimizing the plant condition	-1% electricity consumption	2024	90%

	EN24	Refurbishment/change of equipment for greater efficiency	-1% electricity consumption	2023	100%
	EN35	II. cooling plant heat utilization	600kW	2023	100%
	Cooling Towers				
	EN26	Drive upgrade and fan change	-1% electricity consumption	2023	100%
	EN36	Automatization upgrade, optimizing the plant condition	-1% electricity consumption	2024	5%
	Zoltek Office building				
	EN29	Facade insulation	-	2025	0%
3. WATER PROTECTION					
	VI01	Extended communication about the topic of water protection (trainings, events)	-	ongoing	100%
	VI02	Reduction of pollutants in technological washing water entering the wastewater treatment plant	-70% less solid content	2024	30%
	Waterworks plant				
	VI04	Installation of water meters	-	2024	60%
4. AIR PROTECTION					
	LE03	Treatment of hotspot exhaust gases by incinerator (test) in the production plants	-	2024	80%
	LE04	Decrease of NOx release at the CF plant RTO chimneys	-	2024	60%
5. NATURE PROTECTION					
	TE01	Increasing environmental awareness by lectures	quarterly	ongoing	100%
	TE02	Planting trees and flowers	-	2023	65%
	TE03	Installation of artificial swallow nests	-	2024	90%
6. HANDLING HAZARDOUS MATERIALS					
	Zoltek Zrt. General				
	VA03	Enhanced communication of chemical management and use (trainings, actions)	-	ongoing	100%
	VA07	Replacing hazardous chemicals with less hazardous ones (PU)	-	2024	90%
	Precursor Plant				
	VA06	Integration of alarm gauge and alarm system to the SCADA (Industrial Control System)	-	2023	100%
7. ENVIRONMENTAL MANAGEMENT SYSTEM					
	KR04	Working out the ecological performance profile of production areas, building up a motivation system	-	ongoing	100%
	KR05	Increasing environmental awareness by lectures	quarterly	ongoing	100%

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.

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.

15. Certifying Statement