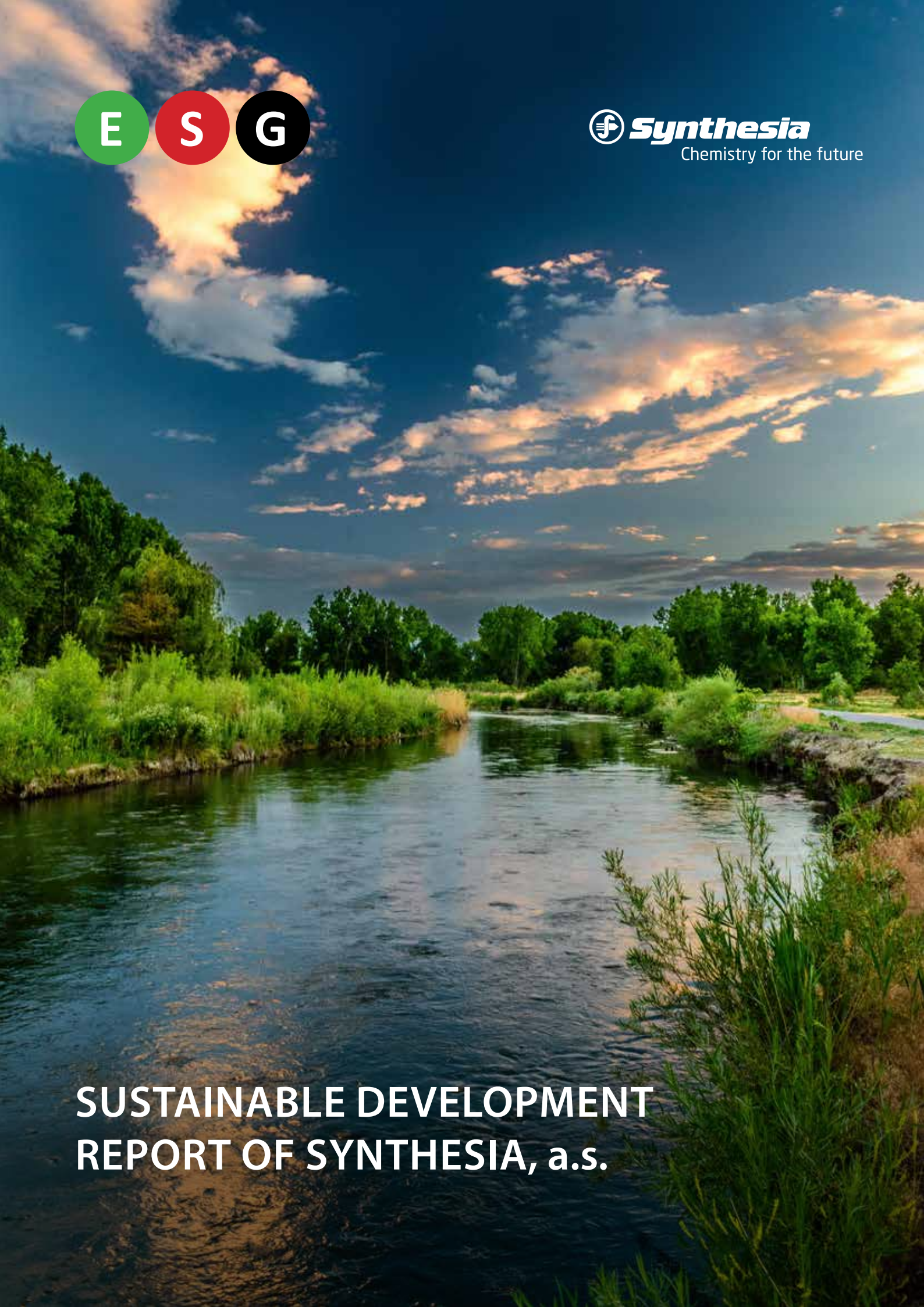

E S G
Synthesia
Chemistry for the future
SUSTAINABLE DEVELOPMENT
REPORT OF SYNTHESIA, a.s.


Synthesia
Chemistry for the future

CONTENT

General Information

- About Synthesia
- Business Model
- Company Management

Environmental Part

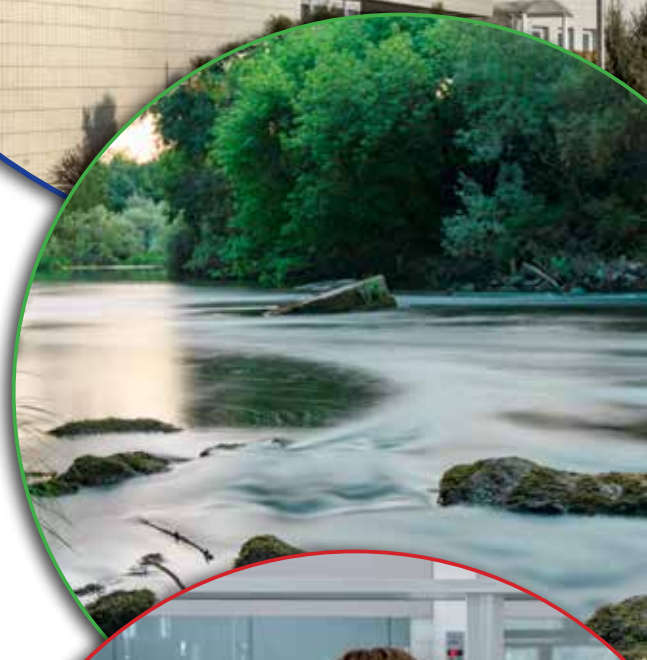
- Climate Change
- Pollution
- Water and Marine resources
- Biodiversity and Ecosystems
- Use of Resources and Circular Economy

Social Part

- Employees
- Synthesia in the Region

Governance

- Prevention and Detection of Corruption and Bribery
- Company Culture



https://www.synthesia.eu/eng/sustainability

About Synthesia

Synthesia, a part of the Kaprain Group, is a leading European manufacturer of qualified chemistry with a tradition of more than one hundred years. The production portfolio consists of pigments and dyes, cellulose derivatives and organic intermediates.

Depending on this wide assortment also the company's organizational structure is based. It is divided into four strategic production-commercial units (SBUs – Strategic Business Units) – Pigments and Dyes, Nitrocellulose, Organic Chemistry and Power Engineering. SBUs are units with a great deal of independence and central coordination.

Our Values

Customer orientation

- we are a reliable supplier of products and services

Performance and confidence

- we deliver high performance backed by our expertise and continuous education, we believe in our ability to meet challenging objectives

Responsibility

- we accept responsibility for our activity, including its impact on the environment

Cooperation

- with joint efforts we continuously improve quality and efficiency of all activities

Respect and recognition

- we appreciate quality people, we see them as bearers of the company's success

Our Vision

Modern, safe, ecological, prosperous and evolving company – the best employer in the region.

Business Model

Synthesia, a.s.

Pigments and dyes

- Pigments
- Dyes
- Optical brightening agents (OBAs)

Nitrocellulose

- Energetic nitrocellulose
- Industrial nitrocellulose
- Oxycellulose
- Inorganics acids and salts
- Diethylether

Organic chemistry

- Custom syntheses
- Intermediates
- Pesticides
- Pharmaceutical substances

Power Engineering

- Energy for all divisions
- Steam and electricity

Company Management

An integrated quality management system according to **ISO 9001**, an environmental management system according to **ISO 14001** and an occupational health and safety management system according to **ISO 45001** have been implemented in the company.
At the same time, a quality management system according to **ISO 13485** is in place for production of medical devices and for production of pharmaceutical substances according to good manufacturing practice.

ISO 9001
ISO 14001
ISO 45001
BUREAU VERITAS
Certification

Since 2015 we have been involved in the **EcoVadis** sustainability rating system.

SILVER 2023 ecovadis Sustainability Rating

Since 1996 we have been authorized to use the **Responsible Care** logo.

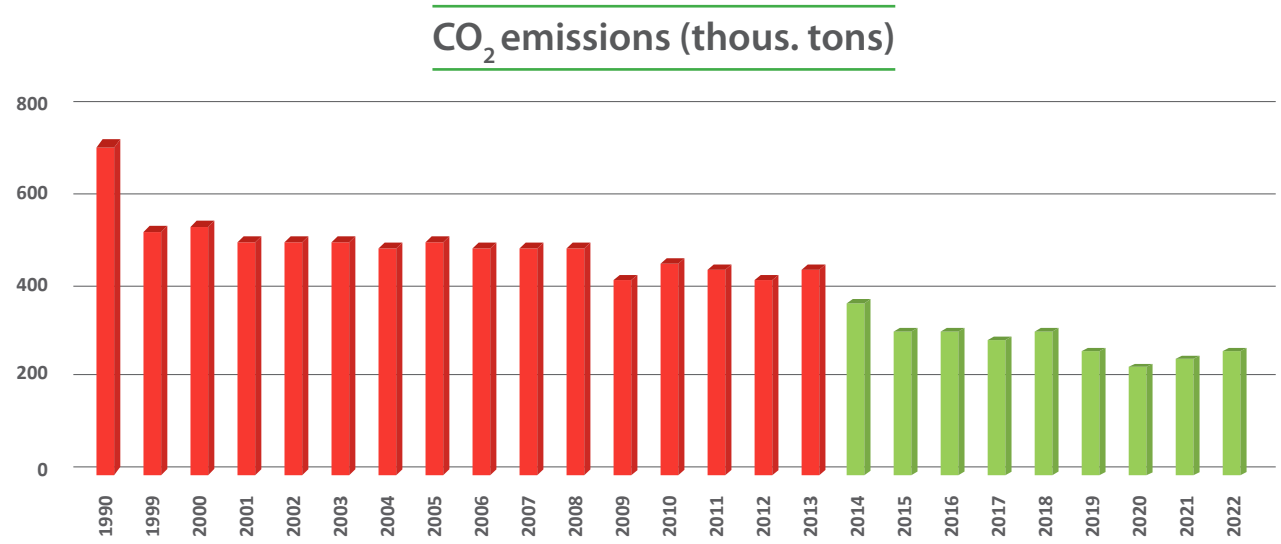
RESPONSIBLE CARE®
OUR COMMITMENT TO SUSTAINABILITY

In 2015 we received the **Sustainable Development Award from Association of Chemical Industry of Czech Republic.**

Climate Change

The main source of CO_2 emissions in the company is combustion of fossil fuels to produce steam for heating and electricity generation. Fossil fuel combustion also occurs in various technological nodes of chemical production.

Development of CO_2 Emissions



Company's Decarbonization Vision

Between 1990 and 2022, CO2 emissions were reduced due to reductions in energy performance, energy losses, restrictions on production and investment in energy source reconstruction.
The objective to reduce emissions to 55% of the value of 1990 resulting from „FIT FOR 55", was achieved in Synthesia already in 2014.

Measures for Emission Reduction We Implemented up to 2022

- Supplying the boiler room with gas, installation of gas boiler K15 – 2015.
- Repairs of insulations; steam pipelines continuously approximately over last 5 years.
- Energy savings in technologies (e.g., large-scale autoclaves for NCL production, condensate recovery, installation of more efficient heat exchangers, installation of frequency converters, etc.). Continuously approximately over the last 15 years.

Our Objectives

To increase the share of renewable raw material sources in power engineering– up to 50 % of heat from certified biomass by 2030 and 100 % by 2050.

To achieve 10 % CO_2 emission savings by 2030 compared to 2023.

Planned Actions to Reduce Emissions by 2050

- Replacement of public lighting discharge tubes with LEDs
- PV installations on roofs
- Insulation of steam pipelines
- Installation of more efficient TG 14 turbo generator
- Installation of Rankine cycles in selected manufacturing plants
- Modernization of transformer stations
- Electromobility

Monitored Values in the Field of Energy

Consumption of energy raw materials and fuels

Non-renewable sources	MU	2022
Coal and coal products	MWh	653,902
Light fuel oil – LFO	MWh	1,154
Natural gas	MWh	28,533
Oil for energy purposes	MWh	1.2
Petrol	liters	26,000
Oil	liters	114,000
Renewable sources		
Biomass	tons	3,000

Purchase and production of energy

Non-renewable sources		MU	2022
Purchased energy	Electric power	MWh	3,882
	Heat	MWh	23
Total annual energy production	Electric power	MWh	128,357
	Heat	MWh	568,442
Renewable sources			
Purchased energy	Electric power	MWh	0
	Heat	MWh	0
Total annual energy production	Electric power	MWh	2,070
	Heat	MWh	9,167

CO_2 emissions

Volume of total annual direct and indirect GHG emissions	MU	2022
Gross annual emissions SCOPE 1	tCO_2e	246,880
Gross annual emissions SCOPE 2	tCO_2e	4,257
GHG emissions from F-gas consumption	$kgCO_2e$	248.00

Pollution

Our Objective

To implement measures to achieve BAT limits by 2026.

Air

In 2022 the investment project „Energy Source Greening – Zelená louka Heating Plant" took place, which had two stages and consisted of conversion of two coal-fired boilers to fluid combustion boilers and construction of a natural gas boiler. This investment project has significant impact on air quality improvement and ensures compliance with new stricter BAT limits valid from 18 August 2021.

Monitored Values of Emissions to Air

Emitted substance	MU	2022
Emissions of sulfur oxides (SO_x)	tons	294.79
Emissions of nitrogen oxides (NO_x)	tons	243.10
Emissions of non-methane volatile organic compounds (VOCs)	tons	23.48
Fine dust emissions	tons	2.66
Ammonia emissions (NH_3)	tons	0.26
Carbon monoxide CO	tons	75.32
Gaseous chlorine compounds, such as HCl	tons	4.60
Gaseous fluorine compounds, such as HF	tons	0.54
Sulfuric acid H_2SO_4	tons	0.97

Wastewater

In 2022 the company continued to monitor systematically wastewater discharged from individual production facilities and defined discharges from the entire industrial site to surface watercourses.

In 2022 the limits set in the wastewater permit were met and pollution production in the wastewater was below the limits for imposition of fees in the same way as in 2021.

Monitored Values of Emissions to Water

Emitted substance	MU	2022*
Priority substances	tons	0.29
Nitrogen emissions (total nitrogen)	tons	206.67
Phosphate emissions (total phosphorus)	tons	0.28
Suspended solids (SS)	tons	105.90
COD-Cr	tons	1,266.80
BOD 5	tons	648.05
Dissolved inorganic salts	tons	9,377.35
AOX	tons	0.75

**volume of water discharged in 2022 was 2.5 million m^3*

Projects We Realized

- Reconstruction of sewerage system at buildings RY 42, RY 133, nitrocellulose manufacturing plant and KYPY manufacturing plant

Emergency Preparedness and Response

The company has in place a system for identification of potential emergency threads and for emergency situations where also corresponding responses are set to minimize potential impact on the environment or human safety.

Transport Information and Accident System (TRINS) provides via its centers nonstop assistance in case of solving extraordinary situations connected with transportation or storage of dangerous substances in the territory of the Czech Republic. Synthesia, a.s. belongs to one of the founding members of TRINS and within the system it represents companies operating in industrial sites. The company's operation center provides assistance in this system for stages 1 and 2. In urgent cases, it is also able to provide technical assistance.

The company's fire brigade provides its services 24/7. The company uses warning system informing surrounding municipalities, government authorities, crisis management of the region and the Czech Environmental Inspectorate (CEI) about extraordinary events in the company via SMS, and this system also provides information about possible threats to the company's surroundings. A „hotline" has been established to facilitate communication on overloaded lines.

Water and Marine resources

According to the company's flood plan, the entire area being assessed is situated above the centennial water level for the Elbe River. The industrial site **is not located** in the areas of increased risk of drought, in the areas of so-called water stress.

Chemically polluted wastewater is discharged via sewerage network and before being discharged back into the Elbe River it is treated in the biological wastewater treatment plant, or the terminal device in the NCL sewerage system.

Zelená louka heating plant is a large water consumer in the site. We are increasingly focusing on water re-use here. At Zelená louka heating plant, the water used for cooling of machines was previously discharged back into the Elbe Rive or used to float ash to the tailing pond. Current situation enables to reuse the heated water from cooling of generators at Zelená louka heating plant.

Our Objective

To reduce surface water consumption permanently.

Monitored Values of Water Consumption and Recycling

Parameter	MU	2022
Surface water consumption	m^3	5,012,079.00
Drinking water consumption	m^3	70,459.00
Recycled water volume	m^3	430,953.00
Potential of water collection volume	m^3	2,960.00

Biodiversity and Ecosystems

In our industrial site there are places representing old ecological burdens – remnants of the activities of already closed chemical production, which, however, has left us here legacy in a form of hazardous waste dumps. Our interest is that the parts of the site affected this way do not pose a risk to health and the environment. They should be removed or at least properly secured.

- Up to now, remedial work was completed at two sites – ferrous sludge lagoon (2009 and 2018) and the "beta-resin" (waste from production of betanaphthol) lagoon (2014).
- Another example of landscape reclamation within the Synthesia site is the still ongoing project of reclamation of tailing pond No. 5. Its purpose is further usage of by-product from combustion of energy raw materials at Zelená louka heating plant for landscaping in this part of the site.

Title	Origin	Quantity (tons)
Ferrous sludge lagoon	Waste from reduction of aromatic nitro compounds	Approximately 74,000 t removed
Beta-resin lagoon	Waste from production of betanaphthol	Approximately 120,000 t removed

Our Objective

By 2030 to start works on reclamation of the solid waste landfill ***STOH V*** *after has reached its capacity and end of usage.*

Use of Resources and Circular Economy

We are involved in the „Green Company" project, the aim of which is to protect the environment by ensuring take-back and efficient recycling of old electrical appliances, batteries and accumulators, and other collective systems:

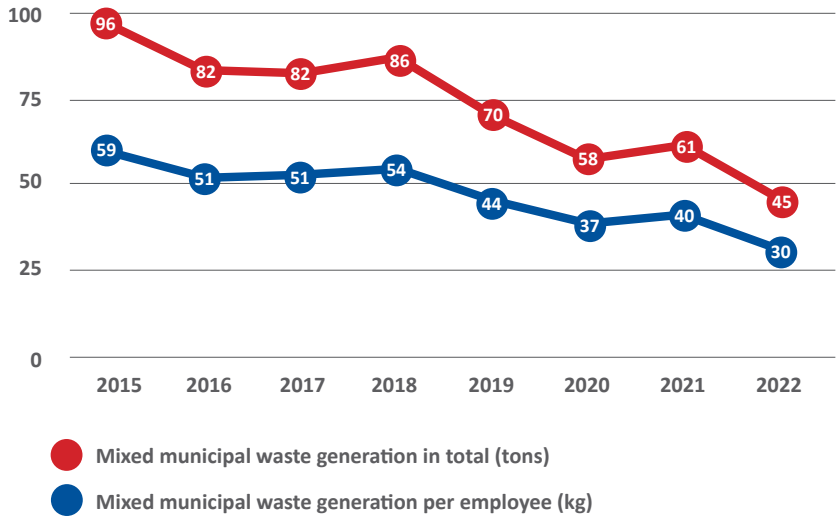
- **EKOKOM** (take-back of packaging materials),
- **EKOLAMP** (collective collection system for old lighting equipment),
- **ELTMA** (collective tire collection system).

Our Objective

Continuous reduction of mixed municipal waste amount.

Environmental Part

Mixed municipal waste generation: 2015 - 2022



Projects We Realized

- Increasing the share of fuels from renewable sources in heat production
- Reconstruction of the Mixing Centre (MC)
- Sale of fly ash into construction mixtures

Monitored Values of Solid Waste Generation

Waste materials	MU	2022
Total waste generated	tons	3,835.5
Hazardous waste generated from it	tons	1,405.1
Mixed municipal waste from it	tons	45.0

Employees

Our company's long-term interest is to create and ensure safe working environment and working conditions by means of suitable organization of occupational health and safety and fire protection. We have an occupational health and safety system in place in accordance with the international standard ISO 45001, which takes specific workplace conditions into account and covers the activities of all employees. We monitor working environment, analyze work-related accident rates, and implement measures to reduce and prevent risks at the workplace. We work intensively on increasing employees' awareness and responsibility for health and safety protection.

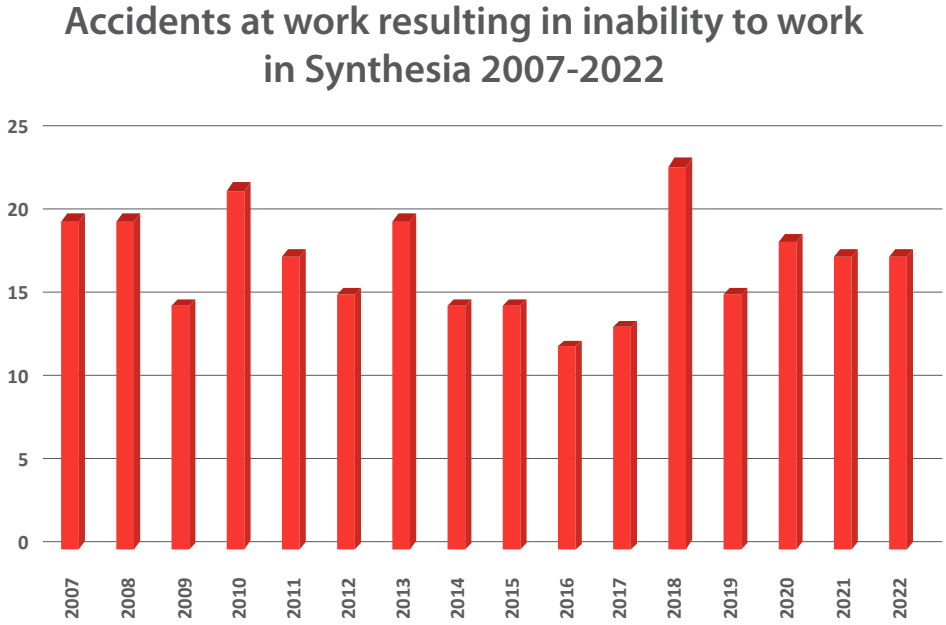
Average number of our employees

Employees		2022
Permanent employees	Men	1,089
	Women	305
Temporary employees	Men	62
	Women	33
Employees with non-guaranteed working hours	Men	9
	Women	2

Our Objective

To keep the frequency of accidents resulting in inability to work per 1 million hours worked at the value lower than 5.

Development of work-related accident rates from 2007 to 2022 (accidents at work resulting in inability to work)



Social Part

Statistics of accidents at work	2022
Registered accident at work	17
Registered work-related diseases	1
Death resulting from accident at work and occupational disease	0
Calendar days lost	1,006
Accident frequency (H-value)	6.52

Projects We Realized

- Replacement of safety helmets including part of accessories
- Replacement of chemical protective clothing for the fire brigade
- Extension of equipment of workplaces for work at height with restraint systems

In our company, we develop employment relationships in accordance with labor and other legal regulations and in accordance with accepted principles of morality. We adhere to equal treatment of all employees throughout the whole HR process, starting with selection of employees and during the employees' employment relationship, including remuneration for work, professional training, and opportunities for career advancement. We require all our employees to adhere to the above-mentioned principles in their employment relationships, and we also commit our employees to adhere to the principles of ethical conduct outlined in our Code of Ethics and Compliance Policy.

Synthesia in the Region

We also direct significant part of the funds we generate to support of our region. Our aim is to be close to the region and to help in the areas requiring support of a strong partner. We want to be belong to it from childhood up to the old age and to be a proud part of our city. Therefore, our activities are mainly aimed at lovers of good culture and entertainment, young sportsmen, active nature lovers or disadvantaged fellow citizens.

Social Part

- General partner of the East Bohemian Theater Pardubice
- Partner of Pardubice City Festival (Velká Pardubická Steeplechase and Golden Helmet)
- Partner of Pardubice youth basketball
- Partner of Pardubice school Svítání for children with mental and combined disabilities
- Partner of sheltered workshop Handico
- Education in the field of chemistry
    - Young Chemist competition
    - Faculty of Chemical Technology of the University of Pardubice student thesis awards
    - industrial chemistry courses for employees

We support development of neighboring villages where we help with construction of new sportsgrounds and playgrounds, cultivation of parks, equipment of municipal authorities and nursery schools and the organization of cultural and sports events.

By means of all these steps Synthesia aims to live up to the principles of a socially responsible company giving to the region much more than only job opportunities.

Prevention and Detection of Corruption and Bribery

When performing our everyday activities, we comply not only with the applicable legislation, but also with the rules of ethics, morality and honest commercial practices. To prevent illegal conduct, we have in place a **Compliance Program**, which also includes our **Code of Ethics**. We also support whistleblowers in accordance with Act No. 171/2023 Coll., on the protection of whistleblowers, coming out from Directive (EU) 2019/1937.

We are committed to review discreetly all allegations of possible misconduct from employees and other persons who perform work for our company, directly or indirectly, through a responsible person, so-called **Compliance Officer**, who also prepares and submits an Annual Report to the Board of Directors and the Supervisory Board.

Company Culture

Direct or indirect discrimination on the grounds of sex, pregnancy and maternity, sexual orientation, racial or ethnic origin, nationality, citizenship, social origin, health, age, religion or belief, property, marital and family status, political or other opinion, membership in political parties and movements, trade unions and employers' organizations is not tolerated in our company. We do not allow incitement, instigation or inducing coercion aiming at discrimination or harassment.

Compliance training is mandatory for all company employees.

Our Objective

No unsolved corruption case.

In 2022 there were no confirmed cases of corruption or bribery involving the company management and its employees.

In the same period there were no noticed or confirmed cases of contracts with business partners that had to be terminated or were not renewed precisely because of infringement of regulations related to corruption or bribery.

In 2022 our Company did not make any political contributions or donations to political parties, political movements and their coalitions and politicians at all levels of politics.

Synthesia, a.s.
Semtín 103
530 02 Pardubice
Czech Republic