Joint Report

on Occupational Health, Safety, and Environment (OHSE)

ORLEN Unipetrol

Contents

1. Introduction to the ORLEN Unipetrol Group

The ORLEN Unipetrol Group (hereinafter the Group) specialises in refining and petrochemical production and sales in the Czech Republic and the Central European region. The Group companies mainly produce and sell refinery products, chemical and petrochemical products, polymers and specialty chemicals. The Group also operates its own transport services and funds its own research and development. ORLEN Unipetrol a.s. is the leading refining and petrochemical Group in the Czech Republic and a major actor in Central and Eastern Europe. The Group focuses on three strategic business segments:

- oil refining and wholesale of refinery products
- petrochemical and agrochemical production
- retail sale of motor fuels

ORLEN Unipetrol a.s. is the 100% owner of the following companies:

- ORLEN Unipetrol RPA s.r.o. – a producer of and trader in refinery, petrochemical and agrochemical products, the largest oil processor in the Czech Republic for a wide range of products with a total annual capacity of 8.7 million tonnes. ORLEN Unipetrol RPA s.r.o. also includes a network of petrol stations ORLEN Unipetrol RPA s.r.o. - BENZINA, registered branch, ORLEN Unipetrol RPA s.r.o. - POLYMER INSTITUTE BRNO, registered branch, and from 1 November 2023, also Kolín Site Section - originally part of PARAMO, a.s.
- ORLEN Unipetrol Doprava s.r.o. – a professional railway carrier not only for chemical and petrochemical products, including related services.
- PARAMO, a.s. – the largest producer of asphalt, asphalt products and process oils, and which also operates a fuel terminal.
- SPOLANA s.r.o. – a member of the ORLEN Unipetrol Group since 2016, a producer of polyvinyl chloride, caprolactam, sulphuric acid and ammonium sulphate.

The following refinery and petrochemical products are the flagship products of the ORLEN Unipetrol Group:

- Refinery products: motor petrol, diesel fuel, light fuel oil, aviation fuel, LPG, asphalts, naphtha, lubricating and fuel oils.
- Petrochemical products: ethylene, propylene, C4 fraction, benzene, high density polyethylene, polypropylene, PVC, DCPD.
- Agrochemical products: ammonia, highly conductive carbon black, caprolactam, sulphuric acid, oleum and ammonium sulphate.

2. Important milestones of the ORLEN Unipetrol Group in 2024

The following events can be considered the most important events of 2024 for the ORLEN Unipetrol Group in terms of occupational health, safety & environmental protection:

- Decision to terminate the uneconomical production of PVC and caprolactam at SPOLANA s.r.o.
- Kolín site – The disposal of 3 kt of oil sludge from two long-term unused tanks (a historical burden after the termination of oil processing at the Kolín site in 1992), and the demolition of these two tanks and five other tanks, including disposal of the foundations and soil contaminated with petroleum substances.
- Across the ORLEN Unipetrol Group companies, pilot preparations for data collection and system configuration for reporting data on the environment, safety, social affairs and corporate governance in order to comply with the requirements for ESG and CSRD reporting.
- Preparation of technologies/operations for oil processing in relation to the transition to non-Russian oil.
- The discovery and successful disposal of unexploded ordnance from the Second World War at the Chempark site without significant damage to the surrounding facilities. The controlled detonation took place in collaboration with expert pyrotechnicians, the Fire and Rescue Service of the Czech Republic, and the Police of the Czech Republic.
- In connection with the selection of a licence for the chemical recycling of plastics, the State Environmental Fund of the Czech Republic issued a decision in 2024 on the provision of a subsidy for a project for the advanced chemical recycling of plastic waste. This decision was a milestone towards fulfilling strategic goals in the area of the circular economy and company sustainability.
- In 2024, a decision was made to fundamentally modify the energy system configuration at the Chempark Záluží site to simplify implementation and provide cost and time savings. As part of this decision, two key separate projects are currently being prepared, aimed at ensuring the gradual phasing out of coal combustion at the site. The first project is the planned conversion to gas of the K19 and K20 boilers, which will modernise operations while also making them more environmentally friendly. A second significant step is the reconfigured T600 project, which will complement a comprehensive approach to transforming the energy infrastructure in line with sustainable goals.
- The ORLEN Unipetrol Foundation commenced collaboration with the Czech Union for Nature Conservation in 2024. The foundation supports the union both financially (supporting eagles and hawks at rescue stations) and through volunteer days attended by ORLEN Unipetrol Group employees.

3. The role of employees

In the ORLEN Unipetrol Group companies, employees are considered to be key players in environmental protection, occupational health and safety and fire protection activities. The individual companies have therefore implemented an effective training system for all employees. Employee training and education are part of the management systems in place and are subject to regular review, evaluation and supplementation in the companies in accordance with the ISO 9001, 14001, 45001 and 50001 standards.

All employees are actively and constantly involved in the creation and application of occupational health, safety and environmental protection.

Proper training does not only apply to the companies' own employees, but also to employees of external companies operating at the production sites. Obligations related to occupational health, safety, environmental protection and fire protection are part of the contracts signed with individual contractors.

Employees are further trained through becoming familiar with policies, operating regulations, and organisational and management standards in environmental protection, health and safety, fire protection, the environmental aspects of their activities, and with the goals and programmes defined for their workplaces.

The active role of employees is also supported by the implemented IDEA platform, through which the Group's employees are motivated to submit their own suggestions to help meet and improve ORLEN Unipetrol Group goals, including in environmental protection and occupational health and safety.

In addition to regular training, employees are now also introduced to issues of occupational safety, the environment and other areas through e-learning courses closely related to specific issues, enabling employees to engage with the particular area in a much clearer manner.

4. Public communication

To communicate with the public, the ORLEN Unipetrol Group primarily uses the following:

- Compliance with corporate social responsibility (CSR) principles by the ORLEN Unipetrol Group companies towards cities and municipalities in the surrounding areas.
- Informing about the company's environmental impact in the surrounding areas through the participation of representatives of the ORLEN Unipetrol Group management in public meetings of the councils of neighbouring municipalities.
- Regular meetings with the mayors of the municipalities in the vicinity of the production plants, during which the participants are informed about all activities, including environmental protection and information on the occurrence of non-standard operating situations.
- Operating the Green Line of the Most and Kralupy nad Vltavou Ecological Centres and internal communication sources (print, intranet and email communication).
- Online connection of the Police of the Czech Republic and the City Police in Litvínov and Most to the company warning system at Chempark Záluží.
- Sending emergency text messages via the Most and Litvínov city information channel.
- Operation warning and alert signalling and sound systems at production sites and in the surroundings areas.
- Sharing information with the public through the Most and Kralupy nad Vltavou Ecological Centres.
- Cross-border cooperation with Saxony through a joint working group and through the Most Ecological Centre.
- Internet and social media: Facebook, X (Twitter), Instagram, LinkedIn and YouTube.
- Interactive and educational programmes for primary and secondary school students, such as A Journey to the Secrets of Oil.

5. Integrated management system policy and integrated management systems

The integrated management system policy is established around the basic values of the ORLEN Unipetrol Group and the ORLEN Group, namely **Responsibility - Development - People - Energy - Reliability**. In line with the strategic focus of the Group companies, the policy includes commitments in occupational health and safety, environmental protection, quality and energy management.

The integrated management system policy is published on the websites of the individual companies.

The management systems in place are an important factor in environmental protection, product quality, occupational safety and health protection, fire protection and major accident prevention. ORLEN Unipetrol Group companies have implemented and certified their quality management systems (QMS), environmental management systems (EMS) and health and safety management systems (HSMS) as a guarantee of their systematic approach towards customers and their needs, product and service quality, environmental protection and occupational health and safety. Most companies have implemented and certified their own energy management systems (EnMS), by which these companies declare their commitment to energy consumption optimisation while at the same time also meeting the legislative requirements of the Energy Management Act.

The aforementioned management systems are certified according to the ISO 9001, ISO 14001, ISO 45001 and ISO 50001 international standards.

In May and June 2022, a recertification audit of the QMS, EMS, HSMS and EnMS management systems was conducted by ORLEN Unipetrol a.s., ORLEN Unipetrol RPA s.r.o. (incl. the BENZINA and POLYMER INSTITUTE BRNO registered branches), ORLEN Unipetrol a.s. Doprava s.r.o. and Petrotrans, s.r.o. The LRQA Česká republika s.r.o. certification organisation confirmed compliance with the system standards and certified all the above companies for the next three-year period, i.e. to 2025, when the next recertification will take place.

PARAMO, a.s. underwent a surveillance audit by LRQA Česká republika s.r.o. covering all three systems – EMS, HSMS and QMS - in June 2024.

From 20 May to 25 May 2024, a QMS, EMS, SMS, and EnMS recertification audit took place at SPOLANA s.r.o. The production of suspension polyvinyl chloride, stabilised vinyl chloride, hydrochloric acid, caprolactam, sulphuric acid and ammonium sulphate was certified. The company was certified for another three-year period until 28 June 2027. The audits were conducted by the LLRQA Česká republika s.r.o. certification company (as a result of the implementation of a single certification company for the entire ORLEN Unipetrol Group).

ORLEN Unipetrol RPA s.r.o. has a certified system of sustainability in the production of motor fuels with bio-based components (ISCC). The last audit, which verified compliance with the system requirements, was conducted in December 2024 by TÜV SÜD Czech, s.r.o. The company has also had a certified sustainability system for the production of monomers and plastics from sustainable raw materials (ISCC PLUS) since November 2021. The system was recertified in October 2024.

ORLEN Unipetrol Doprava s.r.o. has implemented the Safety and Quality Assessment System for Logistics Service Providers (SQAS). The system was successfully recertified in October 2024 (with validity to 2027).

ORLEN Unipetrol Group certified/verified management systems in 2024

Company	ISO 9001	ISO 14001	ISO 45001	ISO 50001	SQAS	RC	ISCC	ISCC PLUS
ORLEN Unipetrol	●	●	●	●		●		
ORLEN Unipetrol RPA (incl. ORLEN Unipetrol RPA - BENZINA, registered branch and ORLEN Unipetrol RPA – Kolín Site Section*)	●	●	●	●		●	●	●
ORLEN Unipetrol RPA – PIB registered branch	●			●				
ORLEN Unipetrol Doprava	●	●	●	●	●	●		
PARAMO – Pardubice*	●	●	●					
SPOLANA	●	●	●	●		●		

**As of 1 November 2023, Kolín Site Section, originally part of PARAMO, a.s., has been integrated into ORLEN Unipetrol RPA s.r.o.*

Certificates are published on the websites of the individual companies.

6. Responsible Business in Chemistry programme – Responsible Care

The Responsible Care (RC) programme is a voluntary, globally accepted initiative by the chemical industry aimed at supporting its sustainable development by increasing the safety of its operating facilities and product transport, and by improving the protection of human health and the environment. The RC programme is a long-term strategy coordinated by the International Council of Chemical Associations (ICCA) and the European Chemical Industry Council (CEFIC) in Europe. The RC programme's contribution to sustainable development was recognised at the World Summit in Johannesburg with the United Nations Environment Programme award.

The national version of the RC programme is the Responsible Business in Chemistry programme officially launched by the Minister of Industry and Trade and the President of the Association of the Chemical Industry of the Czech Republic (ACI CR) in October 1994. The programme has met the requirements of the Responsible Care Global Charter since 2008.

The ORLEN Unipetrol Group, which includes ORLEN Unipetrol a.s., ORLEN Unipetrol RPA s.r.o. (including ORLEN Unipetrol RPA s.r.o. – BENZINA, registered branch, and from 2024 also ORLEN Unipetrol RPA s.r.o. – Kolín Site Section) and ORLEN Unipetrol Doprava s.r.o., defended its right to use the Responsible Care programme logo in 2021. The three companies have the right to use the Responsible Care programme logo until 2025, when they will once again go through the public defence system. The self-assessment by companies to defend their compliance with the Responsible Care principles will in 2025 be newly supplemented/adjusted with areas corresponding to ESRS standards, and companies will also be assessed in the area of EU ESRS standards for sustainability reporting based on this innovation.

PARAMO, a.s. is no longer a member of the Czech Chemical Industry Association and therefore does not use the authorisation, although it continues to comply with the principles.

SPOLANA s.r.o. defended its right to use the RC programme logo for the tenth time in 2022. It successfully defended its right to use the RC programme logo for another five years, i.e. until October 2027, in 2022.

7. Compliance with environmental protection laws

The operating conditions and emission limits set out in the integrated permits for all ORLEN Unipetrol RPA s.r.o. facilities were complied with in 2024.

In 2024, a fire broke out at the ORLEN Unipetrol RPA s.r.o. Ethylene Unit due to a breach of a washing pipe seal of the C5 fraction pump. During the extinguishing process, there was a leak of firefighting water and foam into surface watercourses. There was no violation of the conditions of the integrated permit in connection with this event. The event is being investigated by the Czech Environmental Inspectorate.

SPOLANA s.r.o. acted in accordance with legislation in 2024. There was one instance of emission limits being exceeded during the authorised measurement of emissions. This was the exceeding of the emission limit for HCl and Cl_2 at the exhaust of the thermal waste processing unit. The primary reason for this limit being exceeded was the divergent flow of scrubbing solutions in the flue gas absorption column due to insufficient pump performance. Later measurements showed compliance with emission limits.

All the activities of ORLEN Unipetrol Doprava s.r.o., PARAMO, a.s., and SPOLANA s.r.o., except for the VCM installation and the related WTT equipment at SPOLANA s.r.o., were carried out in full compliance with environmental protection legislation in 2023.

8. Integrated pollution prevention and control

The obligations of selected industrial enterprises in integrated pollution prevention and control (IPPC) are regulated by Act No. 76/2002, as amended. All ORLEN Unipetrol RPA s.r.o. production units, including the refineries in Litvínov and Kralupy nad Vltavou, are subject to the IPPC Act and have valid integrated permits issued by the regional authorities of the Ústí nad Labem and Central Bohemian Regions. These permits are updated on an ongoing basis in response to the requirements of amended legislation and compliance with deadlines, the implementation of investment projects, changes in technological equipment and/or changes in the substances used. A total of 10 changes to integrated permits were issued for ORLEN Unipetrol RPA s.r.o. facilities in 2024. The changes included, but were not limited to, the following:

- Operation of the hydrogen filling station was permitted. Its operation was taken over from the company Air Products.
- Operation of the new DCPD storage facility was approved.
- Operation of new separation equipment at the PP2 production unit was approved.
- The conditions of the integrated permit for the Litvínov Refinery were modified in connection with the replacement of the 4320 E07 apparatus at the Claus unit.
- The conditions of the integrated permit for the Kralupy Refinery were modified in connection with the following planned projects - mixing SAF into aviation kerosene, pumping pentane from vehicle tanks, and optimising the gas oil hydrogenation unit.
- An application was submitted for the modification of the Kralupy Refinery integrated permit in connection with the inclusion of the permit for the management of groundwater from the hydraulic groundwater protection system.
- The descriptions of the facilities or the wording of the conditions of the integrated permits were modified, and updated versions of the operating rules for air pollution sources and the operator's emergency plans were approved.
- The operator of the facility for which the 'ORLEN Unipetrol RPA Kolín Site Section' integrated permit was issued was changed.

Kolín Site Section has a valid integrated permit, and all the conditions imposed in it were complied with in 2024. This integrated permit was updated twice in 2024. The April update concerned an update of the Action Plan – Gradual Removal of Waste from Tanks Tk542, Tk543 and Tk568. The August update included an update to the Company Boiler Air Pollution Operating Regulations, the cancellation of the Specified Stationary Air Pollution Source Operating Regulations - Technology Operated at the Kolín Profit Centre, and a change to the frequency of wastewater sampling from weekly to monthly.

ORLEN Unipetrol RPA s.r.o. and SPOLANA s.r.o. were involved, through a technical working group established by the Ministry of Industry and Trade of the Czech Republic, in the preparation of a document on the best available techniques for large-volume inorganic chemicals.

Valid integrated permits have been issued for all technologies operated by PARAMO, a.s.. The Pardubice Profit Centre obtained a joint integrated permit for energy operations, asphalt operations, fuel operations and oil operations issued by the Regional Authority of the Pardubice Region. In the course of 2024, the (IP) integrated permit was updated once (operating conditions for the K5 boiler, approval of operating regulations for air pollution sources, a new description of the Asphalt Oxidation/Incinerator - Post-combustion Unit stationary source). The Kolín Profit Centre obtained one integrated permit issued by the Regional Authority of the Central Bohemian Region. In 2023, the IP was updated twice (change of owner of the Kolín Profit Centre site).

SPOLANA s.r.o. has obtained a total of four integrated permits for the operation of the facility. The Regional Authority issued three changes to the integrated permits (IPs) in 2024. The changes concerned the approval of updated emergency plans and operating regulations, modifications and rectifications to selected binding conditions, demolition permits, and the cancellation of already fulfilled conditions. In 2024, SPOLANA s.r.o. applied for further changes to the integrated permits, yet some procedures were not completed in 2024.

9. Overview of valid integrated operating permits

Production unit	Integrated permit – (issued by)
ORLEN Unipetrol RPA	
Production of polypropylene and polyethylene	Regional Authority of the Ústí nad Labem Region
Ethylene Unit	Regional Authority of the Ústí nad Labem Region
Ammonia production	Regional Authority of the Ústí nad Labem Region
Production plant – Gasification of mazut	Regional Authority of the Ústí nad Labem Region
Energy Services Unit	Regional Authority of the Ústí nad Labem Region
Dicyclopentadiene production	Regional Authority of the Ústí nad Labem Region
Litvínov Refinery	Regional Authority of the Ústí nad Labem Region
Kralupy nad Vltavou Refinery	Regional Authority of the Central Bohemian Region
Heat and Power Plant T600	Regional Authority of the Ústí nad Labem Region
ORLEN Unipetrol RPA – Kolín Site Section	Regional Authority of the Central Bohemian Region
PARAMO – Pardubice	
Refinery operation, Pardubice Profit Centre	Regional Authority of the Pardubice Region
SPOLANA	
Energy and toxic waste landfill (TWL)	Regional Authority of the Central Bohemian Region
Chlorine and sodium hydroxide production using amalgam electrolysis	Regional Authority of the Central Bohemian Region
Polyvinyl chloride (PVC) production	Regional Authority of the Central Bohemian Region
Caprolactam and sulphuric acid production	Regional Authority of the Central Bohemian Region

10. Emissions into the environment

Pollutant emissions into the environment have stabilized over the last five years thanks to extensive environmental investments made in the previous decade. The individual emissions into various environment components are described in the following chapters.

10.1 Wastewater discharge

At ORLEN Unipetrol RPA s.r.o., the quantity of discharged wastewater corresponds to the long-term average and is partly affected by precipitation. The concentration of pollutants in wastewater has been stable for a long time and their quantities are directly proportional to the quantity of wastewater discharged. In terms of the amount of water and the content of pollutants in it, the 2024 values did not deviate significantly from the values of recent years.

At Kolín Site Section, the volume of discharged wastewater (draining into the Hluboký stream) shows a constant state without significant deviations in 2024. The quality of the discharged water does not exceed the set limits.

The Kralupy Refinery underwent an extensive renovation of the wastewater treatment plant from 2013 to 2015. The treatment plant completed a two-year trial operation in 2016 and 2017, and permanent operation began on 1 January 2018. The current limits for wastewater discharge are valid until 31 December 2027. Since 2022, compliance with wastewater treatment plant limits is assessed based on results from the ORLEN Unipetrol RPA s.r.o. accredited laboratory. All limits and conditions for the operation of the WWTP were also met in 2024.

The amount of pollution discharged by SPOLANA s.r.o. into the Hluboký stream has not changed significantly over the years. The established emission limits for the final discharge of treated wastewater into the River Labe marked K10 were complied with in 2024.

PARAMO, a.s. – the rate of transmitted wastewater pollution has not changed significantly over the years. There was a slight increase in monitored AOX indicator pollution due to the intensive production of oxidised asphalts combined with less dilution water due to reduced rainfall. The established emission limits were complied with in all indicators in 2024.

The wastewater pollution indicators for the BENZINA registered branch cannot be listed as the monitored parameters are inconsistent in the petrol station network and thus cannot be reported in the overview. In the overall evaluation of the individual petrol stations, the monitored parameters were not exceeded in terms of the "m" value.

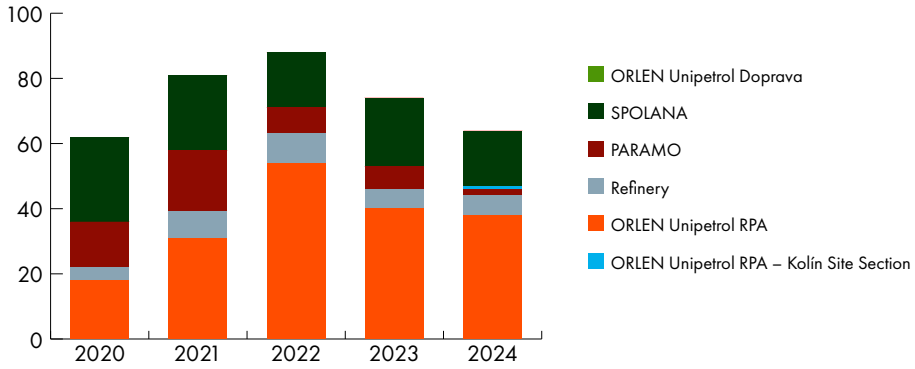
The pollution contained in the ORLEN Unipetrol Doprava s.r.o. wastewater is proportional to the number of treated facilities containing harmful substances.

Pollution discharged in wastewater in the Group – selected indicators (t/year)[1]

Company	Indicator	2020	2021	2022	2023	2024
ORLEN Unipetrol RPA	BOD_5	18	31	54	40	38
Refinery[2)]	BOD_5	4	8	9	6	6
PARAMO – Pardubice*	BOD_5	14	19	8	7	1.99
ORLEN Unipetrol RPA – Kolín Site Section*	BOD_5	-	-	-	-	0.9
SPOLANA	BOD_5	26	23	17	21	17
ORLEN Unipetrol Doprava	BOD_5	0	0	0	0	0
ORLEN Unipetrol Group	BOD_5	**62**	**81**	**88**	**74**	**64**

[1)] BENZINA registered branch is not monitored globally. No representative data can be assessed.
[2)]Only the Kralupy site; there is no direct discharge in Litvínov.

**Since 1 November 2023, Kolín Site Section, originally part of PARAMO, a.s., has been incorporated into ORLEN Unipetrol RPA s.r.o. For the purposes of the annual report, 2024 data for PARAMO, a.s. / ORLEN Unipetrol RPA s.r.o. – Kolín Site Section will be reported separately.*



Company	Indicator	2020	2021	2022	2023	2024
ORLEN Unipetrol RPA	COD_{Cr}	305	301	334	327	333
Refinery[2)]	COD_{Cr}	31	52	48	59	59
PARAMO – Pardubice*	COD_{Cr}	57	65	34	28	10.58
ORLEN Unipetrol RPA – Kolín Site Section*	COD_{Cr}	-	-	-	-	11
SPOLANA	COD_{Cr}	352	321	296	235	197
ORLEN Unipetrol Doprava	COD_{Cr}	26	25	21	17	18
ORLEN Unipetrol Group	COD_{Cr}	**771**	**764**	**733**	**666**	**629**

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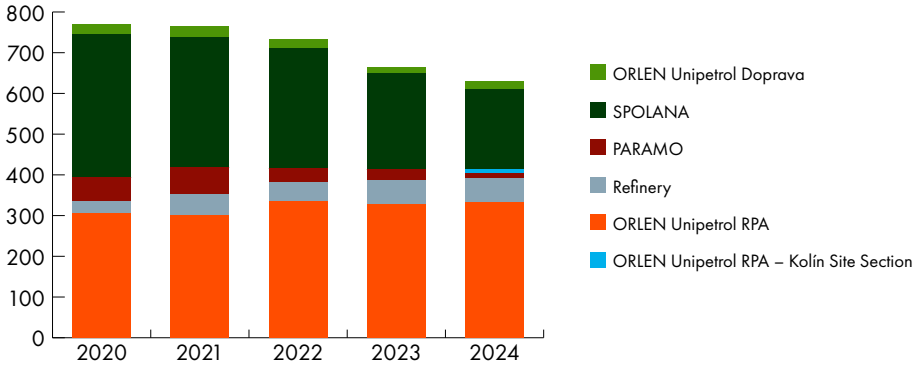

Company	Indicator	2020	2021	2022	2023	2024
ORLEN Unipetrol RPA	SS	41	70	101	69	75
Refinery[2)]	SS	21	29	33	23	23
PARAMO – Pardubice*	SS	11	10	6	5	2.15
ORLEN Unipetrol RPA – Kolín Site Section*	SS	-	-	-	-	3.6
SPOLANA	SS	63	66	36	49	61
ORLEN Unipetrol Doprava	SS	4	3	3	3	4
ORLEN Unipetrol Group	SS	**140**	**178**	**179**	**149**	**169**

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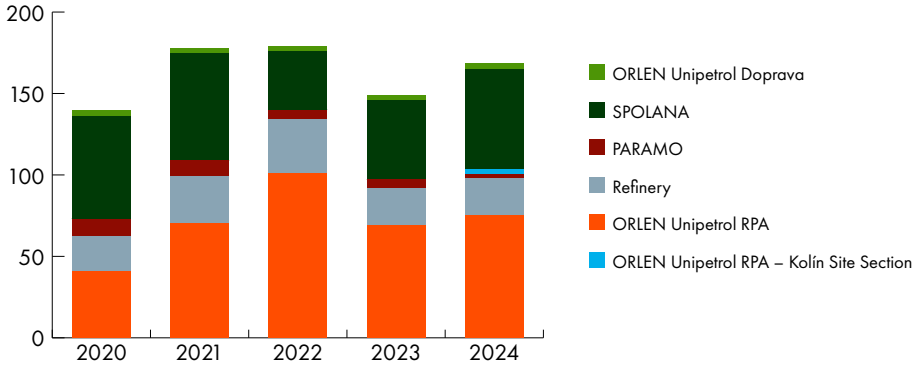

Company	Indicator	2020	2021	2022	2023	2024
ORLEN Unipetrol RPA	oil products	0.4	0.7	2.4	2.4	3.2
Refinery[2)]	oil products	0.3	0.1	1.2	0.7	0.6
PARAMO – Pardubice*	oil products	1.6	0.9	0.8	0.3	0.15
ORLEN Unipetrol RPA – Kolín Site Section*	oil products	-	-	-	-	0.04
SPOLANA	oil products	-	-	-	-	-
ORLEN Unipetrol Doprava	oil products	0	0	0	0	0
ORLEN Unipetrol Group	oil products	**2.3**	**1.7**	**4.4**	**3.4**	**4**

[1)] BENZINA registered branch is not monitored globally. No representative data can be assessed.
[2)]Only the Kralupy site; there is no direct discharge in Litvínov.

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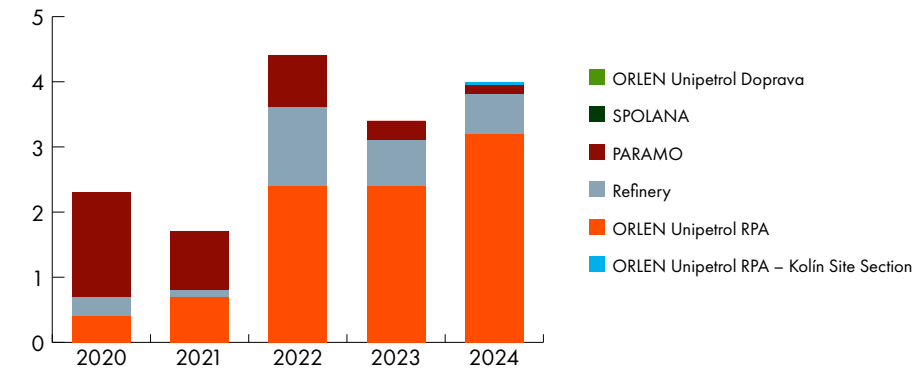

10.2 Waste Management

The quantity of waste generated by ORLEN Unipetrol RPA s.r.o. in 2024, including the refineries, was lower than in preceding years, despite maintenance and repair work taking place in that year. At the Kolín site, there was a decrease in waste generation in 2024 due to the termination of the operation of production units and the activities of contractors involved in demolition work at the site, which became waste producers.

At PARAMO, a.s., there was an increase in waste generation due to the implementation of numerous investment and related activities associated with cleaning equipment and tanks.

The decrease in the generation of hazardous waste by ORLEN Unipetrol Doprava s.r.o. is related to reduced capacity utilisation at the steaming station in Litvínov. The reduction in the generation of other waste was associated with waste prevention, and no decommissioned railway vehicles were disposed of.

The increase in the generation of hazardous waste at SPOLANA s.r.o. over the last few years is related to the decommissioning, sanitation and gradual dismantling of selected technological units of the former amalgam electrolysis plant - hazardous waste generation has been low since 2024. The fluctuations in the generation of other wastes are related to the intermittent disposal of metal waste, while a significant proportion of other waste is made up of the almost constant production of sludge from the wastewater treatment process every year.

At the BENZINA registered branch, the gradual implementation of the new waste management system was completed, meaning the company has become the producer of waste generated from the operation of individual petrol stations. The company is already the producer of all waste generated from the operation of petrol stations.

Waste generation in the Group (t/year) – total

Company	2020	2021	2022	2023	2024
ORLEN Unipetrol RPA	5 439	4 786	4 207	5 141	4 766
Refinery	6 092	4 671	4 712	6 458	6 245
PARAMO – Pardubice*	796	1 087	829	627	684
ORLEN Unipetrol RPA – Kolín Site Section*	-	-	-	-	103
SPOLANA	16 152	12 854	11 147	9 997	9 241
ORLEN Unipetrol Doprava	362	564	213	353.29	246
BENZINA registered branch	18	35	40	3 868	4 807
ORLEN Unipetrol Group	**28 859**	**23 997**	**21 145**	**26 444**	**26 056**

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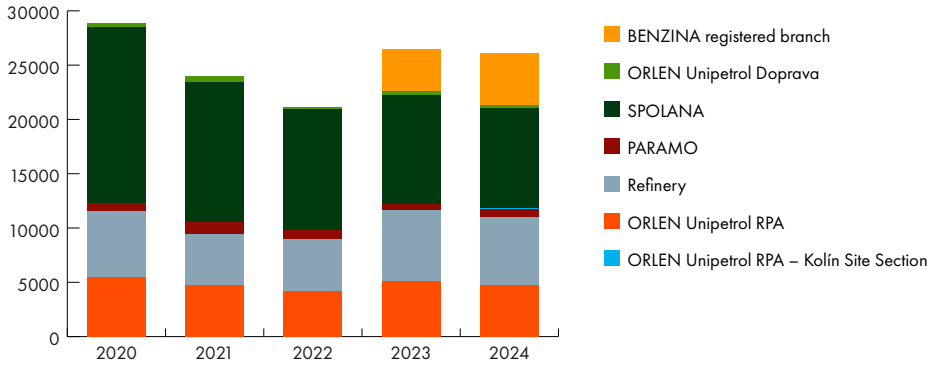

Waste generation in the Group (t/year) – hazardous waste only

Company	2020	2021	2022	2023	2024
ORLEN Unipetrol RPA	651	584	269	595	492
Refinery	2 109	1 608	1 871	2 104	2 375
PARAMO – Pardubice*	316	533	412	219	342
ORLEN Unipetrol RPA – Kolín Site Section*	-	-	-	-	28
SPOLANA	3 020	2 205	1 763	238	179
ORLEN Unipetrol Doprava	269	375	129	263.32	139
BENZINA registered branch	2	30	25	308	885
ORLEN Unipetrol Group	**6 367**	**5 335**	**4 469**	**3 727**	**4 440**

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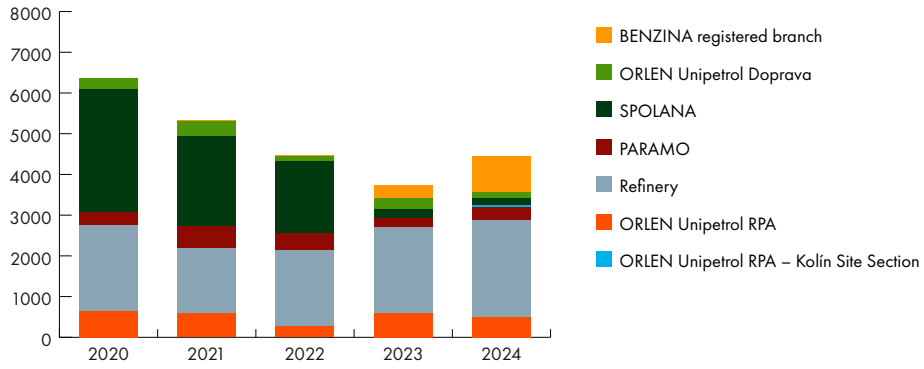

10.3 Air protection

In 2024, emissions of all pollutants stabilised at ORLEN Unipetrol RPA s.r.o. and the refineries, with minor fluctuations caused by changing operating conditions. The slight increase in solid pollutants was caused by the more frequent operation of the bypass at the T700 heating plant. In 2024, the Kolín site generated almost no air pollution – this was due to the placement of combustion sources of air pollution in cold standby at the decommissioned Kolín site in 2023.

At PARAMO, a.s., both natural gas and heating oil (TOT-R2M) were burned at the Pardubice Profit Centre boiler facilities. The slight decrease in SO_2 and NOx emissions is related to the choice of fuel for boiler K1 (a significant preference for natural gas as fuel). The increase in fugitive VOC emissions is related to the higher quantities of stored diesel and petrol.

As a result of the termination of the operation of coal-fired boilers at SPOLANA s.r.o. in December 2019, emissions of SO_2 and solid substances from the company's energy generation were already significantly reduced in the past, while NOx emissions are also decreasing. The higher emissions of solids in 2021 were caused by the penetration of substances through the terminal equipment. In 2024, sulphur dioxide emissions from the sulphuric acid operation were lower due to the partial operation of this source as a result of ongoing modernisation work at the production facility.

The amount of VOCs from the cleaning and steaming station for road and rail tankers at ORLEN Unipetrol Doprava s.r.o. was similar to the previous three years in 2024.

BENZINA registered branch continued to introduce new pumps equipped with an automatic Stage II petrol vapour recovery control system (VRSM).

Air pollution in the Group (t/year)

Company	Indicator	2020	2021	2022	2023	2024
ORLEN Unipetrol RPA	NO_x	2 039	1 820	1 917	1 830	1 656
Refinery	NO_x	365	465	502	407	403
PARAMO – Pardubice*	NO_x	24	20	19	21	19
ORLEN Unipetrol RPA – Kolín Site Section*	NO_x	-	-	-	-	0
SPOLANA	NO_x	335	404	360	191	233
ORLEN Unipetrol Doprava	NO_x	0	0	0	0	0
ORLEN Unipetrol Group	NO_x	**2 763**	**2 709**	**2 798**	**2 449**	**2 311**

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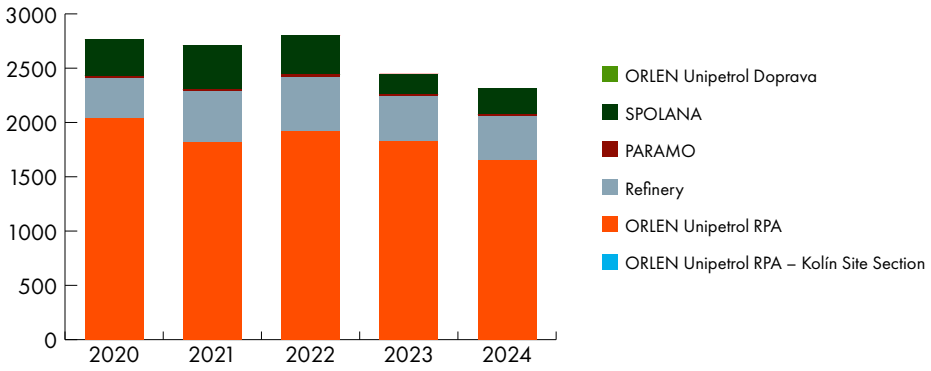

Company	Indicator	2020	2021	2022	2023	2024
ORLEN Unipetrol RPA	SO_2	1 317	1 876	702	714	670
Refinery	SO_2	1 707	1 974	2 347	2 442	1 838
PARAMO – Pardubice*	SO_2	1.1	0.9	0.35	3.09	1.73
ORLEN Unipetrol RPA – Kolín Site Section*	SO_2	-	-	-	-	0
SPOLANA	SO_2	148	198	146	105	48
ORLEN Unipetrol Doprava	SO_2	0	0	0	0	0
ORLEN Unipetrol Group	SO_2	**3 073**	**4 021**	**3 195**	**3 264**	**2 558**

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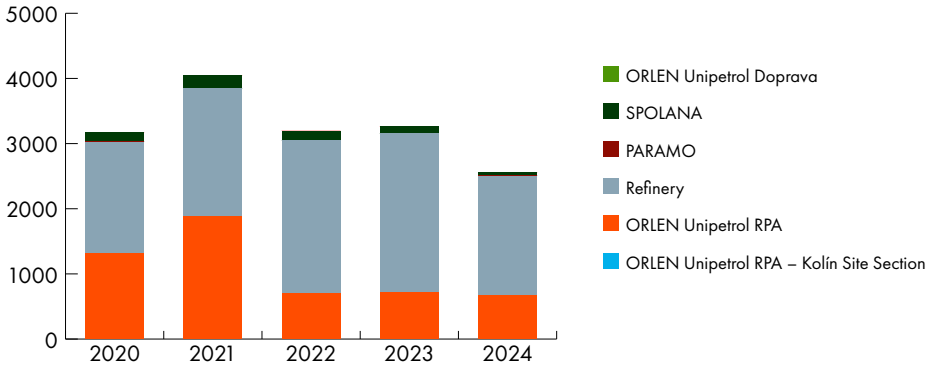

Company	Indicator	2020	2021	2022	2023	2024
ORLEN Unipetrol RPA	Solid compounds	100	12	6	12	27
Refinery	Solid compounds	20	46	45	38	31
PARAMO – Pardubice*	Solid compounds	0.4	0.3	0.7	0.439	0.152
ORLEN Unipetrol RPA – Kolín Site Section*	Solid compounds	-	-	-	-	0
SPOLANA	Solid compounds	1	13	4	2	3
ORLEN Unipetrol Doprava	Solid compounds	0	0	0	0	0
ORLEN Unipetrol Group	Solid compounds	**121.4**	**72.3**	**55.7**	**52.5**	**61**

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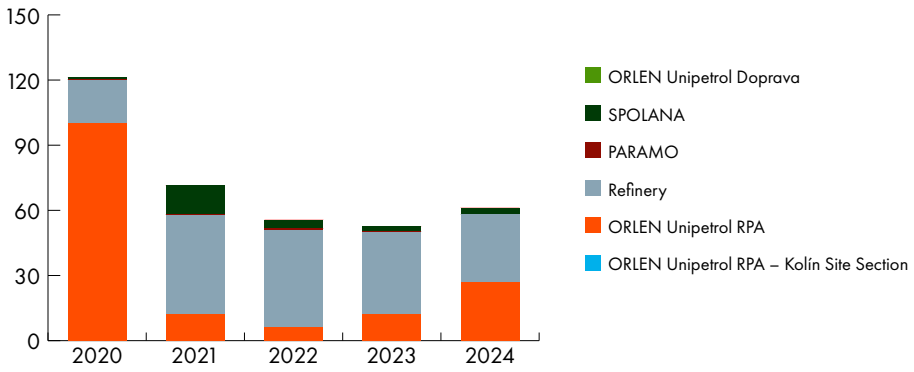

Company	Indicator	2020	2021	2022	2023	2024
ORLEN Unipetrol RPA	VOC	4	14	11	21	29
Refinery	VOC	87	93	97	100	100
PARAMO – Pardubice*	VOC[1)]	297	274	199	156	168
ORLEN Unipetrol RPA – Kolín Site Section*	VOC	-	-	-	-	0
SPOLANA	VOC[1)]	49	57	50	37	46
ORLEN Unipetrol Doprava	VOC	1	0.8	0.7	0.8	0.7
ORLEN Unipetrol Group	VOC	**438**	**439**	**357**	**315**	**344**

[1)]90% are fugitive emissions reported only based on solvent purchases in the relevant calendar year.

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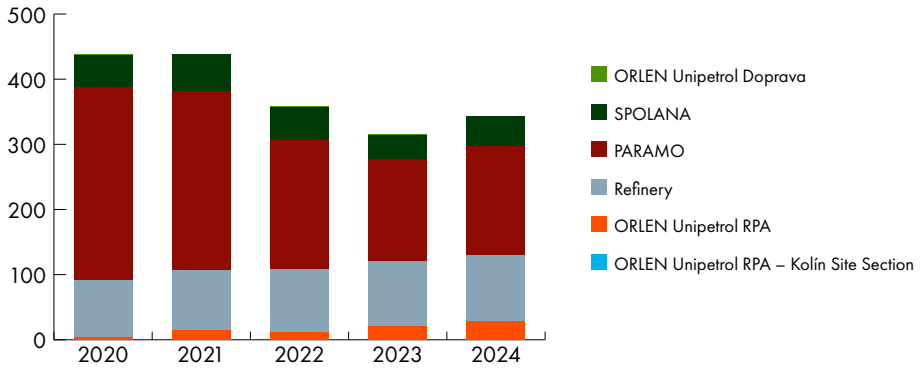

10.4 CO_2 emissions and allowance trading

The regulation of carbon dioxide emissions according to the EU Emissions Trading System (EU ETS).

The fourth trading period (2021-2030) is divided into two phases. For the first phase (2021-2025), the initial allocation of free allowances was carried out based on decisions taken by the Ministry of the Environment that may be revised from time to time based on actual production levels according to the Allocation Level Adjustment Statements. The materials for the basic allocation for the second phase (2026–2030) were submitted to the Ministry of the Environment in 2024.

Initial allocation of free allowances to ORLEN Unipetrol Group companies for the 2021–2025 period, actual CO_2 emissions 2021–2025

Initial allocation of free allowances (thousand units) real emissions (kt/year)	ORLEN Unipetrol RPA Petrochemicals and Agrochemicals	ORLEN Unipetrol RPA Litvínov Refinery and Kralupy Refinery[1)]	ORLEN Unipetrol RPA – Kolín Site Section*	PARAMO – Pardubice*	SPOLANA	ORLEN Unipetrol Group
Total allocation for the 2021–2025 period	**4 581[1)]**	**3 449**	**-**	**158**	**272**	**8 460**
2021: real CO_2 emissions	3 326	917	-	40	82	4 365
2022: real CO_2 emissions	3 277	875	-	27	71	4 250
2023: real CO_2 emissions	3 039	922	-	24	46	4 031
2024: real CO_2 emissions	2 611	858	0.005	22	61	3 552

[1)] ORLEN Unipetrol RPA s.r.o. and Česká rafinérská merged in 2017. The refineries operated as a registered branch of the Refinery until 31 December 2018.

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The emissions calculation for 2024 shows that the allocated annual allowance amount at ORLEN Unipetrol RPA s.r.o., including the refinery units, covers approximately 45% of annual emissions. The deficit of allowances for 2024 is addressed via ORLEN S.A., which handles emission allowance trading within the ORLEN Unipetrol Group. Applications for the free allocation of allowances for the fourth EU ETS trading period were independently verified and submitted to the ministry in 2019. The free allowances were allocated after the relevant benchmarks and correction factors were updated over the course of 2021, and their amount was further adjusted according to the outputs from the verification of the activity level reports for facilities in 2019-2024. Audits of operating data were carried out for 2020-2024 for the purpose of submitting an application for indirect cost compensation due to the pass-through of emissions costs into electricity prices.

At the Kolín site, there was a decrease in CO_2 emissions in 2024 due to the shutdown of production units and the placement of combustion sources of air pollution in cold standby at the decommissioned Kolín site in 2023.

At PARAMO, a.s., there was a noticeable but slight decrease in CO_2 emissions for 2023 compared to preceding years due to the preference for natural gas as fuel in boiler K1.

Since 2020, SPOLANA s.r.o. has reduced CO_2 emissions due to the termination of operation of coal-fired boilers and, in 2023, CO_2 emissions were reduced due to production plant shutdowns.

10.5 Other greenhouse gases

All Group companies operate their production facilities in accordance with ozone layer protection requirements and in accordance with applicable international agreements. Refrigerants have already been replaced by more environmentally friendly media in previous years.

11. Management of primary sources of raw materials and energy

To conserve primary raw material and energy sources, the ORLEN Unipetrol Group follows sustainable development principles and focuses its basic strategy on innovative methods leading to the optimisation of energy and material inputs while promoting continuous improvement of environmental performance and increased energy efficiency. The Group companies, whose energy management systems have been successfully certified in accordance with ISO 50001, have committed to complying with these principles as part of the Integrated Management System Policy.

ORLEN Unipetrol RPA s.r.o. has prepared a strategy for reducing greenhouse gas emissions as part of the Decarbonisation programme. As part of the ORLEN corporate Group, ORLEN Unipetrol a.s. has committed to achieving the carbon neutrality goals by 2050. One important step is the continuous reduction of energy losses. A key activity for reducing energy losses is the "Increased Reliability and Efficiency of Vapour Condensate Systems" programme. As part of this programme, steam leaks at all production sites are continuously monitored and their elimination promptly initiated. Energy leakage monitoring includes replacing non-functioning condensate drainers, repairing steam leaks and replacing damaged or adding missing insulation. Leaks through piping valves are also monitored as part of the programme. The Group has been placing increasingly more emphasis on introducing energy-efficient and innovative solutions to optimise energy utilisation. The vast majority of these activities are carried out in the form of

investment projects. At the same time, the area of digitalisation is taking off and will also contribute to optimising energy utilisation. The New Boiler Facility in the Ethylene Unit project was completed and the facility was commissioned in 2021. The new boiler facility enables stable operation of the Ethylene Unit in compliance with legislation. 2021 also saw the completion of the second implementation phase for the CombustionONE system for combustion control on pyrolysis furnaces, followed by the launch of the third phase on the remaining furnaces, i.e. BA-101 – BA-105. The complete installation was finished in 2024. At the same time, the installation of CombustionONE on the CCR (Continuous Catalyst Regeneration) unit was completed in 2022, and after its successful commissioning, further furnaces at the Litvínov and Kralupy refineries are being considered. During a shutdown in 2024, the complete modernisation of the vacuum distillation unit took place, including the installation of the CombustionONE system, which is already the standard for optimising combustion processes at suitable furnaces at ORLEN Unipetrol RPA s.r.o. In addition to the installation of the combustion optimisation system, the vacuum column was also replaced. The modernisation of this unit will help improve its energy efficiency.

Also in 2024, preparatory work continued on the New Energy Source project at Chempark Záluží – a new steam-gas heating plant that will mean a shift away from coal and a transition to gas which, in combination with the latest technologies, will significantly reduce emissions and their discharge into the air (especially CO_2 emissions). As part of this project, a study was carried out to select and define the most appropriate solution from both the technical and economic perspectives. Preparations are currently under way for the implementation of the project. In 2024, the gasification of the existing heating plant was initiated with the replacement of two coal boilers with gas ones. As part of the work on the new heating plant, a variant using hydrogen as fuel will also be prepared. In addition to the new steam-gas heating plant, the construction of solar energy sources is also being considered, both in the production areas and at the petrol stations. State-of-the-art energy sources such as SMRs (Small Modular Reactors) and geothermal sources are also being considered, yet are still in the phase of ideas for future development. The main goal of these activities is to fulfil the company's carbon neutrality and maximum energy efficiency strategy.

Another equally important project in terms of emissions reduction, which is being coordinated by the Energy Department, is the installation of an electrolyser powered by renewable electricity sources, which will be used by ORLEN Unipetrol RPA s.r.o. to start the production of green hydrogen (RFNBO hydrogen). In the future, this hydrogen should also be supplied to petrol stations, where it will be used as a future fuel for cars.

Advanced process control (APC) continues to be developed. The complete installation of the APC system took place at the T700 heating plant in 2024. This will significantly contribute to the optimisation of operations and savings in primary raw materials, especially lignite. The APC system at the T700 will focus on the combustion process and its optimisation. As an extension of the APC system, projects are under way to implement PWO (Plantwide Optimiser), which will connect APC systems and thus allow for further optimisation improvements.

ORLEN Unipetrol RPA s.r.o. uses the Visual MESA tool for optimal energy consumption and utilisation. This system enables the optimal use of all energy sources across the entire Chempark Záluží site, starting with energy generation at the T700 and its consumption at all production units, i.e. the refinery, petrochemical and agrochemical units. The Visual MESA tool is used to optimise energy utilisation on a daily basis. The fact that the created model evaluates all technologies in operation as a whole and seeks to optimise the entire site continues to be a significant benefit. It also enables the identification of more ideas for optimisation.

Within the units, great emphasis is placed on optimal capacity utilisation with a positive contribution to the energy efficiency of production. Projects aimed at increasing the reliability of the facilities continue in this area.

In terms of innovative projects, the search for, preparation and implementation of projects for the use of low-energy/waste heat continues. The largest project implemented in this area is the Utilisation of Flue Gas Heat at Kralupy Refinery. The design documentation preparation (BDEP phase) for this project was completed in 2022, and the connection points implemented during a refinery shutdown. In 2023, the project moved to the final implementation phase, which is currently under way and will be completed by mid-2025, when this unique unit will be put into operation. Another project is The Use of Medium-Pressure Steam at the Ethylene Unit, which aims at reducing energy losses during steam reduction by injection reduction. This project is now on hold due to the reduced volume of steam, which is being considered for the future turbine. During the stoppage, which will take place at the petrochemical plant in 2025, there will be a planned check of steam measurement for reduction and other activities that should help move the project forward. As part of Energy Efficiency, the replacement of conventional reduction valves with rotary ones is being considered, as well as the use of heat from flue gases and other heat sources. The examined activities in waste heat utilisation include, for example, an investigation into the use of the ORC (Organic Rankine Cycle) to generate electricity from waste heat. In cooperation with an external company, research is under way to install an ORC unit on an ethylene unit, which will help us decide on the suitability of installing these technologies that achieve full performance and thus enable the use of waste heat from large streams. In the event of positive outcomes, it is planned that the projects will be further developed into the implementation phase, not only at ORLEN Unipetrol RPA s.r.o. but throughout the ORLEN Group, where regular workshops are being held for the sharing of information and experience.

An important part of energy efficiency is the installation of new and efficient devices that have the potential to save electricity.

In the field of energy management and reducing energy intensity, ORLEN Unipetrol RPA s.r.o., Kolín Site Section, is focusing primarily on thermal and electrical energy. The consumption of all the above energy types is monitored regularly, with consumption recorded and assessed in daily and monthly reports. Energy costs are monitored and assessed on a monthly basis. In the field of thermal management, measurements resulted in the replacement of non-functional condensate drains in 2024. The reconstruction of the output water temperature regulation in the heat exchange stations for building 'U' and gatehouse No 1 was also carried out. The reconstruction of the public lighting at the site was commenced in 2024. Sodium lamps have been replaced with LED lighting. This measure has reduced electricity consumption. The Kolín Site Section will receive EnMS certification in June 2025.

The BENZINA, registered branch focuses primarily on water, electricity and gas consumption at petrol stations. Energy consumption has been regularly monitored since 2017. IoT meters have been gradually installed to monitor the consumption of individual media (electricity, water, gas) at selected petrol stations (Energy Management System) since 2018. The idea behind the project is to obtain accurate data on the consumption of individual media and to use these data for the regular evaluation of energy consumption at petrol stations through online monitoring. Data obtained in this manner will be used to compare and evaluate opportunities for reducing consumption. Discussions and an exploration of options for implementing a suitable tool for energy optimisation at petrol stations began in 2024. Energy management efforts include a task manager for evaluating and monitoring deviations in energy consumption, successfully launched on a pilot basis. Electricity use at petrol stations is also optimised through the implementation of low-energy appliances and technologies (LEDs). The adopted measures meant that electricity consumption was reduced by 2% in 2024 compared to 2023. The implementation of photovoltaic power plants (PV) at petrol stations (the company's own pilot project in cooperation with ORLEN Unipetrol RPA s.r.o. representatives) began in 2023. The first installation was carried out at the Slaná u Semil petrol station in 2024. A project for the installation of another six to eight photovoltaic power plants is also being implemented using funding from the RES+ subsidy fund. Other photovoltaic power plant projects

have been assessed in connection with a project to develop e-mobility infrastructure to 2030, where the use of the generated energy is anticipated for charging electric vehicles.

An authorised Facility Management employee carries out regular monitoring of energy consumption (electricity, water, heat and gas) at the Polymer Institute Brno registered branch. Secondary meters (mainly water meters) have been installed to make individual consumption monitoring more accurate and to detect, address and verify any differences better and faster. In addition, the gradual reduction in electricity consumption is continuing through the replacement of old with new low-energy lighting (LEDs). Nevertheless, in 2024 there was an increase in total electricity consumption of 53 MWh compared to 2023, due to higher consumption in research (by 41%, or 22.2 MWh) and in production (by 9.1%, or 94 MWh). Water consumption increased by 3.8% (285 m^3) in 2024 compared to the preceding year. Nevertheless, this was the second-lowest consumption in the past 20 years. Heat consumption increased slightly (by 2.6%, or 61 GJ) in 2024 compared to 2023, due to climatic conditions, but was still one of the lowest consumption levels in the past 20 years. The established isothermal heating regime remains in effect – the heating is controlled according to the outdoor temperature with short, intense ventilation periods. Significant savings have once again been achieved in natural gas consumption. Total consumption decreased to 86.4% (savings of 1,443 m^3) of the 2023 level, and actually decreased to 76.6% (savings of 2,800 m^3) compared to 2022.

In terms of energy performance improvement, PARAMO, a.s. has long been implementing projects that contribute to reducing steam consumption for heating products and pumping lines (using heat from its own steam produced at the asphalt incinerator, and electric heaters for occasional use at the pumping route). The lengths of the steam pipeline routes have been optimised (reducing pipeline heat losses) and thermal insulation has been installed on selected tanks. Great attention is also paid to insulation as part of the Zero Tolerance for Steam Leaks and Missing or Damaged Insulation or Malfunctioning Condensing Units project. New feed pumps have been installed at PARAMO, a.s. to reduce electricity consumption. The renovation of the HV and LV substations to improve the reliability and safety of electricity distribution at the company was initiated and completed. In addition, the programme for replacing discharge lighting with LEDs with significant potential for electricity savings continues. The heat savings achieved by installing a new BOSCH steam boiler in the energy system together with the construction of new steam piping for the selective refining and paraffin refining department in the oil production operation are equally important. These activities are part of the energy saving and technological process optimisation projects, in line with the ongoing revitalisation programme for the PARAMO, a.s. complex.

SPOLANA s.r.o. has implemented and successfully defended the EnMS system, a group of ISO 50 000 standards. In 2024, it was decided to terminate the uneconomical production of PVC and caprolactam, along with the ongoing investments and measures related to it. The vital and ongoing project for the modernisation of the sulphuric acid operation continued until the end of 2024, after which sulphuric acid production was restored. Steps were taken to optimise the production facilities in line with the comprehensive change in energy and water consumption. Surplus steam was used as the main steam source, and the NEC was used as a backup. To optimise the use of the heat produced, preparations for a steam turbine project were initiated, with commissioning planned for 2027. SPOLANA s.r.o. maintains an action plan for decarbonisation. As part of the strategic declaration backed by the action plan for the decarbonisation of SPOLANA s.r.o. in the area of direct CO_2 emissions savings, SPOLANA s.r.o. will thus achieve a favourable situation in which the transition to emission-free sources in line with the Group's decarbonisation goal by 2050 will not likely involve significant investments.

In energy management, ORLEN Unipetrol Doprava focuses mainly on optimising the consumption of fuel, electricity and process and heating steam.

The replacement of the lighting on lighting towers with LED lights continued in 2024, with a consequent positive impact on electricity consumption.

The investment activities for the modernisation of the locomotive fleet continued. In 2024 and at the beginning of 2025, the company incorporated four more Siemens Vectron MS locomotives into its fleet (bringing the total to 11), thus completing its extensive programme to renew its rolling stock, which began in 2017. These powerful and safe locomotives feature modern technologies, such as the European Train Control System (ETCS). The ETCS system has been an essential technical requirement for locomotives to run on important corridors since 1 January 2025. The locomotives are equipped with electricity meters that also enable energy recovery measurement. In total, the locomotives recovered 12.06% more MWh of electrical energy from the total traction energy consumed in 2024 compared to the preceding year.

In accordance with the ORLEN Unipetrol Group environmental policy, these modern traction systems are contributing to reducing CO_2 emissions. By purchasing electric locomotives, ORLEN Unipetrol Doprava is fulfilling its strategic goal of decarbonising operations, reducing energy consumption and maintaining competitiveness in the field of rail transport services.

ORLEN Unipetrol electrified its railway siding at the Litvínov site at the end of 2024. ORLEN Unipetrol Doprava has taken over the electric traction lines over part of the railway siding – the part of the siding at the transfer station that connects the plant and state railway networks. The electrification of this section allows the Vectron locomotives to independently depart/arrive from/to trains, eliminating the need to use a diesel locomotive and thus improving operational efficiency, reducing energy consumption and eliminating the emissions burden on the environment.

Water consumption in the Group (million m^3/year)

Company	2020	2021	2022	2023	2024
ORLEN Unipetrol RPA	16.1	17.8	18.9	18.4	18.6
Kralupy Refinery	1.9	2.1	2.1	2.2	2.1
PARAMO – Pardubice*	0.3	0.3	0.2	0.2	0.15
ORLEN Unipetrol RPA – Kolín Site Section*	-	-	-	-	0.005
SPOLANA	12.1	12.2	11.4	9.0	8.1
ORLEN Unipetrol Group	**30.4**	**32.4**	**32.6**	**29.8**	**29**

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A positive trend is seen mainly in specific energy consumption thanks to the utilisation of production capacities. This always has a positive impact on energy and raw material use, and so it is more appropriate to monitor the ratio of energy consumption in tonnes of oil equivalent (TOE) to tonnes of production per year:

Energy consumption in the Group (thous. TJ/year)

Company	2020	2021	2022	2023	2024
ORLEN Unipetrol RPA	8.6	9.9	9.2	9.17	8.4
Litvínov Refinery	8.1	9.3	9.8	9.7	8
Kralupy Refinery	7.1	8.7	7.7	8.1	8.3
PARAMO – Pardubice*	0.83	0.903	0.583	0.464	0.414
ORLEN Unipetrol RPA – Kolín Site Section*	-	-	-	-	0.0232
SPOLANA	2.0	2.0	1.8	1.2	1.2
ORLEN Unipetrol Group	**26.6**	**30.8**	**29.1**	**28.6**	**27.3**

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Specific energy consumption in the Group (TOE/t of production per year)

Company	2020	2021	2022	2023	2024
ORLEN Unipetrol RPA	0.158	0.145	0.140	0.15	0.15
Litvínov Refinery	0.050	0.048	0.046	0.047	0.0504
Kralupy Refinery	0.059	0.063	0.059	0.058	0.057
PARAMO – Pardubice*	0.148	0.154	0.131	0.118	0.11
ORLEN Unipetrol RPA – Kolín Site Section*	0.304	0.331	0.376	n. a.	n. a.
SPOLANA	0.119	0.109	0.113	0.116	0.153

**Since 1 November 2023, Kolín Site Section, originally part of PARAMO, a.s., has been incorporated into ORLEN Unipetrol RPA s.r.o. For the purposes of the annual report, 2024 data for PARAMO, a.s. / ORLEN Unipetrol RPA s.r.o. – Kolín Site Section will be reported separately.*

12. Environmental investments

Environmental investments are defined as investment projects directly triggered by the requirements arising from environmental protection legislation, which are closely related to the application of integrated pollution prevention and control in practice or have a significant positive effect on the environment.

The following environmental investments were made in the Group in 2024.

Refinery

In Refinery, no environmental protection investment projects were implemented in 2024.

ORLEN Unipetrol RPA s.r.o.

Environmental protection investment projects amounting to CZK 7 million were implemented at ORLEN Unipetrol RPA s.r.o. The most important ones included:

- new CO_2 flow measurement on the cold chimney of the POX production facility

Significant investments with a markedly positive environmental impact include preparations for the gasification of two boilers at the T700 heating plant and preparations for the construction of the new T600 energy source. Preparatory work (permitting processes, project preparation and tender procedures) is currently being carried out.

At ORLEN Unipetrol RPA s.r.o., Chempark Záluží, extensive demolitions of decommissioned operations and unnecessary technologies took place, in addition to environmental investments. The company thus acquired potential development areas for future investment construction. The most significant activities included the demolition of unused cooling towers and a former alcohol production facility.

A number of other measures with a positive environmental impact were implemented and funded as part of equipment maintenance operating costs.

PARAMO – Pardubice / ORLEN Unipetrol RPA – Kolín Site Section

Environmental protection investment projects amounting to CZK 74.84 million were implemented at PARAMO, a.s. and ORLEN Unipetrol RPA s.r.o. – Kolín Site Section. The most important ones included:

- Replacement of K2 boiler (with K5 boiler, power engineering)
- Energy savings - steam distribution optimisation
- Fire alarm and gas detection
- Filling the AC system with HVO100 (Fuels operation)
- AR12 and AR13 tank revitalisation (Asphalts operation)

SPOLANA s.r.o.

Environmental protection investment projects amounting to CZK 70 million were implemented at SPOLANA s.r.o. The most important ones included:

- the optimisation of air use for oxychlorination – ongoing
- a new filling point for sulphuric acid dispatch - ongoing
- the renovation of cooling systems - ongoing

BENZINA registered branch

The BENZINA registered branch implemented environmental protection investment projects amounting to CZK 129.1 million. The investment projects focused primarily on:

- renovation of the petrol station sewers
- installation of new vehicle washing facilities
- general reconstruction of biological wastewater treatment plants
- the replacement of emergency collectors, fuel tanks and distribution systems
- modification of the drainage in water-proofed areas

Environmental protection investment costs in the Group (CZK mil./year)

Company	2020	2021	2022	2023	2024
ORLEN Unipetrol RPA	398	319	385	34	7
Refinery	60	18	1	0	0
PARAMO – Pardubice*	2.7	0.8	9.1	46.6	74.84
ORLEN Unipetrol RPA – Kolín Site Section*	-	-	-	-	0
SPOLANA	22.2	21	115	182	70
BENZINA registered branch	6.7	5.1	89.3	188.1	129.1
ORLEN Unipetrol Group	**490**	**364**	**599**	**451**	**281**

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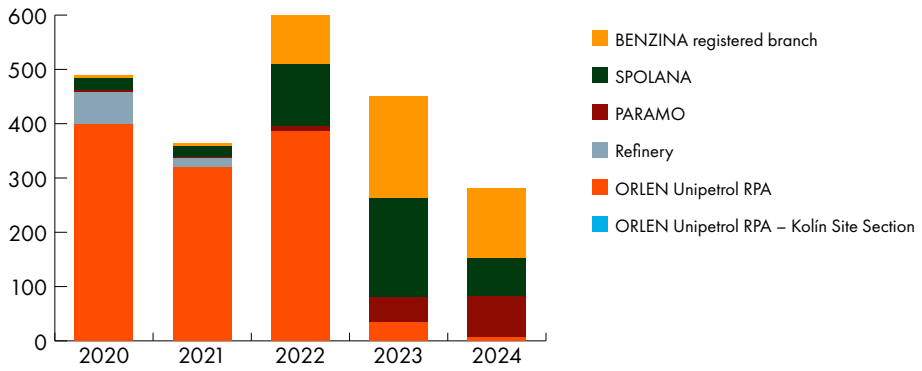

13. Environmental operating costs

Costs associated with the operation of facilities for air protection, wastewater treatment, waste management, operation of environmental management systems, monitoring of substances discharged into the environment, environmental impact assessment (EIA), integrated pollution prevention and control and other related environmental activities are referred to as environmental operating costs.

Newly installed modern technologies with a high degree of raw material conversion, reduced waste volume and high energy efficiency have resulted in an overall reduction in environmental operating costs compared to the previous decade. Environmental operating costs have been more or less stable over the past decade, except for 2023 and 2024, when there was a significant increase in operating costs due to the large number of demolitions of unnecessary facilities and decommissioned parts of operations.

Environmental protection operating costs in the Group (CZK mil./year)

Company	2020	2021	2022	2023	2024
ORLEN Unipetrol RPA	601	661	710	1 028	1 156
Refinery	77	73	83	196	181
PARAMO – Pardubice*	25.8	28.7	19.6	16.1	21.72
ORLEN Unipetrol RPA – Kolín Site Section*	-	-	-	-	0.67
SPOLANA	144	139	123	141	131
BENZINA registered branch	8	7	9	10	8.2
ORLEN Unipetrol Group	**855**	**909**	**945**	**1 391**	**1 498**

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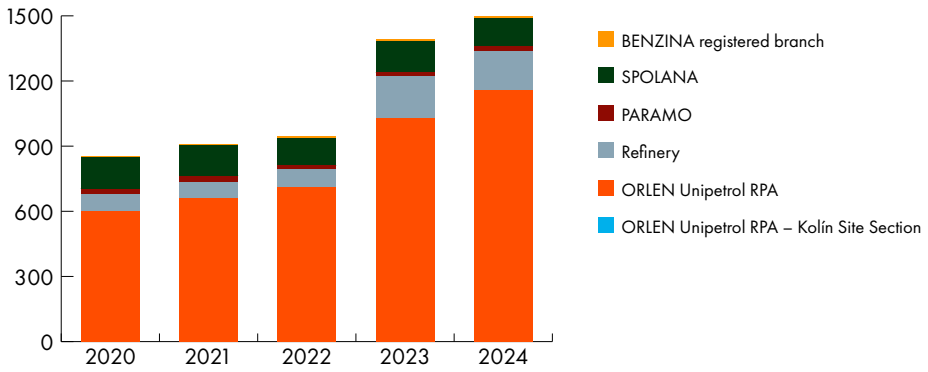

14. Total environmental protection costs

The total environmental protection costs at the ORLEN Unipetrol Group include environmental investment costs, environmental protection operating costs, environmental remediation costs and charges for air pollution, wastewater discharge, landfill disposal, generation of a landfill reclamation reserve and compensation for pollution damage to forests.

Environmental pollution fees and payments in the Group (CZK mil./year)

Company	2020	2021	2022	2023	2024
ORLEN Unipetrol RPA	12.1	16.4	14	14	5
Refinery	6.3	0.9	2.5	27	7.5
PARAMO – Pardubice*	3.7	3.6	3.2	1.6	1.92
ORLEN Unipetrol RPA – Kolín Site Section*	-	-	-	-	0.6
SPOLANA	3.4	3.5	2.9	2.0	2.1
ORLEN Unipetrol Group	**26**	**24**	**23**	**45**	**17**

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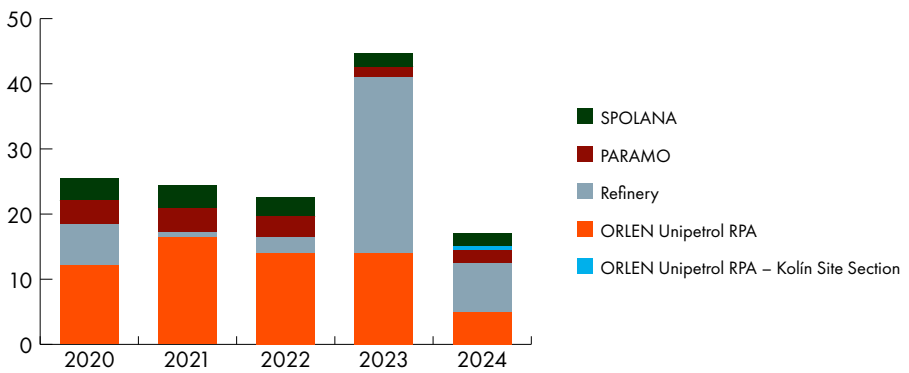

The total environmental protection costs incurred by the Group in 2024 amounted to approximately CZK 2.1 billion.

Total environmental protection costs in the Group (CZK mil./year)

Company	2020	2021	2022	2023	2024
ORLEN Unipetrol RPA	1 097	1 086	1 216	1 259	1 387
Refinery	541	336	362	488	320
PARAMO – Pardubice*	119.03	67.5	144.02	157.9	134.08
ORLEN Unipetrol RPA – Kolín Site Section*	-	-	-	-	0.37
SPOLANA	211	178	241	325	203
BENZINA registered branch	16.2	16.7	99.5	198.9	144.818
ORLEN Unipetrol RPA	1.6	1.6	2.46	2.8	3.1
ORLEN Unipetrol Group	**1 986**	**1 686**	**2 065**	**2 432**	**2 192**

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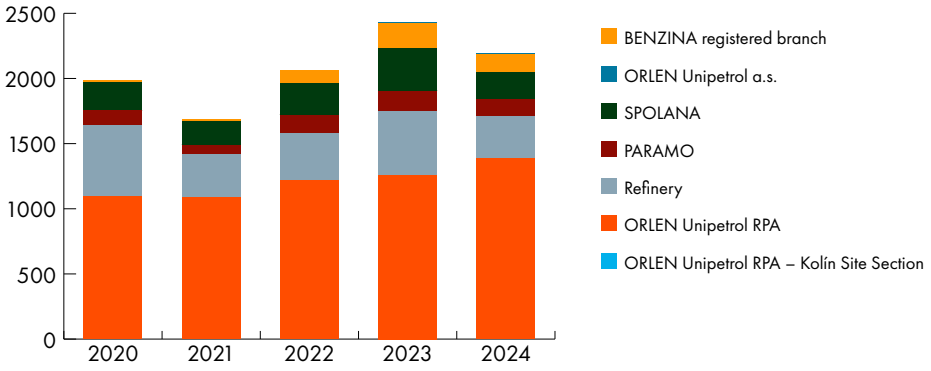

15. Remediation of old environmental burdens

Based on a decision of the government of the Czech Republic in connection with the privatisation, the ORLEN Unipetrol Group companies have concluded the following agreements with the Ministry of Finance of the Czech Republic to address environmental liabilities that arose prior to privatisation (Environmental Agreement):

1) Environmental Agreement No 14/94, as amended by Amendment 4 of 6 May 2019, signed by Unipetrol
2) Environmental Agreement No 32/94, as amended by Amendment 2 of 6 May 2019, signed by Unipetrol
3) Environmental Agreement No 39/94, as amended by Amendment 4 of 28 January 2019, signed by PARAMO
4) Environmental Agreement No 58/94, as amended by Amendment 5 of 28 January 2019, signed by PARAMO
5) Environmental Agreement No 184/97, as amended by Amendment 9 of 18 June 2019, signed by the BENZINA registered branch
6) Environmental Agreement No 33/94 including Amendments 1-4, signed by SPOLANA

Remediation work, which is at various stages of progress, is performed under the environmental agreements. **An updated overview is provided in the following table:**

Litvínov

Location	Current status	Further steps
Růžodol lagoons	in 2023 - the completion of landscaping and land reclamation	follow-up cultivation care, continuation of monitoring, a project to eliminate the occurrence of free-phase petroleum substances, a project for a solution for shafts in the R14 lagoon
Plant complex	Remediation completed and contamination clouds No. 1, 2c, 3, 4, 6, 9 and 10 handed over to the acquirer, in 2023 post-remediation monitoring was evaluated in contamination cloud No. 5, remediation work was not completed for contamination clouds No. 2, 7, 11 and block 32 , after the termination of the contractor's activities, the work is performed by the acquirer to the necessary extent until a new contractor is selected	The performance of activities by the acquirer to the necessary extent, the preparation of project documentation for the selection of a remediation contractor for KM 2a, 11 and 7b, newly also 7a and block 32 due to the termination of the contractor's activities in 2023, selection of a contractor for KM 2a, 11, 7b, 7a and block 32
Uhlodehta landfill	Approval of the final report for the updated risk analysis	Design documentation for the selection of a remediation contractor
Landfill for solid industrial waste	A new CEI decision was issued in 2021	Monitoring continues, landfill reclamation project
Lime sludge dump II	A new CEI decision was issued in 2021	Monitoring continues, landfill remediation feasibility study
Lime sludge dump by the siding	A new CEI decision was issued in 2021	Monitoring continues, landfill remediation feasibility study
South foreland of ash dumps	Partial reclamation, a new CEI decision was issued in 2021	The continuation of monitoring, a new project for the operation of protective pumping of water from the Nová voda střed reservoir, including a flood test, a project for the removal of oil sludge, a project for the removal of bottom sediments in the Nová voda sever reservoir, and a project for covering non-remediated fly ash at Nová voda střed
Ash landfills	Partially reclaimed, in 2021 a new decision by the Czech Environmental Inspectorate was issued, a drilling project was completed, and the expansion of the monitoring system was partially implemented – phase 1	The continuation of monitoring, a project for the removal of local surface occurrences of oil sludge, a landfill remediation project, implementation of phase 2 of drilling work for the extension of the monitoring system
Dispersion plume 13	Protective remediation pump and treat process at the acquirer's expense (ORLEN Unipetrol a.s.)	Remediation feasibility study
Pump and treat in the Nová voda střed reservoir	Protective remediation pumping (after the termination of the contractor's activities, the pumping is being performed by the acquirer to the necessary extent until a new contractor is selected)	The selection of a new contractor for protective remediation pumping. For more, see the south foreland of ash dumps
Pumping and treatment of Růžodol dispersion plume 12	Protective remediation pumping (after the termination of the contractor's activities, is being performed by the acquirer to the necessary extent until a new contractor is selected)	Selection of a new contractor for the protective remediation pump and treat process, feasibility study for an optimal water management solution in the area

Kralupy nad Vltavou

Location	Current status	Further steps
Plant complex	Risk analysis updated (RAU)	Additional research, remediation project documentation
Nelahozeves landfill	Pollution remediation	Monitoring of groundwater and surface water, targeted risk analysis update, selection of a contractor for the temporary landfill closure
Plant complex – dispersion plume E	Selection of a remediation contractor	Pollution remediation
Oil sludge	Feasibility study – finalisation of verification and updating	Selection of the remediation contractor, pollution remediation

BENZINA registered branch (distribution storage sites and the most important petrol stations)

Location	Current status	Further steps
DS Točník	Pollution remediation, protective remediation pump and treat process	Risk analysis update
DS Liberec-Rochlice	Protective remediation pump and treat process	Feasibility study
DS Šumperk	Protective remediation pump and treat process	Feasibility study
DS Bartošovice	Post-remediation monitoring	Remediation phase II
PS Pardubice Chrudimská	Protective remediation pump and treat process	Feasibility study
PS Přelouč	Final report	
DS Nový Bohumín	Pollution remediation	Post-remediation monitoring
DS Česká Ves	Pollution remediation	Post-remediation monitoring
DS Jičín	Protective remediation pump and treat process	Update of remediation project documentation

PARAMO Pardubice

Location	Current status	Further steps
Časy	Remediation implementation according to the remediation completion project	Remediation continues according to the remediation completion project
Hlavečník	Protective pumping of rainwater	Protective pumping of rainwater
Surroundings of the main plant – LIDL	Contract completed in May 2018	-
Surroundings of the main plant – U Trojice	Pump and treat in wells and drains, and monitoring	Pump and treat and monitoring continues (managed by PARAMO)
Main plants – phase 1 A	Contract completed in October 2020	-
Nová Ves	Contract completed in September 2023	Post-remediation monitoring (directed by PARAMO)

ORLEN Unipetrol RPA – Kolín Site Section

Location	Current status	Further steps
Plant complex and sludge lagoons	Implementation of remediation work according to variant D	Implementation of remediation work according to variant D continues

SPOLANA

Location	Current status	Further steps
Remediation of a toxic waste landfill	Remediation completed	Remediation completed
Remediation of facilities contaminated with dioxins	Remediation completed	Site maintenance – in progress
Remediation of an amalgam electrolysis facility	Remediation completed	Remediation completed
Remediation of groundwater at the Petrochemie site and its surroundings	Targeted update of the risk analysis, new decision (2/2020), contract with the remediation project contractor, the Final Water Monitoring Report	Remediation project for the award of a public contract for implementation
Remediation of groundwater at the Starý závod site	Feasibility study, targeted update of the risk analysis, new decision (11/2024), contract with the remediation project contractor, the Report on Survey Completion	Remediation project for the award of a public contract for implementation
Remediation of mercury contamination on the banks of the Elbe	Remediation completed, replacement planting	Remediation completed, aftercare of planted trees
New contamination hotspots	Risk analysis	Conditional zero variant
Long-term water monitoring	Monitoring completed by 6/2023 as per the contract, preparation of tender documentation for contractor selection	Contract for continued water monitoring

Overview of financial guarantees of the Ministry of Finance of the Czech Republic and drawing of funds at the ORLEN Unipetrol Group as at 31 December 2024 (CZK mil. incl. VAT)

	ORLEN Unipetrol Litvínov	ORLEN Unipetrol Kralupy	ORLEN Unipetrol RPA – Kolín Site Section*	PARAMO Pardubice	BENZINA registered branch	SPOLANA	Group total
Financial guarantees from the MF CR	6 012.0	4 243.9	1 906.6	1 241.5	1 323.0	8 159.1	22 886.1
Costs covered by the MF CR in 2024	7.3	1.2	0.7	35.6	31.4	1.4	77.6
Costs covered by the MF CR since the start of work	4 489.3	65.0	1 904.3	1 238.2	902.5	5 671.1	14 270.4
Expected cost of future work	2 409.2	710.5	1.2	1 997.0	632.8	2 206.4	7 957.1
Total (estimated) cost of remediation	6 898.5	775.5	1 905.5	3 235.2	1 535.3	7 877.5	22 227.5

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16. Chemical safety

All Group companies manufacture or use chemicals and mixtures in accordance with the applicable Chemical Act and Regulation (EC) No 1907/2006 (REACH). They classify their marketed chemical products in accordance with Regulation (EC) No 1272/2008 (CLP), and for those with hazardous properties, they process safety data sheets, which are then provided free of charge to all customers. At ORLEN Unipetrol RPA s.r.o., the safety data sheets of manufactured and purchased hazardous chemicals and mixtures are, in accordance with the REACH Regulation, available to all employees via the intranet – CASEC database (a system for the administration and accessibility of safety data sheets).

The Group companies continuously comply with the requirement of the REACH Regulation to keep the registration documentation up to date, and therefore they also have to make sure that their IUCLID software application, in which technical documentation for registered and notified substances is processed, complies with the latest version published on the ECHA website.

The Group constantly pays great attention to communication in the supply and demand chains in order to implement measures to protect employee health and the environment when hazardous chemicals are used directly or in mixtures. The Group monitors and incorporates any changes resulting from the clarification of processes associated with registering and classifying chemical substances and updates its safety data sheets accordingly.

All Group companies continuously monitor the handling of chemical substances and mixtures, from raw materials to finished products, and ensure compliance with applicable laws and regulations, including internal and external testing and the subsequent issuance of legal statements for the specific applications of selected products, for example when they are in contact with food, drinking water or used for medical purposes, etc. Customer services in the companies are in charge of providing detailed information about the characteristics of the products in relation to their specific use.

The Group companies are subject to international inspection by the UN focusing on compliance with commitments assumed under the Chemical Weapons Convention. All inspections carried out by government authorities and international inspection bodies in the Group companies to this day have shown compliance with the Convention commitments.

At ORLEN Unipetrol RPA s.r.o., an international programme called Operation Clean Sweep® (OCS) has been implemented, aimed at preventing polymer product loss during polymer production and processing and while handling polymer products within logistics operations, thus preventing the leakage of microplastics into the environment.

During 2024, ORLEN Unipetrol RPA s.r.o. continued its activities for the gradual registration of selected chemical substances under the local national REACH regulations in Great Britain and Turkey. This is a long-term process and the activities will continue in the coming period.

The registration documentation of all active substances at PARAMO, a.s., including for which PARAMO, a.s. is the main registering entity on the EU market (Lubricating oils / EC 278-012-2), was updated in 2024. PARAMO, a.s. works closely with CONCAWE and responds operatively to official requests from ECHA for the possible additional testing of substances. PARAMO, a.s. has also been continuously monitoring the situation surrounding the restriction of "N-methyl 2-pyrrolidine" (Restriction as per Annex XVII, REACH), which is used as an extraction agent in the selective refining plant in the Pardubice Profit Centre.

In August 2014, SPOLANA s.r.o. submitted its first application for authorisation to use trichlorethylene in the production of caprolactam under Article 56 of Regulation (EC) No 1907/2006 REACH to the European Chemicals Agency (ECHA). The authorization was granted and was valid until 21 April 2020. In order to ensure the use of trichlorethylene after this date, an application for a review of the authorisation to use trichlorethylene (TCE) as an extraction solvent in the production of caprolactam was submitted to the European Chemicals Agency in accordance with REACH in August 2018. The first permit to use TCE was granted to SPOLANA s.r.o. to April 2020, and in its review application SPOLANA s.r.o. requested an extension of the permit for another 12 years. In 2019, the ECHA made a recommendation to the European Commission to extend the Company's permit by the requested 12 years. On 4 March 2021, the European Commission issued an implementing decision authorising the use of trichlorethylene. The permit will expire on 21 April 2032 unless a review report is submitted in accordance with Article 61 (1) of the REACH Regulation by 21 October 2030.

In the spring of 2022, SPOLANA s.r.o. made a change to the fertiliser documentation in accordance with the new Regulation (EU) 2019/1009 of the European Parliament and of the Council of 5 June 2019 laying down rules on the making available on the market of EU fertilising products.

17. Occupational health and safety, process safety and fire protection

Strategy

The strategy for occupational safety and health, process safety and the transportation of hazardous materials (hereinafter "safety") is defined at the ORLEN Unipetrol Group in 'New Directions for the Development of Personnel and Process Safety 2022–2026'. The New Directions 2022–2026 are based on the ORLEN Capital Group strategy.

This strategy focuses on individual activities in areas such as leadership, personnel safety, hazard assessment and risk analysis, technical safety, fire prevention and the transport of hazardous goods. All activities are defined so that they contribute towards the continuous improvement of safety processes and help achieve the target value for the level 1 injury and process safety event frequency indicators.

Segment management

Occupational safety and health, fire protection and the safe storage and transportation of hazardous materials is managed as a single segment. The rules and requirements for segment management are defined in the policy 'Segment Management in Occupational Safety and Health, Fire Protection and Safe Storage and Transportation of Hazardous Materials', applicable to the companies that make up the ORLEN Unipetrol Group.

The aim of segment management within the ORLEN Unipetrol Group is primarily to set rules for cooperation within the ORLEN Unipetrol Group to ensure the uniform implementation of standards, strengthen cooperation, and increase the efficiency of information exchange within the ORLEN Unipetrol Group between the ORLEN Unipetrol Group and the ORLEN S.A.

As the leader in segment management within the ORLEN Unipetrol Group, ORLEN Unipetrol RPA s.r.o. organises regular Safety Meetings, attended by representatives of companies belonging to the ORLEN Unipetrol Group, and ensures the transfer of information from ORLEN S.A. throughout the ORLEN Unipetrol Group. In 2024, 44 joint Safety Meetings were organised.

As part of segment management, ORLEN Unipetrol RPA s.r.o. conducts joint walks focused on occupational safety and health, fire protection and safe storage and transport of hazardous materials. Several such walks took place in 2024.

The ORLEN Unipetrol Group also operates joint indicator reporting, submitted to ORLEN S.A. on a monthly basis.

Unification of rules and processes

The implementation of technical standards continued throughout the ORLEN Unipetrol Group in 2024, based on the implementation requirements from ORLEN S.A.

Improving safety

The ORLEN Unipetrol Group recognises the importance of the role that the human factor plays in the prevention of undesirable incidents and how leadership and an established safety culture can influence the human factor, especially a proactive approach, communication and understanding of their role in safety. Employees themselves also actively contribute to improving safety and are motivated to do so. At the ORLEN Unipetrol Group, as part of the motivation programme, employees have the opportunity to reward their colleagues for an active approach to safety. Assessment takes place every three months. The assessment committee is composed of representatives from safety, corporate communications, and the trade union. Employee training focuses on risk awareness and knowledge of how to manage such risks.

A number of projects were implemented in the ORLEN Unipetrol Group to improve safety in 2024. Many projects implemented in 2024 were employee initiatives submitted as ideas for improvements through the IDEAplus platform.

At the ORLEN Unipetrol Group, we also focused on IT projects that contributed to improvements in safety. Of all the projects, we might mention the IT application "Field Maps" that enables the electronic recording of both positive and negative findings from safety walks directly at the site of their occurrence. It is then possible to display and analyse individual safety walks (recorded in the IT application "Field Maps") on a computer using the web application "Safety Walk", along with findings and evaluations. Another significant IT project is a system for visualising work permits, which enables work being carried out under a work permit regime to be visulalised on a map. It shows the total number of ongoing activities, including "risky work", for which a work permit has been issued, and indicates the total number of people working under an issued work permit.

Safety standard No 010/2024, unifying the procedures for permitting work performed by external workers at petrol stations across member company petrol stations, was approved and issued in 2024 at ORLEN Unipetrol RPA s.r.o. – BENZINA, registered branch, under the ČAPPO framework. At the end of the year, implementation into the company's internal regulations was initiated so that it could be put into practice in 2025. The process of unifying training for external companies and sharing information about training was initiated at the same time. Through the BENZINA Academy, e-learning courses for petrol station partners in ADR and specialised training for fire safety prevention staff took place in 2024, and will be regularly repeated at statutory intervals. To raise awareness of occupational safety and health and fire protection among petrol station partners, a presentation for the onboarding training of partners was prepared in an attendance format at the company headquarters.

The "Safety Week" event took place across the ORLEN Unipetrol Group in September 2024. Safety Week was an attendance event and included demonstrations of first aid, securing people for work at height, demonstrations of personal protective equipment (protective footwear, head protection) and a presentation of a combined vehicle of the company's Fire Rescue Service, including a practical demonstration of extinguishing a burning flammable liquid. It included a rotating simulator that highlighted the effect and importance of seat belts in vehicles. The event ended with a safety quiz.

The causes of specific emergencies are shared throughout the ORLEN Capital Group, primarily for the purpose of learning lessons from them. In December 2024, a two-day meeting was organised for selected employees of the ORLEN Unipetrol Group in Litvínov with representatives of ORLEN S.A. The ORLEN S.A. representatives presented the findings of an investigation into three extraordinary events that occurred at the production plant in Płock. Over 220 employees participated on behalf of the ORLEN Unipetrol Group. The aim of the meeting was to share the conclusions of the investigation into the extraordinary events and the measures taken to prevent the occurrence of the same or similar extraordinary events in our ORLEN Unipetrol Group. This was followed by a discussion and a call to follow rules. An Accident Lessons report was prepared for the ORLEN Unipetrol Group based on this information. In 2024, ORLEN Unipetrol RPA s.r.o. continued the "Practical Safety Culture Training" programme for operational

and maintenance employees at the Training Centre in Litvínov. This programme is aimed at improving the safety culture. The main topics include critical emergencies, multiskilling, safety valves, first aid, LOTO (Lock Out/Tag Out) and risk identification.

Over the course of 2024, at ORLEN Unipetrol RPA s.r.o. the Process Safety Beacon 2023 yearbook (in Czech) was distributed to managers of operations, shift managers and supervisors, and to control rooms and operational centres in printed form. In 2024, a printed version of the 2023 Almanac of Lessons was distributed to the leaders of production teams.

Observations of process safety were also conducted at ORLEN Unipetrol RPA s.r.o. operations in 2024. These observations serve to increase awareness of process safety among employees as well as external suppliers, while also helping efforts to address certain issues in the area of process safety and pointing out areas for potential improvement. The topics for 2024 were as follows: conducting air quality analysis at the workplace, workplace cleanliness, maintaining a sense of vulnerability, and a topic concerning the implementation of measures and their effectiveness. In total, 48 observations were conducted with 150 people participating. Outputs from individual observations as well as a summary for 2024 were presented at Safety Meetings.

In the last quarter of 2024, SIL classification was commenced to improve the level of process safety at the ORLEN Unipetrol RPA s.r.o. Agro production unit. Individual teams composed of representatives from operations, technology, measurement and regulation, automated process control and the safety department will gradually analyse the risks identified in previous HAZOP studies in more depth over the long term across all production units of the entire ORLEN Unipetrol RPA s.r.o. company using a standardised methodology. The result will be the determination of the risk levels of individual safety functions, namely the given equipment for measurement and regulation and electrical systems, and the establishment of the optimal maintenance strategy for these components. A successful recertification audit of the integrated management system was conducted at PARAMO, a.s. in 2024, assessing compliance with the management system under ISO 14001:2015 and ISO 45001:2018. A gradual update of the statutory documentation was also completed due to the separation and incorporation of the Kolín Profit Centre into ORLEN Unipetrol RPA s.r.o. The modernisation of the fire alarm system throughout the site together with the CFRS fire reporting station, including the first aid room and the crisis management room, was completed in 2024. This investment included construction modifications, modern IT technology, interior furnishings and connection to a backup power source in case of a power outage at PARAMO, a.s.

Safety performance indicators

A unified system for monitoring selected safety performance indicators, including the monitoring of target values defined for 2024, is in place in the ORLEN Unipetrol Group. The target values of the indicators are set for the entire ORLEN Unipetrol Group and correspond to the objectives defined for the entire ORLEN Capital Group. The main monitored indicators include the frequency of accidents, i.e. the TRR (Total Recordable Rate) and the frequency of Tier 1 process safety events, i.e. PSER Tier 1 (Process Safety Event Rate).

Overview of the number of Process Safety Events Tier 1 in the ORLEN Unipetrol Group 2021-2024

Company	2021	2022	2023	2024
ORLEN Unipetrol RPA	1	4	3	2
ORLEN Unipetrol Doprava	0	0	0	0
PARAMO – Pardubice*	0	0	0	0
ORLEN Unipetrol RPA – Kolín Site Section*	-	-	-	0
SPOLANA	2	1	1	1
Group total	**3**	**5**	**4**	**3**

**Since 1 November 2023, Kolín Site Section, originally part of PARAMO, a.s., has been incorporated into ORLEN Unipetrol RPA s.r.o. For the purposes of the annual report, 2024 data for PARAMO, a.s. / ORLEN Unipetrol RPA s.r.o. – Kolín Site Section will be reported separately.*

Target safety indicators

ORLEN Unipetrol Group	Objective for 2024	Final value
TRR: Number of accidents resulting in absence per million hours worked	1.70	1.19
PSER – Tier 1: Number of process safety events per million hours worked	0.30	0.19

18. Prevention, personal protective equipment

Implementation of and compliance with a risk prevention and management system is a fundamental commitment throughout the ORLEN Unipetrol Group.

The process of hazard identification and risk assessment in occupational health and safety, major accident prevention and process safety is an ongoing one and is implemented as a tool to prevent emergencies from occurring. All risks are recorded in the Risk Registers, which are regularly reviewed and updated.

Risk assessment is part of day-to-day activities, especially as part of the work permit process. At the same time, the identification of risky conditions and risky behaviour is carried out through daily regular inspections of workplaces, regular patrols, inspections and audits. All risks and risky behaviour are recorded and measures taken to address them. The aim is to eliminate risks immediately and thus prevent accidents.

Employees are motivated to identify risks and risky behaviour. Prevention as part of occupational health and safety is ensured by employees professionally qualified in risk prevention. However, during employee training, emphasis is placed on risk awareness so that both employees and contractors can assess the need to eliminate risks or take measures to minimise them as much as possible. In 2024, a unifying internal regulation was prepared and issued at the ORLEN Unipetrol Group, establishing procedures and rules for the provision and use of personal protective equipment, washing, cleaning and disinfecting agents, and protective beverages, in accordance with applicable legal and other regulations.

19. Quality of the work environment

The quality of the work environment at ORLEN Unipetrol Group companies is regularly monitored by measuring work environment factors including, but not limited to, noise levels and chemical and dust exposure limits, always based on the relevant work classification.

Extensive organisational changes have been carried out at PARAMO, a.s., Pardubice. On the basis of the ascertained facts, the Regional Health Authority recommended remeasuring noise levels. Based on the measurements, the load level was reassessed from the second risk category (2R) to category 1.

At SPOLANA s.r.o., a comprehensive recategorisation of work was initiated with the aim of establishing group requirements and uniformity. The decision was made to exclude it from the hazardous work categorisation because, based on the results of noise measurements in the work environment on 18 January 2023, it was confirmed that the resulting noise exposure does not exceed the permissible exposure limit for steady and variable noise over an eight-hour work shift.

20. Healthcare and prevention

The ORLEN Unipetrol Group companies have concluded occupational medical services contracts with physicians. Preventive medical examinations are performed in accordance with applicable laws and regulations and internal guidelines.

Above-standard health care is also provided to employees, in cycles and under conditions in accordance with the applicable collective agreement.

21. Major accident prevention

Most ORLEN Unipetrol Group production companies are, due to being classified as Group B, subject to the strictest interpretation of Act No 224/2015, on prevention of major accidents when handling selected hazardous chemical substances / mixtures.

For years, the ORLEN Unipetrol Group companies have paid great attention to the prevention of major accidents. Accident prevention is based on the reliable and trouble-free operation of production equipment which is designed, operated, inspected and maintained in accordance with the legislation of the Czech Republic and the company's internal regulations. Some of the regulations also contain requirements beyond legislation and are based on the best practices of the Group companies.

Production sites are equipped with control systems signalling deviations from standard operating parameters. Some dangerous plants are equipped with systems that automatically shut down operating units in the event that the specified operating parameters are exceeded. Depending on the type of hazardous substances handled, the plants are equipped with modern detection systems (detection of flame, smoke or leaks of hazardous substances) with outputs to control rooms and operational centres of the relevant company's fire brigade. Stationary and semi-stationary fire extinguishers and fire monitors are installed at the production plants.

Regular internal audits focused on safety and accident risk prevention are carried out at the ORLEN Unipetrol Group companies. In addition, regular external audits and inspections are carried out by state expert supervision authorities. This includes, for example, the CEI, RLI, FD, RHS, Czech professional organisations, insurance brokers, insurers and foreign reinsurers. Recommendations and conclusions from these audits are included in the relevant implementation plans.

Regular employee training and education are important components of major accident prevention. The functionality of the major accident prevention system is checked throughout the year using emergency and crisis response exercises for on-site employees as well as in cooperation with internal and external intervention units, in the form of emergency drills at the individual production plants, as well as on-site emergency drills carried out in cooperation with companies managing industrial premises or doing business in their immediate vicinity. In the ORLEN Unipetrol Group companies, emergency drills are carried out according to plans. The drills are used for practical training of appropriate employee response to a possible accidents, to verify the valid emergency plans and procedures, and to improve the knowledge of everyone involved. If shortcomings are revealed during a drill, appropriate measures are taken during the evaluation of the drill to ensure such shortcomings are eliminated, including setting deadlines and nominating persons responsible for their implementation.

Drill plans for 2024 were developed, approved, issued and fulfilled.

Company	Number of exercises - 2024	
	Total	Of which with CFRS participation
ORLEN Unipetrol RPA – Litvínov site	236	40
ORLEN Unipetrol RPA – Kralupy site	20	20
ORLEN Unipetrol Doprava	4	4
PARAMO – Pardubice site	14	14
SPOLANA	10	10

In 2024, two meetings of the Emergency Committee took place at ORLEN Unipetrol Doprava s.r.o., resulting in the updating of the Internal Emergency Plans for the Semtín Siding, Neratovice Railway Operations, and the Litvínov Siding due to the necessity of emergency exercises. The incorporation of

comments on the Safety Reports for the Závod vlečka Litvínov site and Pardubice Rail Operations also took place, and these were resubmitted to the relevant Regional Authority for approval. In relation to the Safety Reports for Neratovice Rail Operations and Kralupy Rail Operations, an administrative procedure was initiated in mid-2024 for the purpose of approving the relevant documentation.

The safety level of the Group companies is significantly affected by new investments in production facilities. The potential risks of operating such facilities are already addressed in the project phase using generally accepted methods of assessing the risks of a major accident. New plants are always equipped with state-of-the-art safety systems and meet the requirements of the laws and regulations of the Czech Republic and the European Union.

The ORLEN Unipetrol Group production companies have their own fire brigades. Their equipment and training are first class, and this allows them to intervene in a highly specialised manner in the event of accidents involving the release of hazardous substances. The Kralupy Refinery Unit uses the services of the SYNTHOS Kralupy, a.s. fire and rescue service.

Overview of the classification of businesses under Act No 224/2015, as amended

Company	Facility	Group	Safety report
ORLEN Unipetrol RPA	Litvínov facility	**B**	Approved by a decision of the Regional Authority of the Ústí nad Labem Region
	Kralupy facility	**B**	Approved by a decision of the Regional Authority of the Central Bohemian Region
	BENZINA registered branch	**-**	In accordance with Act No 224/2015, reports on non-inclusion of petrol stations were updated according to the law and submitted to the relevant regional authorities
	Kolín Site Section	**-**	In accordance with Act No 224/2015, a report on non-inclusion was submitted to the Regional Authority of the Central Bohemian Region
ORLEN Unipetrol Doprava	Operations, Pardubice Plant, Semtín, Pardubice Railway Operations	**B**	Approved by a decision of the Regional Authority of the Pardubice Region
	Operations, Pardubice Plant, Semtín, Semtín siding	**B**	Approved by a decision of the Regional Authority of the Pardubice Region
	Operations, Litvínov siding plant	**B**	Approved by a decision of the Regional Authority of the Ústí nad Labem Region
	Operations, Kralupy Plant, Neratovice, Kralupy Railway Operations	**B**	Approved by a decision of the Regional Authority of the Central Bohemian Region
	Operations, Kralupy Plant, Neratovice, Neratovice Railway Operations	**B**	Approved by a decision of the Regional Authority of the Central Bohemian Region
PARAMO*	Pardubice	**B**	The updated Safety Report was approved by the Regional Authority of the Pardubice Region
SPOLANA	SPOLANA	**B**	The updated Safety Report was approved by a decision of the Regional Authority of the Central Bohemian Region

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Five HAZOP studies were approved at ORLEN Unipetrol RPA s.r.o. in 2024. Workshops were also held at other production units in 2024. The HAZOP studies were followed by SIL classification (a tool for improving operational safety).

One HAZOP study was carried out at SPOLANA s.r.o. in 2024.

22. Major accidents

In 2024, two accidents occurred at one of the ORLEN Unipetrol Group facilities subject to Act No 224/2015, on the prevention of major accidents, and these were reported to the Regional Authority of the Ústí nad Labem Region as serious accidents. At the ORLEN Unipetrol RPA s.r.o. Litvínov monomers production unit, an ethylene leak occurred on 18 November 2025, followed by an explosion and fire at the ethylene tanker station, and on 23 November 2024, a C5 fraction leak occurred, followed by a fire. No injuries occurred during the incident. An investigation resulted in the approval of measures to prevent a similar accident from occurring in the future.

Other operational accidents that occurred during the year were handled using our own resources, or using the companies' fire brigades. The response was adequate to remedy the issue and prevent recurrence. The effects of minor accidents did not extend beyond the territory of the ORLEN Unipetrol Group companies.

23. TRINS transport information and accident system

The TRINS transport information and accident system is an assistance system that defines a framework for collaboration in the following areas of cooperation:

- accidents involving the transport of hazardous goods
- cooperation in the emergency response to accidents involving stationary installations
- cooperation with member companies of the Czech Association of Cleaning Stations

TRINS was established by the Association of the Chemical Industry of the Czech Republic as part of the Responsible Care programme in 1996 based on an agreement between the Association and the General Directorate of the Fire and Rescue Service of the Czech Republic, and included in the Integrated Rescue System of the Czech Republic as a support system. Foreign equivalents of TRINS include, for example, the British CHEMSAFE system and the German TUIS system, which served as a model for the development of TRINS. Similar systems have also been created in Slovakia (DINS), Hungary (VERIK), and have been operating in a number of EU countries for many years. TRINS centres, in cooperation with the Fire and Rescue Service of the Czech Republic, provide the necessary urgent work-related consultations concerning data on chemical substances and mixtures, their safe transport and storage, practical experience with handling dangerous substances and responses to extraordinary events associated with their transport. TRINS centres also provide practical assistance in handling such emergencies and eliminating subsequent environmental damage.

There are currently 21 companies included in the TRINS system in the Czech Republic, while there are a total of 36 centres providing assistance at the individual levels within the TRINS system throughout the Czech Republic. ORLEN Unipetrol RPA s.r.o. serves as the system's national coordination centre.

In 2024, 10 instances of level 1 assistance (telephone inquiries and consultations), one instance of level 2 assistance (dispatching a specialist to the site), and two instances of level 3 assistance (technical support) were recorded. All TRINS system activities for 2024 have been summarised in the Annual Report for 2024, which is published on the ORLEN Unipetrol RPA s.r.o. website.

The names of the ORLEN Unipetrol Group companies (ORLEN Unipetrol a.s., ORLEN Unipetrol RPA s.r.o., ORLEN Unipetrol RPA s.r.o. – BENZINA, registered branch, ORLEN Unipetrol RPA s.r.o. – POLYMER INSTITUTE BRNO, registered branch, ORLEN Unipetrol DOPRAVA s.r.o., PARAMO, a.s., SPOLANA, s.r.o.) are also included in this report in their simplified versions (ORLEN Unipetrol, ORLEN Unipetrol RPA, BENZINA, registered branch/OZ BENZINA, Polymer Institute Brno / PIB, ORLEN Unipetrol Doprava, PARAMO, SPOLANA).

Abbreviations and acronyms:

ACHV – chemical production site

APC – Adaptive Process Control

BAT – Best Available Techniques

BWWTP – biological wastewater treatment plant

BOD_5 – biochemical oxygen demand

SR – safety report

CASEC – Chemical Abstract Substances Evidence Centre – a database of chemical substances and safety data sheets

CEFIC – The European Chemical Industry Council

CLP – Classification, Labelling and Packaging of substances and mixtures – regulation of the European Parliament

CO_2 – carbon dioxide

CONCAWE – CONservation of Clear Air and Water in Europe

CEI (OI) – Czech Environmental Inspectorate (district inspectorate)

WWTP – wastewater treatment plant

PS – petrol station

DCPD – dicyclopentadiene

$DeSO_x$ – technology for reducing sulphur oxide emissions

$DeNO_x$ – technology for reducing nitrogen oxide emissions

DS – distribution storage

EIA – Environmental Impact Assessment

ECHA – European Chemicals Agency

EU – ethylene unit

EnMS – Energy Management System

EMS – Environmental Management System

EU ETS – EU Emissions Trading System

FCC – Fluid catalytic cracking unit

FM – facility management

HMGWP – Hydrogeological Method of Ground Water Protection

HRGO – hydrogenation refining of gas oil

PC – profit centre

OHSMS – occupational health and safety management system

FRS – fire and rescue service

CFRS – company fire and rescue service

COD – chemical oxygen demand

ICCA – International Council of Chemical Associations

IP – integrated permit

IPPC – Integrated Pollution Prevention and Control

ISCC / ISCC PLUS – International Sustainability & Carbon Certification – an international certification system for sustainability and greenhouse gas emissions

RHS – regional hygiene station

LPG – liquefied petroleum gas

MESA – Management of Energy System Application

MEK – methyl ethyl ketone

MF CR – Ministry of Finance of the Czech Republic

SS – suspended solids

NO_x – nitrogen oxide

OCS – Operation Clean Sweep® – a programme to achieve zero polymer product losses

RLI – Regional Labour Inspectorate

RB – registered branch

QMS – quality management system

PVC – polyvinyl chloride

REACH – registration, evaluation and authorization of chemicals – EU regulation

RC – responsible care

SP – solvent paraffin

SEF - State Environmental Fund

ACI CR – Association of the Chemical Industry of the Czech Republic

SO_2 – sulphur dioxide

SQAS – Safety and Quality Assessment System

TOE – tonne of oil equivalent

TRINS – transport information and accident system

VISUAL MESA – IT application (Management of Energy System Application)

VOC – volatile organic compound

ZERO – a software application for the central reporting of inspections and extraordinary events at ORLEN Unipetrol RPA

EP – environmental protection