JOINT REPORT ON OCCUPATIONAL HEALTH, SAFETY, AND ENVIRONMENTAL PROTECTION

Unipetrol

ORLEN GROUP

UNIPETROL GROUP IN 2015

Contents

Fundamental data on the management of the Unipetrol Group in 2015 - consolidated data

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	2014	2015
Structure of assets and liabilities (mil. CZK)		
Total assets	48,517	**54,499**
Fixed assets	22,173	**22,575**
Current assets	26,344	**31,924**
Equity	28,462	**35,509**
Liabilities	20,055	**18,990**
Structure of profit (mil. CZK)		
Sales	124,229	**108,907**
Gross profit	5,986	**12,763**
EBITDA [1)]	1,273	**10,643**
EBIT [2)]	-997	**8,716**
Net financial expenses	-365	**-47**
Profit / loss before tax	-1,362	**8,669**
Net profit / loss	-556	**7,036**
Profit / loss per share (CZK)	-3.07	**38.80**
Operating ratios (in thous. tonnes)		
The volume of crude oil processed [3)]	5,130	**6,495**
Sales of refined products, including retail (Benzina petrol station network) [4)]	4,268	**5,800**
Sales of petrochemical products [5)]	1,773	**1,445**

[1)] EBITDA – Operating income before amortisation, financial result and taxes
[2)] EBIT – Operating income before financial result and taxes
[3)] The volume of crude oil processed represents the total amount of crude oil processed in Unipetrol refineries.
[4)] Sales of refined products, including retail (Benzina petrol station network), are the total external sales volumes of refined products outside the Unipetrol Group. These are primarily motor fuels (petrol and diesel).
[5)] Sales of petrochemical products are total external sales volumes of petrochemical products outside the Unipetrol Group.

I. Unipetrol Group in 2015

1.1. Brief History of the Unipetrol Group

1994

Unipetrol´s creation fulfilled one of the conceptual objectives of privatization of the Czech petrochemical industry. Unipetrol was intended to join selected Czech petrochemical firms in a group that would be able to compete with strong international groups. The majority shareholder (with 63 percent of the shares) was the Czech state represented by the National Property Fund. The rest of the shares were owned by investment funds and small shareholders. According to the original concept the State's share was to be privatized.

The following joint-stock companies were gradually incorporated into Unipetrol: Kaučuk, Chemopetrol, Benzina, Paramo, Koramo, Česká rafinérská, Unipetrol Trade, Spolana, and Unipetrol Rafinérie.

2003

Koramo merged with Paramo and the successor company Paramo was created.

Česká rafinérská shifted to the reprocessing mode.

2004

Agreement between PKN Orlen and the National Property Fund on the sale of 63% of shares of Unipetrol.

2006

Sell of the majority interest in the Spolana subsidiary, a.s. to the Polish company Zaklady Azotowe Anwil.

2007

Sell of the subsidiary Kaučuk to the Polish company Firma Chemiczna Dwory

Opening of a new subsidiary Unipetrol Services.

Change of the legal forms of Unipetrol Doprava, Benzina, and Petrotrans from join-stock companies to limited liability companies.

Creation of Butadien Kralupy, the shareholders of which are Unipetrol (51%) and Kaučuk (49%).

Merger of subsidiaries Chemopetrol and Unipetrol Rafinérie with Unipetrol RPA.

2008

Right at the beginning of the year the Board of Directors of Unipetrol approved an investment plan to expand the product portfolio of Unipetrol RPA.

On June 26, 2008 the Annual General Meeting of Unipetrol decided on payment of dividends from retained earnings in the total amount of CZK 3,200,558,584.60.

By buying 49,660 shares Unipetrol increased its stake in Paramo to 91.77 percent. In October, Unipetrol announced its plan to purchase the remaining shares from minority shareholders.

Based on the approved concept of implementation of an integrated management system in the entire Group, the pilot project including certification of five selected companies (Unipetrol, Unipetrol RPA, Unipetrol Doprava, Unipetrol Services, Benzina) took place from October 1 to October 17.

2009

Unipetrol became the one-hundred-percent owner of Paramo. Milan Kuncíř was appointed the new CEO of Paramo.

In late May, Unipetrol RPA announced a final shutdown of the unit producing oxo alcohols. The unit had been in operation since 1969.

In June, Transpetrol, Česká rafinérská and Paramo entered into agreement on transport and storage of crude oil in the Slovak Republic for 2009.

In September, Benzina introduced a significant enhancement of its fuel portfolio. As the first company on the Czech fuels market it began to sell a new formulation of the premium diesel with the cetane number 60. The product was named Verva and it was made available at 130 filling stations.

In the fourth quarter of 2009, Benzina began to withdraw from the sale the already unpromising petrol Special 91 which was significantly losing its market position. The withdrawal from the market was set to Q2, 2010.

On December 10, Unipetrol's Supervisory Board appointed Mr. Piotr Chełmiński, who was a member of the Board of Directors and the Chief Administrative Officer at that time, the new Chairman of the Board of Directors and CEO.

Artur Paździor became the new Executive Director of Unipetrol RPA.

Unipetrol Group achieved the goals set in the optimization plan. The company reported achievement of significant savings on fixed and variable costs. The capital expenditures of the Group were also reduced.

2010

Unipetrol and Unipetrol RPA decided to transfer their shares in Celio to TICATANOR Ltd. and B.E. Fin S.A. Celio is engaged in waste management and its sale was in line with the Unipetrol Group´s strategy the aim of which is to focus more on strategic segments.

A joint venture of Unipetrol and Synthos Kralupy, Butadien Kralupy started production in its new butadiene unit. A CZK 1.2 billion investment replaced the production unit operated by Synthos Kralupy.

The new shall increase the production capacity from 90 to 120 kt per year, which ranks the company among the 10 largest producers of butadiene in Europe.

The shut-down schedule for T200 heating plant in Chempark in Záluží was introduced. T200 heating plant is an obsolete source of electricity and steam and its operation – from 2013 onwards – will not meet the legislative requirements.

The energy services unit belonging to Unipetrol RPA will thereafter continue to operate the newer T700 heating plant

The new member of the Board and Chief Financial Officer of Unipetrol was appointed Mariusz Kędra. Wojciech Ostrowski, the former Unipetrol´s CFO, resigned after three years in function.

Unipetrol will build a new teaching and research centre UniCRE. The centre shall connect research and scientific work with educational activities. It will be built in the coming years in the industrial area in Záluží. The total construction cost of the centre was estimated to nearly CZK 800 million. The project will be supported by the European Union by CZK 600 million.

Benzina started its co-operation with the fast-food chain Burger King which opened its first motorway restaurant in the Czech Republic at the Benzina Plus Filling Station on the third kilometer of the D11 motorway in the direction from Prague.

Paweł Kania became was appointed the new Executive Director of Benzina.

2011

At the beginning of the year, two new subsidiaries of Paramo were created within the restructuring process: Paramo Oil, s.r.o., and Paramo Asfalt, s.r.o.

On September 27, 2011 the liquidation of UNIPETROL TRADE was finished, which was also the part of the restructuring process.

At the turn of the 3rd and 4th quarter was performed the planned four-year cycle shutdown of the refinery and petrochemical plant in Litvinov.

Unipetrol Group became the general partner of the International Year of Chemistry 2011 of the Czech Republic. The International Year of Chemistry 2011 was announced by UNESCO and the International Union of Pure and Applied Chemistry.

Benzina launched the first fully self-service filling station in the Czech Republic named Expres 24.

Three companies of the Unipetrol Group managed to retain their certificates for a responsible approach to business in chemistry awarded by the Association of Chemical Industry of the Czech Republic. Thanks to this, Unipetrol, Unipetrol Doprava and Unipetrol RPA can use the Responsible Care logo.

In November, the production of high density polyethylene in Unipetrol RPA exceeded the value of 5 million tons.

The company has been producing polyethylene since 1976, the current production reaches 950 to 1000 tons of polyethylene per day.

Paramo introduced a new line of performance engine oils Mogul Professional.

Paramo obtained the European Technical Approval ETA for the roof waterproofing system Gumoasfalt.

2012

It was decided to shutdown the urea producing unit in Chempark Záluží in Litvínov to January 1, 2013. The urea producing unit was part of the division agro of the subsidiary Unipetrol RPA and its contribution to the profitability of the Unipetrol Group was negative in recent years and no change in this trend was expected.

The company decided to terminate permanently the processing of crude oil in the Pardubice refinery Paramo. The decision was made on the basis of a comprehensive analysis of the macroeconomic situation, including low refining margins compared to the period before the financial and economic crisis in 2008, weak demand for diesel, and excess of refining capacity in Europe. Another key factor was the low conversion capacity (less than 1 mil. tonnes per year) and low complexity of the Paramo refinery, which has negatively affected the profitability of this Group's asset in the past years. Furthermore, no analysed scenario showed a major improvement in the medium term.

2013

The Unipetrol Group strategy for the years 2013-2017 was published in June. This important document defines the key development trends for the coming years. Petrochemical segment is considered the key creator of the Group's profit and the majority of capital investments will be directed to this segment. Unipetrol will focus on achieving of a significant increase in efficiency and operational excellence across all company segments. Implementation of the Strategy should ensure a strong financial position of the company, both in terms of liquidity and financial debt.

The pivotal Unipetrol's agreement is a three-year contract with Rosneft on supplies of Russian export oil (REB). It was signed in June and it was the first long-term agreement entered into by Unipetrol´s majority shareholder PKN Orlen on behalf of Unipetrol. The agreement is valid from July 1, 2013 to June 30, 2016.

In addition to the Strategy for 2013-2017 it is worth mentioning the acquisition of a 16.335% share in Česká rafinérská by Shell Overseas Investments B.V. which was signed on November 7, 2013. The acquisition was successfully finished on January 31, 2014. Unipetrol´s share in the Česká rafinérská increased from 51.22% to 67.555% and the company gained a qualified majority with the threshold of 67.5%.

2014

On January 31, 2014 the purchase of 16.335% share in Česká rafinérská by Shell Overseas Investments B.V. was successfully finished, on the basis of which Unipetrol´s share in the registered capital of Česká rafinérská increased from 51.22% to 67.555%.

Another important event was the exercise of the pre-emptive right to purchase the remaining 32.445% share in Česká rafinérská from Eni International B.V. Acceptance of the bid was announced on July 3, 2014 and the acquisition was non-finally approved by the Office for the Protection of Competition on December 19, 2014. Upon completion of the transaction Unipetrol becomes the sole shareholder of Česká rafinérská with 100.00% share.

Also noteworthy is the significant strengthening of the long-term strategic cooperation with the University of Chemistry and Technology, Prague (UCT), which was signed on November 12, 2014 and which resulted in creation of a new Educational and Research Centre UCT – Unipetrol. This connection represents a unique collaboration of industrial and educational sectors at the university level. Such intensive cooperation will enable students to use the scientific and research equipment in the research and educational center UniCRE in Chempark Záluží with a maximum possible interconnection of research and educational activities.

2015

In 2014 Unipetrol used the pre-emption rights and accepted an offer from Eni International BV to acquire equity stake of Eni Česká rafinérská. The Office for the Protection of Competition (Úřad pro ochranu hospodářské soutěže, ÚOHS) approved the purchase of equity interest of Eni International BV and the decision of ÚOHS became legitimate on 6 January 2015. Upon completing of the transaction, Unipetrol became the sole owner of with the stake of 100%.

1.2. Unipetrol Group Introduction

The Group operates refineries and performs petrochemical production and sales in the Czech Republic and Central Europe. Group companies mainly produce and sell refinery products, chemical and petrochemical products, polymers, and specialty chemicals. The Group also operates its own transportation services and finances its own research and development. Unipetrol is the leading refinery and petrochemical group in the Czech Republic and a major player in Central and Eastern Europe. The Group focuses on three strategic business segments:

- refining of crude oil and wholesale of the refined products,
- petrochemical production,
- retail sale of motor fuels.

Unipetrol is the 100% owner of the following companies:

- **Unipetrol** RPA, a manufacturer and distributor of refined, petrochemical, and agrochemical products, since January 1, 2016 the following entities were integrated in the structure of Unipetrol RPA: Benzina branches, operator of the largest filling station network in the Czech Republic, research center Polymer Institute Brno and the larger amount of supporting activities of Unipetrol Services
- **Unipetrol** Doprava, professional railway transporter of chemical, petrochemical, and other products, including provision of related services,
- Paramo, the largest manufacturer of bitumen, lubricants, fuel oil, and other refined products,
- **Unipetrol** Services, support center for all Group companies.
- Česká rafinérská, the largest crude oil processor in the Czech Republic for a wide range of products with a total annual capacity of 8.8 million tons

The main products of Unipetrol Group are refined and petrochemical products.

Refined products: gasoline, diesel (diesel), light fuel oil, aviation fuel, LPG, bitumen, naphtha, lubricating and fuel oils.

Petrochemical products: ethylene, propylene, C4 fraction, benzene, high-density polyethylene, polypropylene, ammonia, Chezacarb.

1.3. Business profiles of main subsidiaries of Unipetrol

Unipetrol RPA

The company has manufacturing, sales, and service units.

Chief executive

The unit provides supporting activities in corporate communications, procurement, human resources, legal services, security, and regulatory risks

Production

The unit provides manufacturing of petrochemical and agrochemical products, supporting activities in maintenance and laboratories and operation of company's dispatching

Power engineering and development

The unit provides the supply of the whole area with energies (electric power, steam) , water and provides wastewater treatment for the whole complex, supporting activities in safety, environmental protection, technology and development, investment and fire brigade operation

Retail

The unit provides the operation of Benzina branch, ie. Operation of fuel stations

Finance

The unit provides supporting activities in reporting and accounting, taxation, financial management, controlling, IT, facility management, economy and planning

Trade

The unit proveds sales of petrochemicals, agrochemicals and refined petroleum products.

Strategy, mergers and acquisitions

The unit provides supporting activities in marketing and strategic projects of the Group

Česká rafinérská

Česká rafinérská, is a production company processing crude oil and operating refineries in Litvínov and Kralupy nad Vltavou

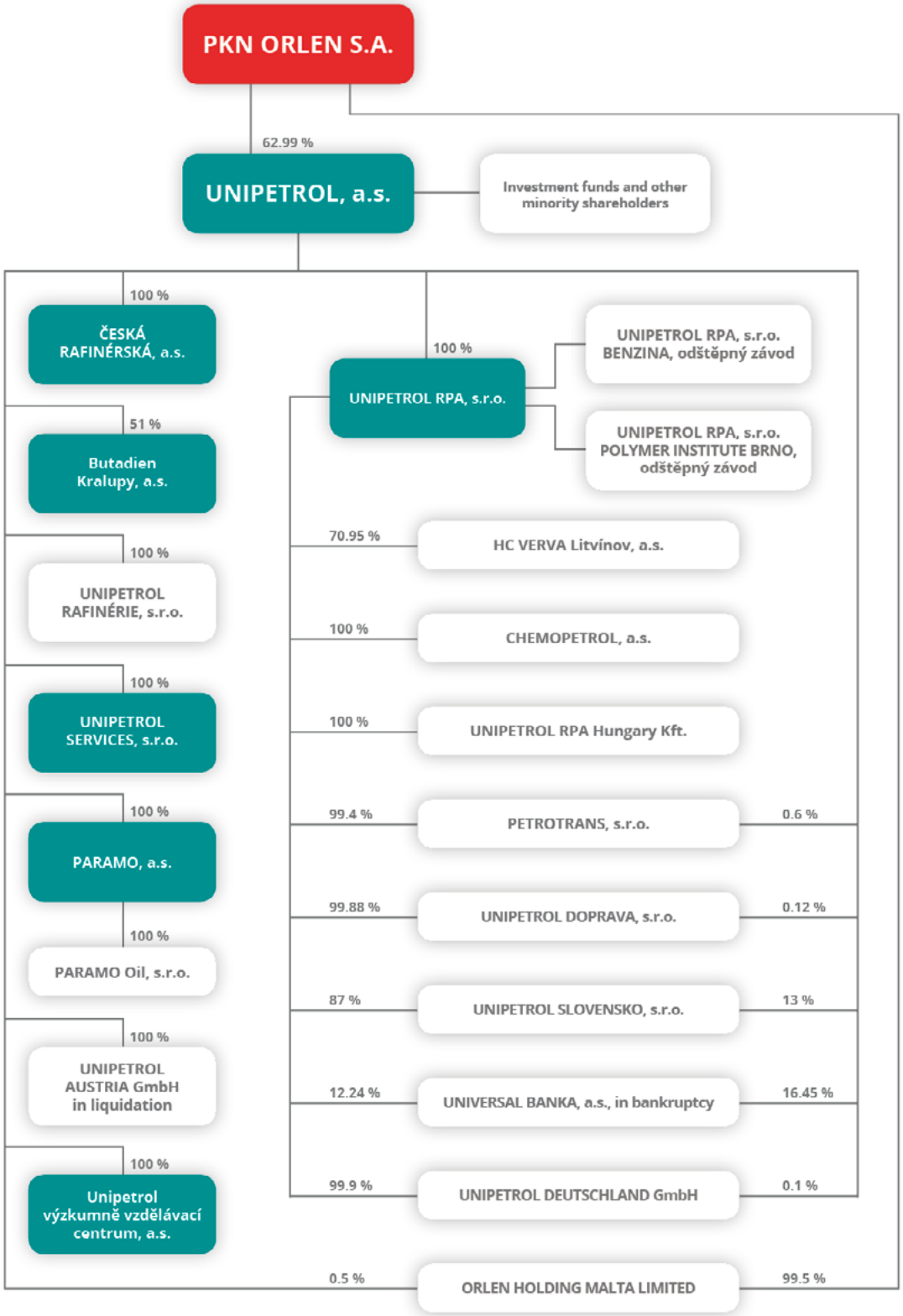
Paramo

Manufacturing company Paramo produces asphalt products and lubricating and process oils, including related and ancillary products.

Unipetrol Services

Service company providing support activities to other companies both within and outside the Group.

Ownership Structure of the Unipetrol Group



II.A The common policy for responsible business in chemistry and integrated system of occupational safety and health, environmental protection and quality management

In November 2007, the Board of Directors of Unipetrol, approved the "Policy for Responsible Business in Chemistry and Integrated System of Occupational Safety and Health, Environmental Protection and Quality Management" which builds on the previous "Joint Environmental Policy of the Unipetrol Group" of 1999 and responds to the new Group structure and new Social Responsibility stimuli (Corporate Social Responsibility – CSR).

THE POLICY FOR RESPONSIBLE BUSINESS IN CHEMISTRY AND INTEGRATED SYSTEM OF OCCUPATIONAL SAFETY AND HEALTH, ENVIRONMENTAL PROTECTION AND QUALITY MANAGEMENT

Unipetrol Group is one of the leading Czech industrial corporations and a national leader in the fields of crude oil refining and petrochemicals.

The Group seeks long-term profitability, competitiveness, and high quality products and services, a high level of safety and environmental responsibility in production, commercial and logistics operations, including oil refining, petrochemical and agrochemical production, distribution, services in the field of railway transport, wholesale and retail trade with motor fuels, oils, and other products

As a member of the industrial group ORLEN, Unipetrol observes the principles of the Global Charter the "Responsible Care", sustainable development, and social responsibility.

Unipetrol Group´s priority is to develop, produce, and transport products with minimal risks of an adverse impact on human health and the environment. To mitigate potential risks, Unipetrol introduces the "Product Stewardship – Product supervision and care" which includes product testing, informing customer chains about a broad range of product features and risk management measures where there is a potential risk to health, safety, or environment.

The Group implements and maintains an integrated management system which includes management system of occupational health and safety, environmental management system, and quality management system. In accordance with the integrated management system, the Unipetrol Group agreed to adhere to the following commitments:

2.1. Product supervision and care

Develop, produce, and distribute products with minimal risks of an adverse impact on human health and the environment.

Test products, inform customers and the public on a wide range of product attributes and risk management measures where there is a potential risk to health, safety, or environment.

2.2. Compliance with legal and other requirements relating to occupational safety and health, product quality, and environmental protection:

Fulfil legal requirements and other company-binding requirements in the field of occupational safety and health, environmental protection, and quality of products and services.

Implement the best available technology wherever it is appropriate and efficient.

2.3. Integrated management system

Regularly review the appropriateness and adequacy of the integrated management system policy.

Monitor, measure, and evaluate processes and measures in order to achieve continuous improvement of the Integrated Management System´s efficiency.

Record discrepancies and analyze the causes of process discrepancies, take appropriate corrective and preventive actions for their elimination.

Continuously improve performance in the areas of occupational safety and health, environmental protection, and quality control of products and services.

Include suppliers (both the legal and natural persons) in the management system, acquaint them with the principles and procedures used by the company and require their implementation.

Provide the necessary resources for implementing and maintaining the integrated management system and for financing the system-related activities.

2.4. Preventive approach

Prefer preventive approach in the areas of occupational safety and health, environmental protection, quality of products and services, and protection of assets from the consequences of emergencies; maintain and test emergency and rescue systems.

Operate facilities in a safe manner that protects the health of employees, suppliers, other companies, and inhabitants of the region, and has a minimal impact on the environment, quality of products, and their value.

2.5. Limiting the risks to safety, health, and environment

Implement a system of prevention and management of risks to health, safety and environment in order to minimize the adverse effects of such risks and accidents and compensate for damage caused by such accidents to health, the environment, or property.

Inform the public about the existence of health, safety, and environmental risks and adopted safety and preventive meaures;

Continuously identify hazards, assess risks, health and environmental impacts, and adopt and implement measures to eliminate or reduce the risks, minimize negative impacts arising from emergencies;

Teach employees how to prevent adverse impacts of their activities on health, occupational safety and environment, product quality and property.

2.6. Open approach

Apply open approach to all parties involved;

Maintain contact with all parties and promote an open attitude towards the public, especially the neighboring towns and villages.

2.7. Evaluation of impacts on safety, health, and environment

Evaluate the impacts on health, safety, and the environment before starting a new activity or project, implementing change, or before stopping an operation and apply the evaluation results so that adverse impacts are minimized.

2.8. Logistics and transport services

Provide logistics and transport services with regard to a high standard of safety, quality, and environmental performance. Implement and maintain the European "Safety & Quality Assessment System – SQAS" for transport services and assessment for cleaning transport facilities European Cleaning Document (ECD);

2.9. Rectification of old environmental burdens

Implement long-term program of rectification of old environmental burdens.

2.10. Customer focus

Maintain a high quality of products and services, adapt product specifications and services to customer requirements wherever it is possible and effective.

Monitor information on customer satisfaction. Meet the needs and expectations of customers and requirements of other stakeholders (suppliers, employees, and owners) in order to achieve their satisfaction and gain competitive advantages.

2.11. Training and education of employees

Educate, motivate, and raise awareness among employees, suppliers, and other business partners regarding security, occupational safety and health, environmental protection, and quality of supplied products and services.

2.12. Protection of company assets

Preserve and protect the company's assets. Adequately insure against indelible risks in order to reduce their impact on the company's assets.

II.B Energy policy

Already in 2015 Unipetrol Group decided to implement the energy management system into already established and certified environmental management systems (EMS), safety management (HSMS) and quality management (QMS) according to ISO 50001. Under this decision it adopted the below mentioned Energy policy.

Energy policy
Unipetrol Group is engaged in refineries and petrochemical production and sales in the Czech Republic and Central Europe. Companies within the group produce and sale mainly refinery products, chemical and petrochemical products, polymers and specialty chemicals. The Group also operates its own transportation services and finances its own research and development. Unipetrol is the leading refinery and petrochemical group in the Czech Republic and a major player in Central and Eastern Europe. Costs of production and procurement of energies constitute a significant item of its budget.

Energy policy is based on values that the Group holds, that is Responsibility – Development – People – Energy – Reliability. One of the key priorities is to reduce the energy consumption and increase the efficiency of their use continuously. The Group's companies therefore implement, maintain and improve the energy management system (EnMS) according to ISO 50001.They declare that all requirements of this norm (including legal and other requirements) are met and the principle of continuous improvement in energy management is fulfilled. The group is also committed to systematically reduce negative impacts of their activities on the environment.

Group's companies undertake within the energy management system to:

- Comply with relevant legal and other requirements;
- Contribute to meeting national objectives on greenhouse gas emissions and increase of energy efficiency;
- Regularly examine performance in energy efficiency and establish relevant measures for its improvement;
- Optimize continually and systematically the energy consumption and associated costs, reduce the energy consumption in the long run;
- Use procurement processes as one of the key criteria of energy efficiency;
- Provide the necessary resources to meet the obligations of ISO 50001 norm;
- Ensure availability of all information related to the energy management system to all employees, to educate them in the area of energy efficiency, new technologies and their impact on the environment, require and motivate them to make them participate in fulfilling the objectives of the established energy management system;
- Cooperate with experts from the academic and professional community in meeting the objectives of the established energy management system.

Energy policy is binding for all employees.

III. Activities of the Unipetrol Group related to environmental protection in 2015

3.1. Environmental investments

Environmental investments are defined as capital investment projects caused directly by requirements of environmental protection legislation and closely related to implementation of integrated pollution prevention. Environmental investments include other investment projects with a significant positive effect on the environment.

In 2015, the Group implemented the following major environmental investments:

Česká rafinérská

Česká rafinérská implemented environmental protection investment projects in the total value of CZK 258.3 mil. These include in particular:

- Reconstruction of wastewater treatment plant in Kralupy – in 2013 the implementation of the project of wastewater treatment plant in Kralupy was launched, which is required in the applicable IPPC. The project was conducted so that the plant complies with the requirements of best available technologies (BAT). The project was completed in December 2015 and from 1 January 2016 the wastewater treatment plant is in trial operation.
- Reconstruction of the sewer system in Kralupy – there are two projects for reconstruction of the existing sewer system. As preferential the parts with potential occurrence of MTBE were selected and solved preferentially in a separate project. The second project addressing reconstruction of the remaining part of the sewer system was completed in 2015.
- A project for expansion of the remedial system in the tank station Jiřetínská and the road terminal in the Litvinov refinery was launched in 2014. The expansion of the system was completed in 2015 and the system was put into operation.
- The reconstruction of the visbreaking sewer unit in Litvínov was launched in 2014 and completed in 2015. Subsequently, the project of repairing of the follow-up part of the sewer system between the visbreaking unit and the new refinery was launched. The completion is scheduled for 2016.
- Modernization of the MEA system in Litvínov – launch of the amine gas purification units' modernization project, including regeneration of the units. The main part of the project will be implemented in the turnaround 2016.
- A project of reconstruction of the gas boiler in the LPG warehouse was completed in the Kralupy refinery.
- In the New Litvínov refinery preparations of the slop system renovation project started. The project will continue next year.
- In 2015 project preparations were launched to ensure compliance with the requirements of so-called best available technologies BAT. On selected sources in both refineries, a completion of continuous measurements emissions into the air will be made. Kralupy refinery will implement an installation of DeSOx additives dosing to the fluid catalytic cracker.
- The Kralupy refinery started the preparation for the project of cistern yard storage tanks repair.
- The Litvínov refinery started the preparation for the repairing project of oily water wells on C/D distillation production and retaining facility on bottling track No. 69.

Unipetrol RPA

In Unipetrol RPA were implemented environmental protection investment projects in the total value of CZK 46,3 mil. The most important ones were:

- Segregation of sewage, 3rd and 4th stage
- Preparation for installation of DeNOx technology in the T700 heating plant
- Preparation for replacement of continuous emission measurement on T700 heating plant
- Reconstruction of sewer system and manholes in the area of the steam cracker
- Water supply and distribution for steam cracker handling areas.
- Construction of facilities for cleaning tanks in the mechanical polishing station
- Replacement of filters on homogenization silos of the polypropylene production plant
- Construction of cleaning surface for the needs of turnaround works
- Feasibility study for reconstruction of the steam cracker energy block

A number of additional measures with a positive impact on the environment were implemented as part of the operating costs of the facility maintenance.

Paramo

In Paramo environmental investment projects in the total value of CZK 14.4 mil were implemented. The most important ones were:

- Completion of reconstruction of the VR52 tank in the P02 plant (HS Pardubice),
- Swapping of the existing solvent in the selective refining plant (HS Pardubice) from the original cresol to the more environmental friendly N-Methyl 2-Pyrrolidone (BAT compliance)- completed

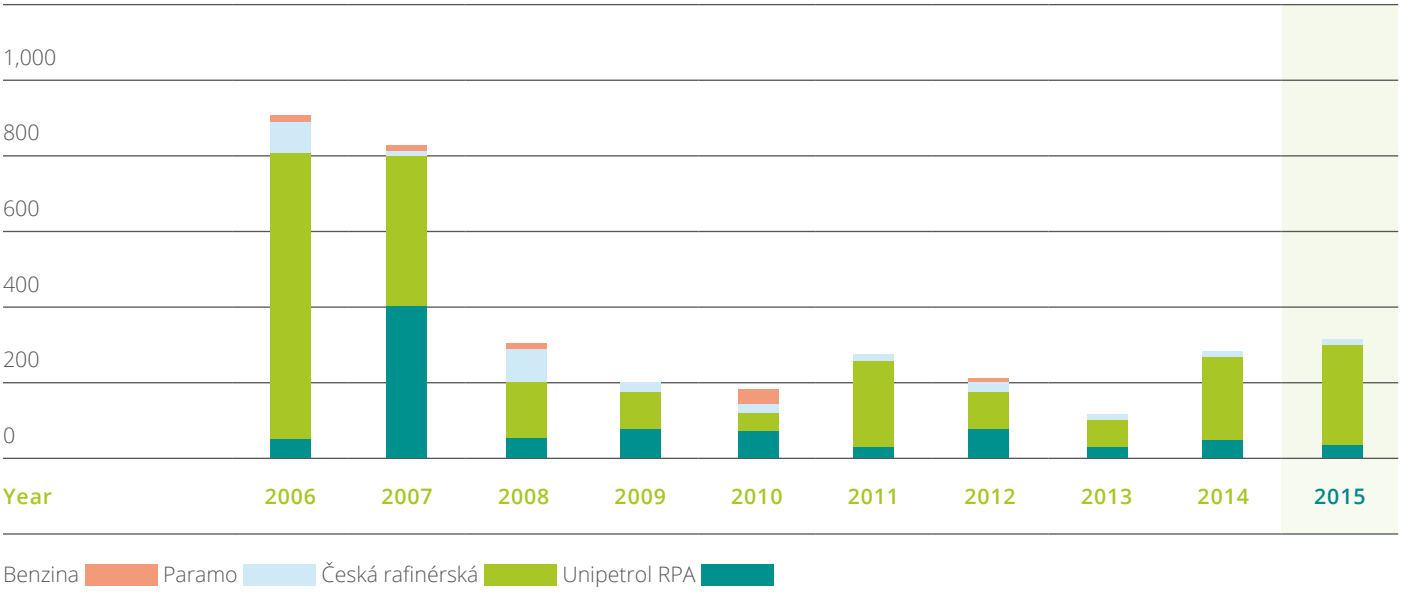
Benzina

In Benzina environmental protection projects were implemented in the total value of CZK 740 thousand. The most important ones were:

- Exchange of BioČOV on ČS 479 Hradec nad Svitavou.
- Continuation of the project of change of rainwater disposal method. The project has passed several stages of implementation – from the feasibility study to commencement of the construction permission procedure. The project further includes 42 ČS Benzina fuel stations, 8 of which were ceased due to disadvantageousness.
- Construction of groundwater borehole for the improvement of stability in BioČOV on ČS 196 Šlovice.
- Reconditioning of ČOV on ČS 643 Ostrava-Hrabová in connection with the installation of the new manual pressure washing device.

Investment costs of environmental protection in the Group (CZK mil. per year)

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Unipetrol RPA	65	389	85	76	81	25	62	26	63	**46**
Česká rafinérská	740	397	116	105	40	241	127	82	177	**258**
Paramo	87	26	59	14	20	7	18	7	10	**14**
Benzina	6	16	22	5	35	8	6	3	2	**1**
Unipetrol Group	**898**	**828**	**282**	**200**	**175**	**281**	**213**	**117**	**252**	320



3.2. The costs of environmental protection

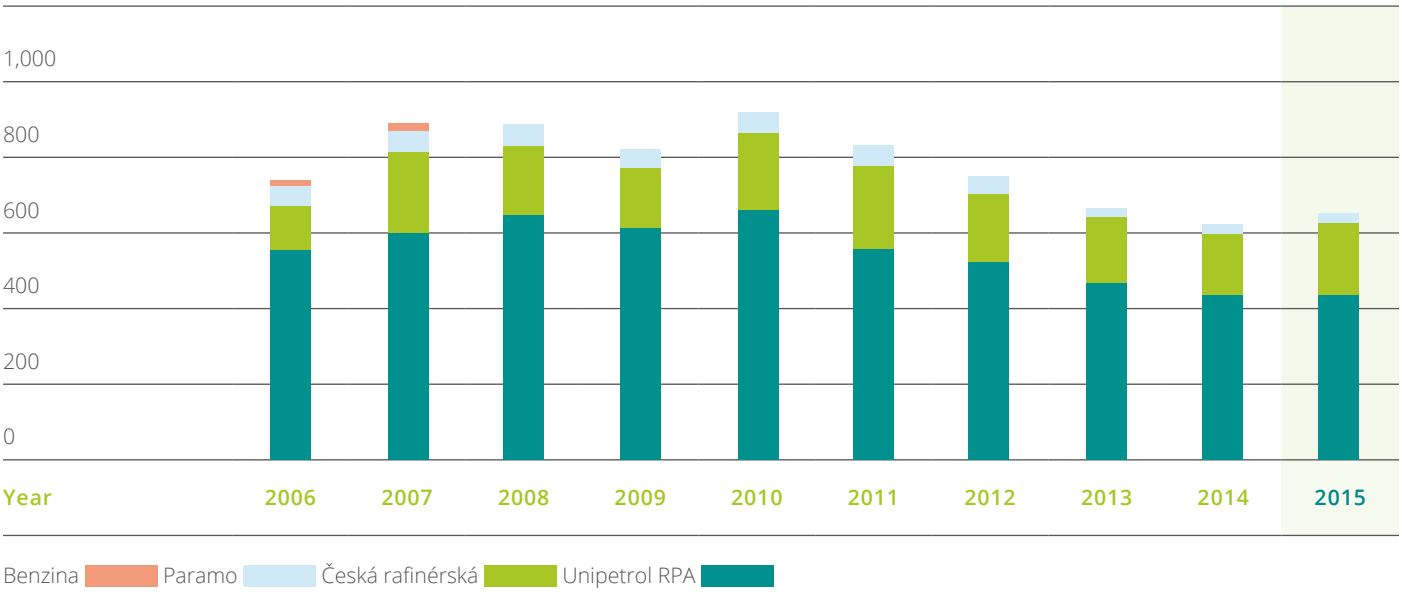
Environmental operating costs

Costs associated with the operation of installations for air protection, wastewater treatment, waste management, environmental management systems, emissions monitoring, evaluation of environmental impact (EIA process), integrated pollution prevention, and other related environmental activities are called environmental operating costs.

Newly installed modern technologies with high degree of raw material conversion, reduced amount of waste, and high energy efficiency have resulted in an overall reduction in environmental operating costs compared with the previous decade. The amount of environmental operating costs has been more or less stable in the last decade. Development trend of environmental operating costs in 2006 – 2015 is shown in the following table.

Operating costs of environmental protection in the Group (CZK mil. per year)

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Unipetrol RPA	590	606	654	624	652	544	511	486	433	**437**
Česká rafinérská	106	203	166	144	202	254	185	176	168	**170**
Paramo	47	48	44	35	44	40	34	15	13	**18**
Benzina	5	5	5	5	6	3	4	2	3	**3**
Unipetrol Group	**748**	**862**	**869**	**808**	**904**	**841**	**734**	**681**	**617**	**629**



Total costs of environmental protection

The total costs of environmental protection in the Unipetrol Group include the costs of environmental investments, operating costs of environmental protection, restoration costs of environmental damage, and also charges for air pollution, wastewater discharges, waste disposal in landfills, provisioning for landfill reclamation, and compensations for pollution damage to forests. Development of charges and payments for environmental pollution and the total costs of environmental protection in the years 2006 – 2015 are shown in the following table. The decrease in fees and charges in 2009 in comparison with 2008 in Česká rafinérská is due to a change in methodology.

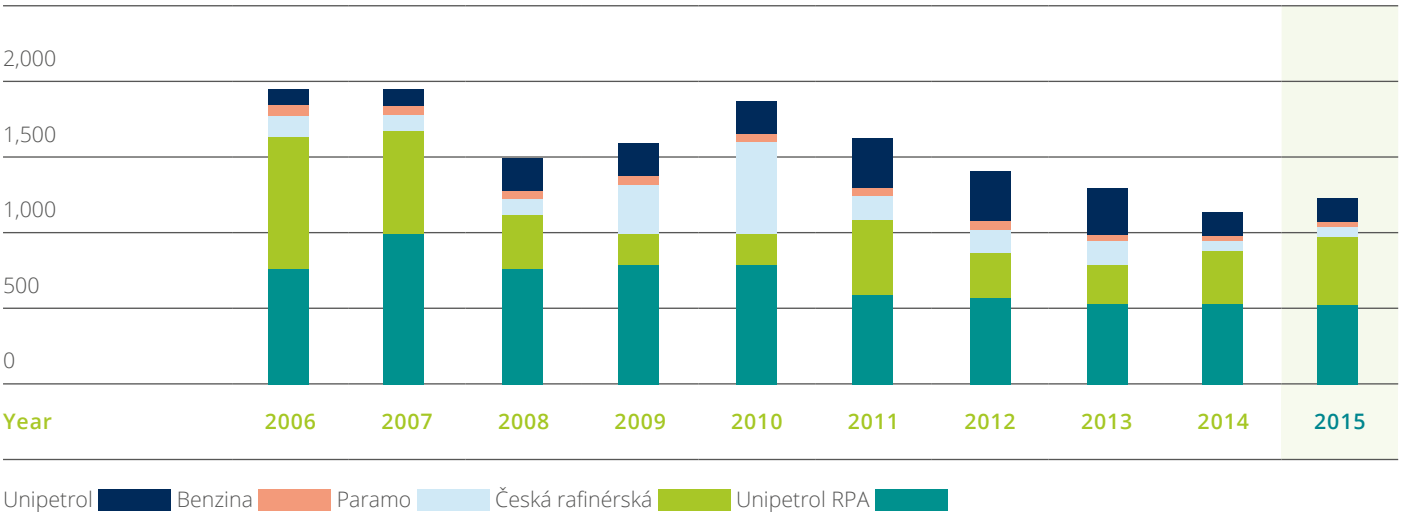
Fees and payments for environmental pollution in the Group (CZK mil. per year)

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Unipetrol RPA	44	16	18	41	32	27	30	25	25	**21**
Česká rafinérská	75	89	113	12	7	10	23	23,8	18	**13**
Paramo	2	1	2	1,7	2,5	2,6	1,7	1,2	1,3	**1**
Benzina	0	0	0	0	0	0	0,2	0	0	**0**
skupina Unipetrol	**121**	**106**	**133**	**55**	**41**	**40**	**55**	**39**	**45**	**36**

The total costs of environmental protection in 2015 amounted to a total of CZK 1.2 billion. The increase in the total costs in 2009 and 2010 compared to 2008 was mainly due to the commencement of new projects in the field of remedial works at both Paramo locations, the decline in 2011-2012 related to the interruption of remediation of contaminated soil from the former rhododendron lagoons in HS Kolín. The drop in costs in 2014 compared to 2013 was mainly due to lower costs for remediation of old environmental burdens.

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

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Unipetrol RPA	699	1011	757	741	764	596	603	537	521	**505**
Česká rafinérská	921	689	395	261	249	505	335	281	363	**442**
Paramo	176	85	119	346	591	179	114	158	79	**80**
Benzina	26	38	73	31	67	39	39	35	18	**10**
Unipetrol	147	148	144	159	148	256	343	306	182	**147**
skupina Unipetrol	**1,969**	**1,971**	**1,488**	**1,538**	**1,820**	**1,576**	**1,434**	**1,317**	**1,163**	**1,183**



3.3. Management systems

Management systems are a very important factor in environmental protection, occupational safety and health protection, and fire protection. Companies within Unipetrol Group have implemented and certified Environmental Management Systems (EMS), Security Management Systems (HSMS), and Quality Management Systems (QMS) in order to guarantee a system approach to environmental protection and other areas.

The systems are certified according to international standards ISO 14001, OHSAS 18001, and ISO 9001.

In the third quarter of 2015 Unipetrol, Unipetrol RPA, Unipetrol Doprava, Benzina, Unipetrol Services and Petrotrans underwent the IMS audit. The certification organisation Lloyd's Register Quality Assurance confirmed compliance with the relevant system standards. At the turn of June and July 2015 the same company conducted the regular TMS audit in Česká rafinérská and even in this company it did not find any significant findings which would prevent the continued validity of the issued certificate. In May 2015 Paramo underwent the Lloyd's Register Quality Assurance recertification audit comprising all three sysemts EMS, HSMS and QMS. Based on the audit results, it extended the validity of integrated certificate to 2018.

In January 2014, SGS Germany performed certification audit of the International Sustainability & Carbon Certification System (ISCC) in Unipetrol RPA. Similar ISCC audit was carried out in November 2015 by TÜV SÜD Czech in Česká rafinérská.

3.4. Responsible Business in Chemistry Program – Responsible Care

Responsible Care (hereinafter "R.C. ") is a voluntary worldwide initiative of the chemical industry aimed at promoting the industry´s sustainable development by increasing the safety of facilities, product transport, and protection of human health and the environment. The program represents a long-term strategy coordinated by the International Council of Chemical Associations (ICCA) and in Europe by the European Chemical Industry Council (CEFIC). The contribution of the R.C. program to sustainable development was acknowledged by an award of the United Nations Environment presented at the World Summit in Johannesburg.

The national version of the R.C. program initiative which was officially launched in October 1994 by the Minister of Industry and Trade (SCHP ČR) and President of the Association of Chemical Industry of the Czech Republic; Since 2008, the program meets the conditions of the Global Charter R.C..

In 2014, the permission to use the logo of the Responsible Care program was bestowed to Unipetrol and Unipetrol Doprava. Since Unipetrol RPA, Unipetrol Services, Česká rafinérská, and Paramo are no longer members of the Association of Chemical Industry of the Czech Republic, they do not use the authorization, although they continue to meet the principles.

Management systems certified/verified in Unipetrol Group in 2015

Company	Verifier	Certification	Certification dates	Recertification outlook
Unipetrol RPA	LRQA	ISO 14001	2002, 2005, 2008, 2011, 2014	2016*
Unipetrol RPA	LRQA	ISO 9001	1996, 1999, 2002, 2005, 2008, 2011, 2014	2016*
Unipetrol RPA	LRQA	OHSAS 18001	2005, 2008, 2011, 2014	2016*
Unipetrol RPA	SCHP CR	Responsible Care	1996, 1998, 2000, 2002, 2004, 2008, 2011, 2014	-
Unipetrol RPA	SGS Germany	ISCC	2011, 2012, 2013, 2014, 2015	2016
Paramo	LRQA	ISO 14001	2003, 2006, 2009 2012, 2015	2018
Paramo	LRQA	ISO 9001	1996, 2000, 2003, 2006, 2009 2012, 2015	2018
Paramo	LRQA	OHSAS 18001	2007, 2009 2012, 2015	2018
Paramo	SCHP ČR	Responsible Care	2001, 2003, 2005, 2008 2012	-
Paramo	SCHP ČR	Sustainable Development Award	2008	-
Unipetrol Doprava	LRQA	ISO 14001	2007, 2008, 2011, 2014	2016*
Unipetrol Doprava	LRQA	ISO 9001	2005, 2008, 2011, 2014	2016*
Unipetrol Doprava	LRQA	OHSAS 18001	2008, 2011, 2014	2016*
Unipetrol Doprava	MOODY International	SQAS	2006, 2009, 2012, 2015	2018
Unipetrol Doprava	SCHP ČR	Responsible Care	2011, 2014	2017
Unipetrol Doprava	Rail Authority	ECM	2013	2018
Benzina	LRQA	ISO 14001	2008, 2011, 2014	2016*
Benzina	LRQA	ISO 9001	1996, 1999, 2002, 2005, 2008, 2011, 2014	2016*
Benzina	LRQA	OHSAS 18001	2008, 2011, 2014	2016*
Česká rafinérská	LRQA	ISO 14001	2001 / 2005, 2007, 2010, 2013	2016
Česká rafinérská	LRQA	ISO 9001	2001 / 2004, 2007, 2010, 2013	2016
Česká rafinérská	LRQA	OHSAS 18001	2007, 2010, 2013	2016
Česká rafinérská	TÜV SÜD Czech	ISCC	2014, 2015	2016
Česká rafinérská	SGS Czech Republic	Product certification ETO	2013	2016
Česká rafinérská	INSTITUT FOR TESTING AND CERTIFICATION	Production management system of a certified product – road bitumen	2010	In case of changes of norms/ conditions in bitumen production/ production management system
Česká rafinérská	SCHP ČR	Responsible Care	2000 / 2002, 2004, 2008, 2012	-
Unipetrol	LRQA	ISO 14001	2008, 2011, 2014	2016*
Unipetrol	LRQA	ISO 9001	2008, 2011, 2014	2016*
Unipetrol	LRQA	OHSAS 18001	2008, 2011, 2014	2016*
Unipetrol	SCHP ČR	Responsible Care	2000, 2003, 2005, 2007, 2011, 2014	2017
Unipetrol Services	LRQA	ISO 14001	2008, 2011, 2014	2016*
Unipetrol Services	LRQA	ISO 9001	2008, 2011, 2014	2016*
Unipetrol Services	LRQA	OHSAS 18001	2008, 2011, 2014	2016*
Unipetrol Services	SCHP ČR	Responsible Care	2014	-

* The certification audit performed a year earlier due to the unification of terms within Unipetrol Group and planned certification EnMS according to ISO 50001

IV. Compliance with laws on environmental protection

4.1. Integrated prevention and reducing of pollution

Obligations of selected industrial companies in the area of integrated pollution prevention (IPPC) are regulated by the Act No. 76/2002, as amended. The scope of this act includes, among other things, all production companies in chemical and refining industries.

Companies within Unipetrol Group, either directly or through industry associations and NGOs, participated in the preparation and consultation process of further new legislation of the Czech Republic and the EU and the related documents (e.g. BREF documents). The revision works of the BREF documents for large combustion plants, large-scale production of organic materials, and wastewater and emissions treatment continued in 2015. At the end of 2014, the Conclusions on BAT for oil and gas refineries were officially published in the Official Journal of the European Union.

Integrated permits for refineries in Litvínov and Kralupy have been issued for the refineries as a whole, without any breakdown into individual plants. Changes of integrated permits were carried out in relation with new investment projects the scope of which required a change in the integrated permit.

The original integrated permit for Litvínov refinery was issued by the Regional Office of the Ústí region on December 15, 2003, for Kralupy refinery by the Regional Office for Central Bohemia on February 9, 2004. Operation conditions set in the integrated permits were completed and changed in following years. During 2015, decisions on changes No. 10 and No. 11 of the integrated permit for Litvínov refinery and changes No. 6 and No. 7 of the integrated permit for Kralupy refinery were issued and the request for change No. 8 was submitted – these changes implement the requirements of the Act No. 201/2012 Coll., On Air Protection, some requirements of the Act No. 76/2002 Coll., On Integrated Prevention and requirements of European legislation on the Best Available Techniques BAT.

All Unipetrol RPA production units have valid integrated permits issued by the Regional Authority of the Ústí region. These permits are continuously updated in relation to the implementation of investment projects, changes in technological equipment or used substances, meeting of term conditions, or changes in legislation.

During 2015 14 insignificants amendments to integrated permits for Unipetrol RPA facilities were issued. The changes involved for eg. the review of the conditions related to the collection of surface water, their accumulation and cooling water transfer, the review of circumstances related to the discharge of wastewater into surface water, authorization of planned changes in the operation of the facility – eg. Installing a new dimerization reactors to increase ZC9 production, renewal of the Steam Cracker – replacement of four pyrolysis furnaces BA 107 – BA 110, change of the medium stored in tanks in ammonia storage, approval of the operating regulations pursuant to the Air Protection Act, approval of the transfer of a part of emission ceiling for TZL, intended for T700 heating plant to another operator, approval of the planned change – application DeNOx technology to the T700 heating plant, approval of the Transitional national plan according to the Air Protection Act, approval of emergency plans for production units, approval of the submitted basic reports and setting the conditions for the case of cessation of operations at the facility, setting the conditions for groundwater monitoring in the area of individual facilities, change of wastewater monitoring from certain production units and last but not least, update in the description of individual facilities due to the authorization of planned changes in the given facilities.

All technologies run by Paramo have valid integrated permits. Since 2014 a common integrated permit has been obtained in HS Pardubice for the Power Engineering, Bitumen, Fuels and Oils operation (issued by the Regional Office of Pardubice region). During 2015 IP was updated (shutdown of HOSD furnaces, placement of a diesel generator). HS Kolín won one integrated permit issued by the Central Bohemian Region Office. During 2015 IP was updated due to the placement of diesel generators, a permit to discharge wastewater until 2018 and approval of the basic report. The permission is changing constantly according to planned investments, termination of certain technologies and legislative changes.

Overview of valid integrated operating permits on December 31, 2015

production unit	integrated permit (issuer, date of issue)
Unipetrol RPA	
Production of polypropylene and polyethylene	Regional Authority of the Ústí Region; issued on December 16, 2003 for an indefinite period, 15 amendments
Ethylene unit incl. naphthalene concentrate production	Regional Authority of the Ústí Region; issued on February 21, 2005 for an indefinite period, 12 amendments
Production of ammonia	Regional Authority of the Ústí Region; issued on June 12, 2006 for an indefinite period, 8 amendments
Heating oil gasification unit	Regional Authority of the Ústí Region; issued on July 12, 2006 for an indefinite period, 10 amendments
Energy services unit	Regional Authority of the Ústí Region; issued on October 11, 2007 for an indefinite period, 29 amendments
Production of dicyclopentadiene and non-hydrogenated C9 fraction	Regional Authority of the Ústí Region; issued on February 23, 2009 for an indefinite period, 1 amendment
Česká rafinérská	
Litvínov refinery	Regional Authority of the Ústí Region; issued on December 15, 2003 for an indefinite period, 11 amendments
Kralupy nad Vltavou refinery	Regional Authority of the Central Bohemian Region; issued on March 13, 2008 for an indefinite period with the exception of the part setting conditions for discharging waste water (this part is valid until December 31, 2019), 7 amendments
Paramo	
Refinery plant, cost centre Pardubice	Regional Authority of the Pardubice Region; published in the version of the 7th amendment to the original IP of February 2, 2004 for an indefinite period. (Last modified on August 19, 2015)
Cost center Kolín	Regional Authority of the Ústí Region; issued on May 31, 2005 for an indefinite period, 10 amendments (10th modification of March 23, 2015)

Integrated pollution register

In the Czech Republic, Integrated Pollution Register (IPR) is kept under the Act No. 25/2008, as amended and in accordance with the Regulation of the European Parliament and of the Council No. 166/2006 establishing The European Pollutant Release and Transfer Register (E-PRTR).

Pollution registers (IRZ and E-PRTR) for individual companies and sectors register data on emissions of 93 reported substances into the air, water, and soil, on their transfers in waste and wastewaters, and transfers of hazardous and other wastes. Yearly data for IPR and E-PRTR are obtained from companies through the Integrated system of reporting obligations (ISRO). The companies must deliver the data by March 31 and the data are subsequently published on the IRZ server by 30 September. The legislation requires that companies report substances whose emissions have reached or exceeded a certain threshold value the to the Integrated pollution register IPR.

4.2. Air pollution control, wastewater discharges, waste management

All companies within the Group maintain compliance of company operations with the requirements of laws on environmental protection. Air pollution sources are operated in accordance with the applicable operational rules. Authorised measurements of emissions are performed in legal terms. All facilities dispose of approved water management plans. Wastewater quality is regularly monitored. Emission limits for pollutants in sewage water are met. Waste is monitored and recorded in accordance with the legislation in force.

Compliance with legislation is monitored by the company management and by the Group headquarters. It is also independently verified by administrative authorities and certification bodies and in companies participating in the "Responsible Care" program also by the Association of Chemical Industry of the Czech Republic. In the case of deviations from the requirements of legal requirement, the appropriate corrective action are implemented without delay. Administrative authorities may impose fines for such deviations. Wastewater discharges

Over the last five years, emissions of pollutants into the environment were stabilized due to massive environmental investments that were made over the previous decade.

The amount of pollution discharged into wastewater is steadily declining. The decline was achieved through a number of investment and non-investment measures, e.g. an extensive reconstruction of biological wastewater treatment in Unipetrol RPA in 2007-2009, reconnection of urban waste water to the newly built sewage treatment plant in 2010, segregation of industrial water from the common sewerage system into the industry sewerage system, and many other measures.

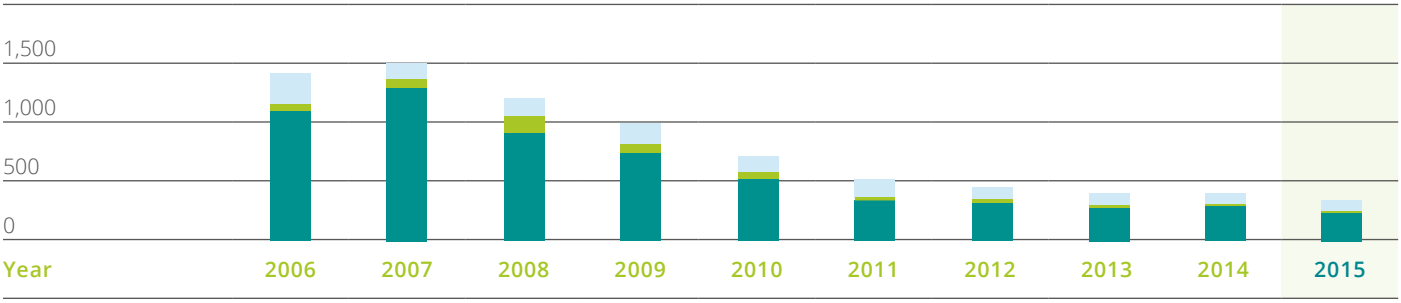
The shutdown (or more precisely operation limits of production units) had an impact on the reduction of pollution by Unipetrol RPA in 2015 as a result of the steam cracker accident in August 2015.

Pollutants discharged in wastewater by the Group (t/year)

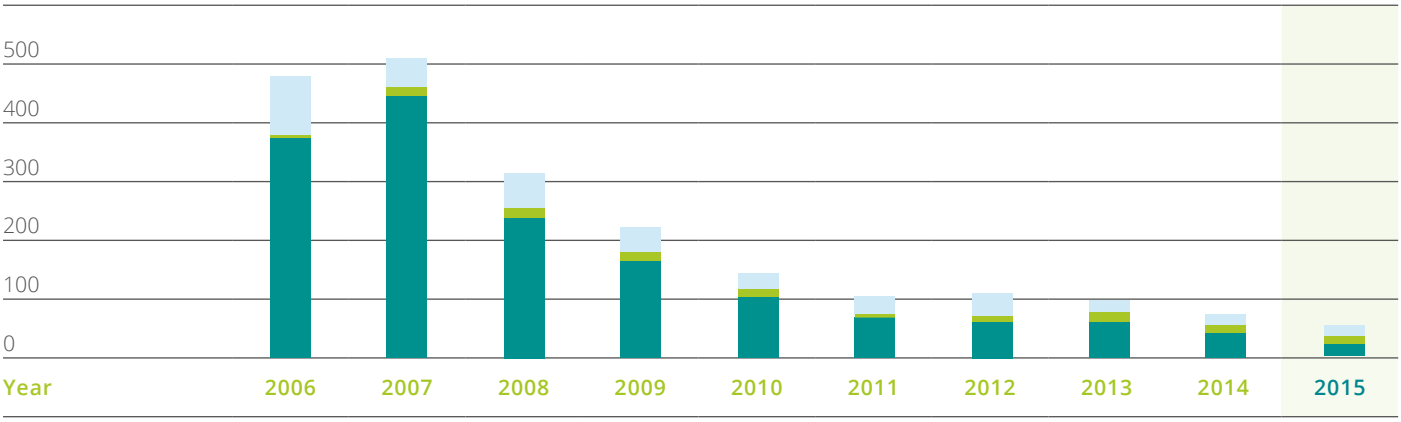
Year	Parameter	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Unipetrol RPA	CHSK	1107	1261	932	780	500	329	311	277	290	**258**
	BSK_5	379	435	237	171	122	62	59	48	37	**16**
	NL	357	395	241	302	208	155	153	111	83	**34**
	Oil products	4	5	3	2	3	1	1	2	1,3	**0**
Česká rafinérská [1)]	CHSK	69	66	71	49	37	37	37	38	38	**30**
	BSK_5	9	11	15	14	15	18	12	16	13	**8**
	NL	43	45	49	46	49	48	39	42	41	**29**
	Oil products	2	3	1	2	1	2	1	1	1	**1**
Paramo	CHSK	248	171	163	154	192	153	111	116	104	**84**
	BSK_5	92	65	59	35	38	32	36	26	24	**19**
	NL	38	27	27	26	32	50	34	39	25	**18**
	Oil products	9	6	8	6	7	6	4	3	1,33	**1**
Unipetrol Group	**CHSK**	**1,424**	**1,498**	**1,166**	**983**	**729**	**519**	**459**	**431**	**432**	372
	BSK_5	**480**	**511**	**311**	**220**	**175**	**112**	**107**	**90**	**73**	**43**
	NL	**438**	**467**	**317**	**374**	**289**	**253**	**226**	**192**	**148**	**81**
	Oil products	**15**	**13**	**12**	**10**	**11**	**9**	**6**	**6**	**4**	**3**

[1)] only in Kralupy

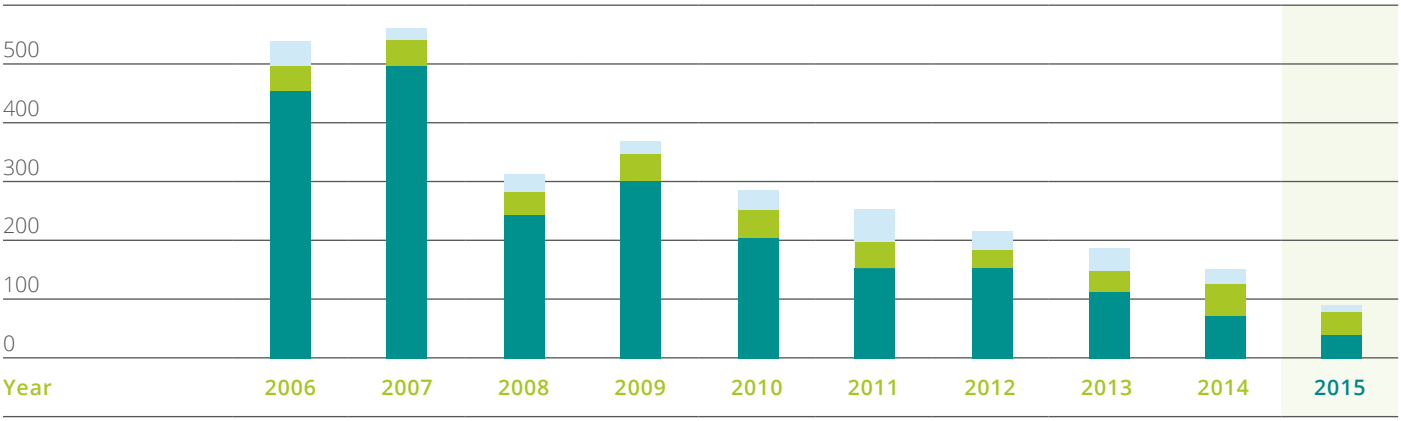
COD



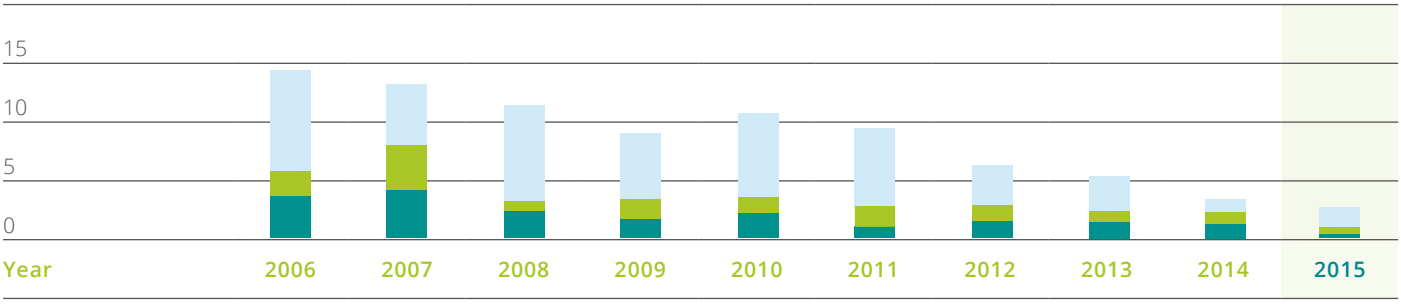
BOD_5



Undissolved substances



Oil products



Unipetrol RPA Česká rafinérská Paramo

Waste management

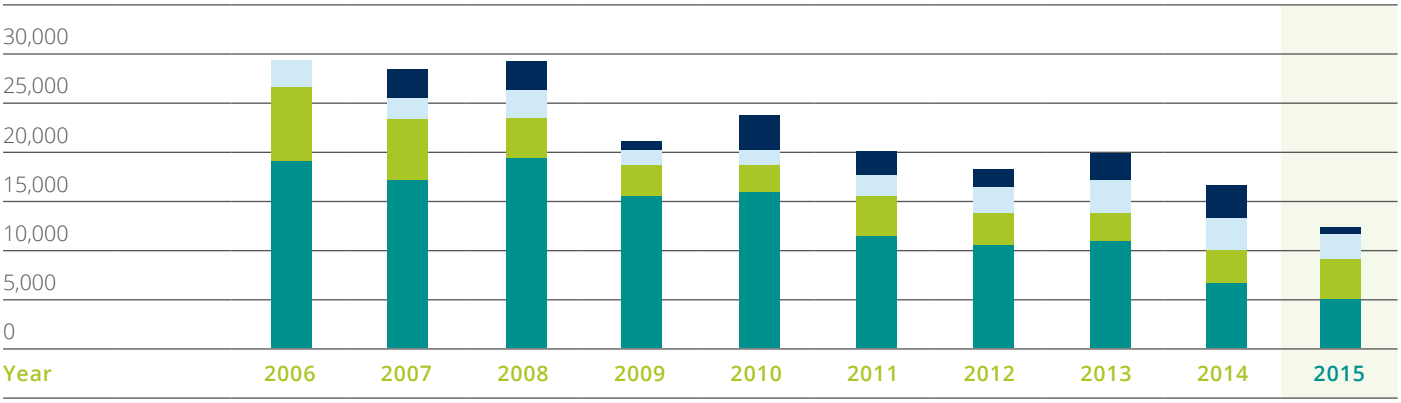
Unipetrol Group managed to achieve significant reduction of volume of both overall and hazardous waste in the long term. In the period 2004 – 2010, the amount of waste was more or less stable with only minor fluctuations caused by stop works or major capital constructions. Between 2011 and 2012, there was a reduction in waste production compared to previous years, mainly due to the reduced amount of waste generated during demolition and construction works. Other waste reduction at Unipetrol RPA was achieved by improvements in the quality of plastic products, which no longer have to be classified under sub-wastes because they now meet the quality requirements on products. The steam cracker unit accident contributed to the reduction of the amount of the waste from Unipetrol RPA. Increased production of hazardous waste in Paramo in 2013 was due to liquidation (selling) of larger volumes of waste slop oils.

Waste production in the Group (t/year)

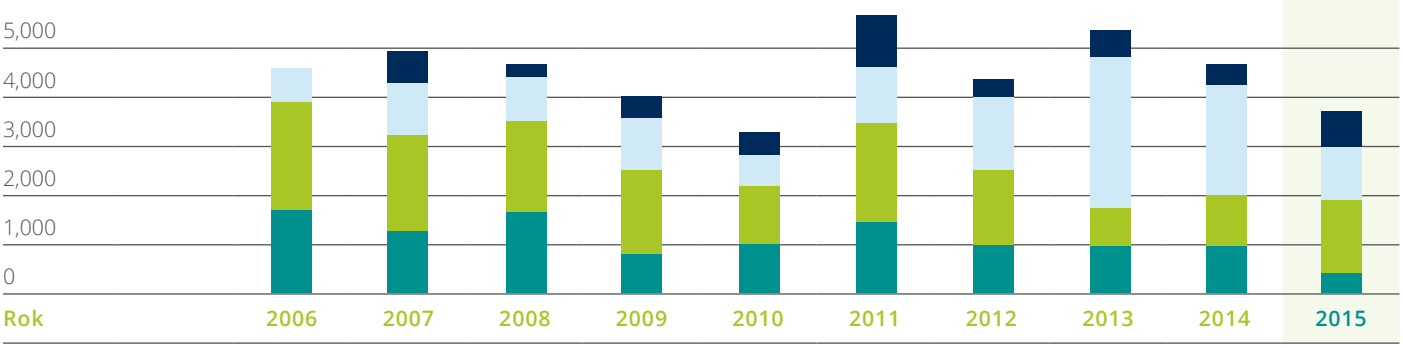
Year	Parametr	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Unipetrol RPA	Total	18,963	17,065	19,818	15,261	15,693	11,563	10,290	10,904	6,368	**5,177**
	Of which is hazardous	1,620	1,309	1,661	914	1,067	1,644	1,067	1,002	1,038	**389**
Česká rafinérská [1)]	Total	8,051	6,599	3,911	3,323	3,103	4,113	3,809	3,043	3,565	**4,336**
	Of which is hazardous	2,253	1,932	1,985	1,663	1,078	1,936	1,534	806	1,075	**1,540**
Paramo	Total	2,310	1,983	2,821	1,723	1,449	2,048	2,280	3,439	3,038	**1,841**
	Of which is hazardous	665	1,115	939	1,060	629	1,151	1,465	2,957	2,307	**1,128**
Unipetrol Doprava	Total	2,094	2,419	2,094	722	3,352	2,539	1,766	2,364	3,394	**953**
	Of which is hazardous	214	527	214	344	393	906	400	532	361	**654**
Unipetrol Group	**Total**	**31,418**	**28,066**	**28,644**	**21,029**	**23,597**	**20,262**	**18,145**	**19,750**	**16,365**	12,307
	Of which is hazardous	4,752	4,883	4,799	3,981	3167	5632	4,466	5,298	4781	**3,710**

[1)] including investment activities

Total waste



Hazardous waste



Unipetrol RPA Česká rafinérská Unipetrol Doprava Paramo **Ochrana ovzduší**

Air protection

In Unipetrol RPA and in the Záluží part of Česká rafinérská the total amount of sulphur dioxide emissions increased in 2007 compared to 2006. The emission increase was due to replacement combustion of relief gases containing hydrogen sulphide from the heating oil gasification unit in Unipetrol RPA and due to combustion of surplus refinery relief gases in the Záluží refinery that could not be processed in gas desulphurization units. Realization of investment projects "Desulphurization unit renewal" and "Visbreaking unit recontacting construction" led to an increase in reliability and capacity of desulphurization. In the following years the combustion of gases due to insufficient desulphurization capacity was eliminated.

The increase in emissions of sulphur dioxide and nitrogen oxides in the Litvínov refinery in 2009 was caused by a boiler failure on Claus III unit. In 2010, the operation was stabilized and the emissions decreased. Increased emissions of SO_2 in 2011 are due to the combustion of part of hydrogen sulphide gases while repairing the sulphur production facility. The reduction of SO_2 emissions in Česká rafinérská and Unipetrol RPA in 2013 and following years compared to 2011 and 2012 was due to extensive repairs of the liquid sulphur production facilities and their subsequent trouble-free operation. In Unipetrol RPA, SO_2 emissions increased by techno-economic reasons. Decrease in other pollutants was caused by a non-operation of the steam cracker unit due to the accident.

Since 2007, Unipetrol RPA has been steadily decreasing the total amount of pollutants released into the air. The decrease was caused by the gradual reduction of output of the older T200 heating plant (shut down permanently in 2011), optimization of operation of the newer T700 heating plant and other pollution sources. A certain increase in emissions of solids in 2010 was mainly due to a lower quality of filters in the T200 heating plant (before its shut-down). The reduction of SO_2 emissions in 2013 was due to the increased rate of desulphurization in T700. The reduction of VOC and NO_x emissions in the years 2012 -2013 was due to shutdown of the T200 heating, due to the ongoing repairs of TG 11, and also thanks to use of a higher DNC+ control on the ethylene unit control system, and, last but not least, due to legislation change which modified VOC balancing. The amount of VOC was also influenced by changes in the composition of the fuel used in the T700 heating plant.

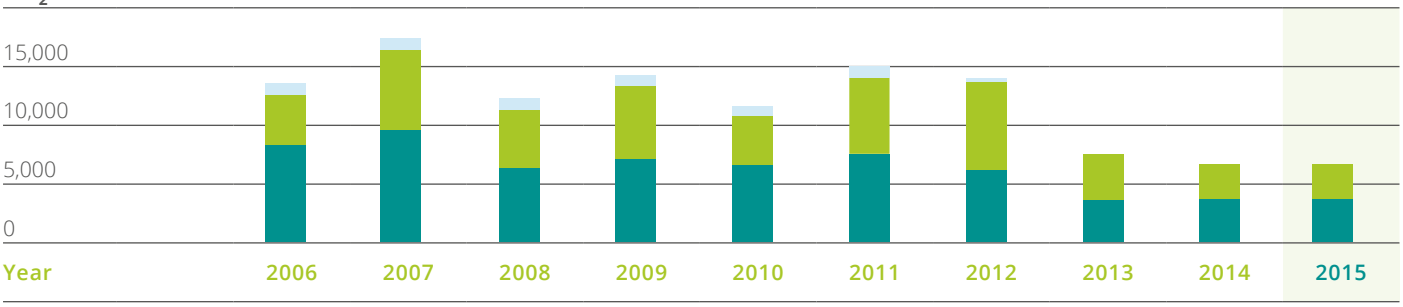
Exclusively natural gas was burned in Paramo and boilers HS Pardubice and HS Kolín which resulted in a further reduction of emissions of sulphur dioxide, particulate matter, and nitrogen oxides in comparison with the previous years. The reduction of overall emissions from combustion processes has been achieved despite the increase in oil processing in HS Kolín. The decrease in the amount of pollutants released into the air was also supported by a limited operation or dropping of some sources of air pollution in the Paliva unit in HS Pardubice.

Pollution emitted into the atmosphere by the Group (t/year)

Year	Parameter	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Unipetrol RPA	SO_2	8,409	9,691	6,143	6,397	6,290	7,039	6,235	3,700	3,973	**4,079**
	NO_x	6,346	5,839	5,695	5,959	5,954	5,388	4,541	3,755	3,958	**3,007**
	Solids	202	281	210	122	255	145	132	99	85	**67**
	VOC	420	381	400	379	367	334	281	33	31	**18**
Česká rafinérská	SO_2	4,107	6,469	5,166	7,121	4,234	7,220	7,481	3,375	2,334	**2,342**
	NO_x	593	604	567	1259	612	906	665	532	563	**440**
	Solids	19	24	19	18	14	12	20	22	50	**33**
	VOC	110	113	127	111	117	118	121	119	124	**117**
Paramo	SO_2	704	749	721	742	546	389	44	9	0,41	**3**
	NO_x	213	208	212	239	219	175	74	33	27	**28**
	Solids	37	29	30	31	20	19	3	0	0,35	**0**
	VOC [1)]	200	304	293	231	178	520	413	343	318	**349**
Unipetrol Group	**SO_2**	**13,220**	**16,909**	**12,030**	**14,260**	**11,070**	**12,690**	**13,760**	**7,084**	**6,307**	**6,424**
	NO_x	**7,152**	**6,651**	**6,474**	**7,457**	**6,785**	**6,469**	**5,280**	**4,328**	**4,548**	**3,475**
	Solids	**258**	**334**	**259**	**171**	**289**	**176**	**155**	**121**	**136**	**101**
	VOC	**730**	**798**	**820**	**721**	**662**	**972**	**815**	**497**	**473**	**484**

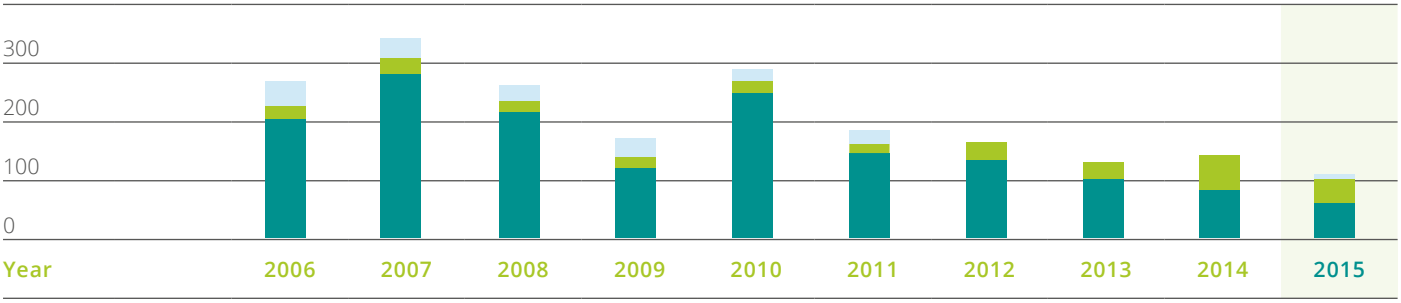
[1)] 90% are fugitive emissions that are reported only on the basis of solvent purchases in the given calendar year

SO_2



NO_x

Particles



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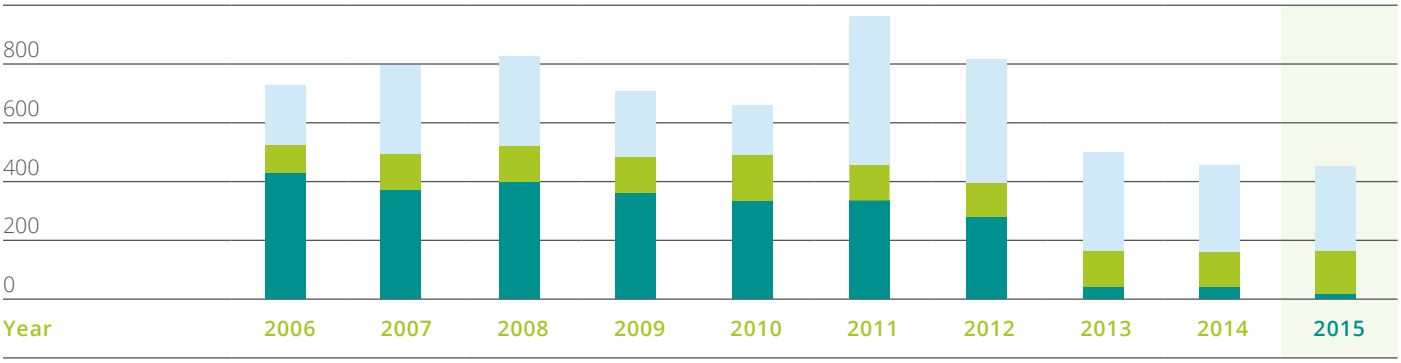

Unipetrol RPA Česká rafinérská Paramo

4.3. Evaluation of environmental impact

In connection with the DeNOx technology implementation plan in the T700 UNI RPA heating plant, the Regional Authority was notified in July 2015 according to the Section 6 of the Act No. 100/2001, On Environmental Impact Assessment, "Storage of reagent – ammonia water." The Regional Office subsequently decided that the intent has no significant effect on the environment and will not be judged by the Act No. 100/2001 Coll.

In relation to the planned investment project "Installation of new dimerization reactors for the purpose of increasing ZC9 production" and "Restoration of the steam cracker – replacement of four pyrolysis furnaces", there were individual opinion requests submitted to the MoE in order to find out whether the given projects are subject to the requirements of the Act No. 100/2001 Coll. MoE issued an opinion to all the projects in the sense that this is not a significant change to the existing project pursuant to the Act and therefore not subject to assessment in terms of environmental impacts under the law.

Work began on drafting the notification on the intent in the scope of annex No. 4 to the Act No. 100/2001 Coll. for the planned construction of a new boiler house for steam cracker unit with the thermal output < 200 MW. Notification will be presented to the Ministry of Environment in mid-2016.

No environmental impact assessments (EIA) were performed in the remaining companies of the Group in 2015.

4.4. Penalties for breaching the requirements of environmental laws

The consistent effort to comply with the regulations on environmental protection is evidenced by the low number of cases of partial breaches of the requirements of environmental laws which occurred due to abnormal operating conditions in the last five years, i.e. in 2011–2015. In that period, the Group companies received eight fines, four of which exceeded CZK 100,000.

Overview of fines imposed for breaching the environment-related duties between 2011 - 2015

company	rok	reason for sanction	amount of sanction (thous. CZK)	note
Unipetrol RPA	2011	Exceeding the AOX "m" indicator limit in the wastewater discharged in 2010	120	Paid
Česká rafinérská	2013	Violation of provisions of the Water Act	350	Paid
Česká rafinérská	2015	Violation of provisions of the Water Act	500	Paid
Paramo	2011	Incorrect labelling of retail packaging	31	Paid
Paramo	2011	Violation of provisions of the Water Act	6	Paid
Paramo	2012	Incorrect labelling of retail packaging	6	Paid
Paramo	2013	Overfilling of the VR10 tank with diesel fuel	350	Paid
Paramo	2015	Leackage of 31% HCl while drawing from ŽC to CHUV	240	Paid

V. Reducing environmental and operating risks and prevention of major accidents

5.1. Prevention of major accidents

The companies belonging to the Group pay much attention to the prevention of major accidents in the long term. The basis for prevention of accidents is a reliable and trouble-free operation of production facilities. The facilities are designed, operated, inspected, and maintained in accordance with Czech legislation and internal regulations. Some of the regulations contain requirements beyond legislation and are based on the best practices of companies within the Group.

Production plants are equipped with control systems that signal deviations from standard operating parameters. Some plants performing hazardous operations are equipped with automatic unit shut-down systems in case of exceeding the specified operating parameters. Depending on the type of the type of the hazardous substances, the plants are equipped with modern detection systems (detection of flame, smoke, or releases of hazardous substances) connected to signaling panels in the control rooms and operation centers of the fire brigade. In the plants a stable or semi-stake extinguishing systems and re monitors are installed.

Regular internal audits of security and risk prevention of accidents take place in all group companies. Furthermore, state technical supervision bodies perform regular external audits and inspections. The bodies include CEI, OIP, FRS, professional organizations, insurance brokers, insurers, and foreign reinsurers. Recommendations and findings of these audits are incorporated in the respective implementation plans.

An important component of prevention of serious accidents is the regular training of employees. Functionality of the serious accident prevention system is tested throughout the year through simulations of both emergency and crisis situations. The testing is performed in cooperation with its own and external riot forces. They include emergency exercises (in individual plants + complex emergency exercises performed in cooperation with the companies managing the industrial premises or businesses in their neighborhood). The emergency exercises in the Unipetrol Group companies are carried out according to the defined plan. The exercises serve for practical training of employees´ adequate response to a possible disaster. The aim is also to verify the validity of emergency plans and procedures and improve the knowledge of all participants. If an exercise reveals shortcomings, adequate corrective measures are adopted within the evaluation of the exercise, including setting deadlines for the shortcomings´ removal and designation of persons responsible for implementation of the measures.

The risk management of major accidents includes liability insurance in accordance with the Act No. 59/2006, as amended.

The safety level of the Group companies is significantly influenced by new investments in production facilities where the projects of which address the possible operational risks by the use of generally accepted methods of analysis of the major accident risks. Each new facility is equipped with the most modern safety systems which meet the legal requirements of the Czech Republic and the European Union.

Production group companies have their own fire brigade with top-level equipment and training. The fire brigade is capable of highly specialized interventions in accidents with releases of hazardous substances. Česká rafinérská utilises the services of the Unipetrol RPA (Litvínov) fire brigade and the Synthos (Kralupy nad Vltavou) fire brigade.

Most manufacturing companies in the Group have the "B" classification which means that they are subject to the strictest regime defined in the Act No. 59/2006 or 224/2015 Coll on the prevention of major accidents in the handling of selected hazardous chemical substances/mixtures.

On the basis of the recommendations issued by reinsurers, Unipetrol RPA launched a project aimed at processing HAZOP studies for all production sites in 2014. Completion of the project is scheduled for 2016.

The Risk analysis and assessment for this new plant has been drawn up within the preparation of the project documentation for the planning procedure of the new PE3 production plant of Unipetrol RPA.

Overview of classification of companies into groups according to the Act No. 59/2006, as amended, and the state identified in the Safety report of December 31, 2015

Company	Groups	Safety report
Unipetrol RPA	B	The third SR update is currently undergoing the approval process / Regional Authority of the Ústí Region
Unipetrol Doprava – Operating department, Pardubice facility, Semtín, Railway facility Pardubice	B	April 22, 2014, approval of the second SR update / Regional Authority of the Pardubice Region, Ref. no. KrÚ 26142/2014/OŽPZ/FI
Unipetrol Doprava – Operating department, Pardubice facility, Semtín, Railway siding Semtín	B	April 29, 2014, approval of the second SR update / Regional Authority of the Pardubice Region, Ref. no. KrÚ 28262/2014/OŽPZ/FI
Unipetrol Doprava – Operating department, Railway siding Litvínov	B	August 7, 2012, approval of the second SR update / Regional Authority of the Ústí Region, Ref. no. 2582/ZPZ/2011/H-20.3
Unipetrol Doprava – Operating department, Kralupy facility, Neratovice, Railway facility Kralupy	B	October 11, 2012, approval of the SR update / Regional Authority of the Central Bohemian Region, Ref. no. 239899/2011/KUSK OŽP Bo
Unipetrol Doprava – Operating department, Kralupy facility, Neratovice, Railway facility Neratovice	B	December 5, 2008, approval of the SR update / Regional Authority of the Central Bohemian Region, Ref. no. 119423/2007/KUSK OŽP Oh
Unipetrol Doprava – Operating department, Kralupy facility, Neratovice, Railway facility Neratovice		December 5, 2008, approval of the SR update / Regional Authority of the Central Bohemian Region, Ref. no. 119423/2007/KUSK OŽP Oh The second SR update is currently undergoing the approval process / Regional Authority of the Central Bohemian Region
Česká rafinérská Litvínov refinery Kralupy refinery		Approved on February 16, 2003 / Regional Authority of the Ústí Region June 3, 2009, approval of the RA update of the Ústí Region Ref. no. 23/09/ZPZ/H-02-2a/stát The update was approved by the Mělník District Authority on October 8, 2002 October 10, 2008, approval of the RA update of the Central Bohemian Region, Reg. no. 83689/2007KUSK OŽP
Paramo cost centre Pardubice		August 3, 2004, approval of the Safety report – Regional Authority of the Pardubice Region June 16, 2005, approval of the updated Safety report October 10, 2008, approval of the updated Safety report October 16, 2009, approval of the updated Safety report Operator´s safety report – approved on March 8, 2012 the updated Safety report approved on January 23, 2013 the updated Safety report approved on November 19, 2013 the updated Safety report approved on January 13, 2015
Paramo cost centre Kolín	-	Not subject to the Act No. 59/2006. Report on the non-inclusion according to the law was updated and submitted to the Regional Authority
Benzina	-	Not subject to the Act No. 59/2006 or 224/2015 Coll. Reports on the non-inclusion FS into groups according to the law was updated and submitted to the Regional Authority

5.2. Transport Information and Emergency System TIES

Transport Information and Emergency System (TIES) is a system providing help in accidents associated with the transportation of hazardous substances. TIES was created by the Association of Chemical Industry of the Czech Republic as part of the "Responsible Care" program in 1996. Under the agreement between the Association and the Headquarters of the Fire and Rescue Service, it was included as one of the support schemes in the Integrated Rescue System. TIES is similar to the British system CHEMSAFE, for example, or the German TUIS, which served as the model for building TIES. Similar systems were implemented also in the Slovak Republic (DINS), Hungary (VERIK) and they have been also utilized in many EU countries.

TIES centers provide (in cooperation with the Fire Brigade of the Czech Republic) urgent consultations concerning information about chemical substances and products, their safe transportation and storage, and practical experience with the handling and disposal of hazardous materials and with emergency situations associated with their transport. TIES centers provide also practical assistance in liquidation of emergency situations, such as the removal of the subsequent environmental damage.

Currently there are 22 regional centers TIES in the Czech Republic. The centers are provided by 35 companies operating in the chemical industry. Unipetrol companies are founding members of TIES. Moreover Unipetrol RPA acts as the national coordination center.

Overview of the Unipetrol Group companies participating in TRINS

Company	Participation in the emergency system TRINS
Unipetrol RPA	National Centre, Regional Centre reporting and ensuring the operation of the whole system at the national level

5.3. Serious accidents in the Unipetrol Group in 2014

In August 2015 an accident, classified as serious, happened on the Unipetrol RPA steam cracker unit. This accident was announced in accordance with legislative requirements and a written report on the occurrence of a serious accident was delivered to the regional office within 24 hours. Furthermore, a final report draft on the occurrence and impact of a serious accident was prepared and submitted. Investigations carried out by the Czech Police were not concluded by the end of 2015. Once the investigations are concluded, the final report draft will be updated and submitted for approval to the regional office.

No accident classified pursuant to Act No. 59/2006 Coll. or 224/2015 Coll. occurred in none of the other companies of the Unipetrol Group

Other operating accidents that occurred during the year were managed in-house or by the company's fire departments. They were adequately responded in order to prevent their recurrence. The effects of small operating accidents did not extend beyond the Group.

VI. An open approach to environmental issues

6.1. Role of employees in environmental protection

Unipetrol Group Employees are considered the key bearers of environment, health and safety, and fire protection activities. Therefore, the individual companies have implemented effective training systems for all employees. Training and education of employees is part of the established management systems. It is subject to regular reviews, evaluations and completions in terms of ISO 9001, ISO 14001, and OHSAS 18001 standards.

All employees are actively and continuously engaged in the creation and protection of the environment. They are acquainted with policies in the areas of environmental protection, health and safety protection, fire protection, environmental aspects of their activities, and the objectives and programs defined for their workplaces at regular reconditioning trainings.

The proper training applies to both own employees and employees of external companies operating in industrial complexes. Liabilities related to environmental protection, health and safety protection, and fire protection are included in agreements with individual contractors.

6.2. Communication with the public

Information openness is one of the principles of the "Policy for Responsible Business in Chemistry and Integrated System of Occupational Safety and Health, Environmental Protection and Quality Management" of the Unipetrol Group, which is the basic policy document of the Group.

Detailed information on the status and development of effect of the Group's activities on the environment are regularly published in the "Joint Report on Health, Safety and Environmental Protection in Unipetrol Group" (until 2006 it was the "Joint Environmental Report") and on the Group's website.

The selected companies publicly discuss their reports on implementation of the "Responsible Care" program with representatives of trade unions, local, and regional authorities. An overview of their activities in the field of environmental protection and health and safety protection can be found on the website of the Unipetrol Group.

Unipetrol Group companies apply corporate social responsibility principles (CSR) to the towns and villages in their vicinity. Part of the cooperation with the public is informing about the company's impact on the environment in the area through the participation of representatives of Unipetrol´s management in public sessions of councils of the neighboring municipalities. The companies organize "Open Days" for the public. The companies hold regular meetings with the mayors during which the participants are familiarized with all activities, including environmental protection. When a non-standard operating situation occurs, mayors of neighboring municipalities are preventively immediately informed. The need for immediate communication with the public and employees of companies is met via a "green line". Employees are informed through internal communication sources (radio, printed materials, intranet).

Another example of active openness of information in the field of environmental protection is the Environmental Centre Most which has been created in 2000 with the support of Unipetrol RPA and Česká rafinérská. The center contributes significantly to the dialogue on environmental protection between companies and the general public, it also ensures cross border communication with the neighboring Saxony. In 2007 was created the Environmental Centre in Kralupy nad Vltavou which performs similar functions for the Kralupy region.

In 2007, the Environmental Centre Most participated in completion of a training program project "Chemistry and the Environment" aimed at educating primary and secondary school students. The primary aim of the project was to popularize environmental protection issues in relation to chemical production, present the positive and negative aspects of chemical production and present activities of Unipetrol RPA in the area of environmental protection. The project had a very positive response from schools and therefore, on the basis of the schools´ interest, it continued also in 2008. In 2011, the Environmental Centre Most participated in preparation of an interactive educational program "Journey to the secret oil" for elementary and secondary schools. Česká rafinérská together with UCT and other partners operates the information portal Petroleum.cz which contains extensive information on oil and oil products and impacts on the environment. The information is intended for the general public.

Overview of the Unipetrol Group´s corporate periodicals bringing regular information on activities in the field of environment, safety, and fire protection

Company	Publication	Contact person
Unipetrol	SPOLU, newspaper for Unipetrol´s employees	Ing. Jitka Němečková, tel. +420 225 001 467
Unipetrol	Company website	http://www.unipetrol.cz
Unipetrol RPA	Company website	http://www.unipetrolrpa.cz
Unipetrol RPA	Monthly newsletter on occupational safety and fire protection	David Marek, tel. +420 476 164 105
Unipetrol Doprava	Company website	http://www.unipetroldoprava.cz
Unipetrol Doprava	Monthly newsletter on occupational safety and fire protection	David Marek, tel. +420 476 164 105
Česká rafinérská	Impuls, bulletin on safety, occupational health, safety, quality, and environment protection	Ing. Michal Šulc, tel. +420 476 163 292
Česká rafinérská	Company website	http://www.ceskarafinerska.cz
Paramo	Company website	http://www.paramo.cz

VII. Mitigation of effects of old environmental burdens

7.1. Program for elimination of old environmental burdens

Based on the privatization-related decision of the Government of the Czech Republic, Unipetrol Group companies entered into the following agreements on solving ecological commitments incurred before the privatization (Ecological Agreement):

[1] Ecological Agreement No. 14/94, as amended by the amendment 3 on January 25, 2005, entered into by Unipetrol
[2] Ecological Agreement No. 32/94, as amended by the amendment 1 on July 4, 2001, entered into by Unipetrol
[3] Ecological Agreement No. 39/94, as amended by the amendment 2 on July 4, 2001, entered into by Paramo
[4] Ecological Agreement No. 58/94, as amended by the amendment 3 on September 26, 2008, entered into by Paramo
[5] Ecological Agreement No. 184/97, as amended by the amendment 7 on January 18, 2007, entered into by Benzina

7.2. Overview of old environmental burdens in the Unipetrol Group

There were no changes in the extent of old environmental burdens in 2015 compared to the previous period. Below is an overview of the Unipetrol Group´s old environmental burdens.

Unipetrol, Litvínov – industrial complex and other locations

Ethylbenzene pipeline route Litvínov – Kralupy nad Vltavou, location Miletice u Velvar

- groundwater and soil contamination by ethylbenzene
- remediation work were completed, groundwater is being monitored

Litvínov industrial complex and the surrounding landfills

- **Liquid sludge landfill Růžodol**
  - pollution by tar residue and waste from oil refining
  - waste from all landfills was drawn
  - construction of rehabilitation drain was completed, phase pumping and water infiltration system is completed.
- **Ash dumps K1-K4**
  - remediation of ash dumps K1 and K2 was completed
  - remediation works are halted due to priorities of Finance Ministry
- **Sewage treatment plant sludge dump**
  - Remediation works were completed
- **Protection of Bílina River in the area of the sewage treatment plant dump**
  - Remediation works were completed
- **Intercepting and separator drain**
  - Remediation works were completed
- **Solid industrial waste landfill, lime sludge landfill II, lime sludge landfill at the siding**
  - pollution by solid waste, oil products, and lime sludge with phenols
  - protective remediation drainage of water from lime sludge dumps was performed
  - remediation works are halted due to priorities of Finance Ministry
- **Uhlodehta landfill**
  - pollution by coal slack, ash, fly ash, lime sludge, and lignite tars
  - remediation works are halted due to priorities of Finance Ministry

- **Ash dump south foreland**
  - pollution by ash and sludge oil, pumping of contaminated water
  - oil sludge was drawn and removed
  - remediation works are halted due to priorities of Finance Ministry
- **Remediation of groundwater in the contamination clouds in the complex**
  - pollution of groundwater by petroleum hydrocarbons and phenols
  - a remediation system was constructed in the contamination clouds no. 4, 11
  - remediation works were completed in contamination clouds no. 3, 6, 9
- **Groundwater monitoring**
- **Remediation of soil in the complex as part of ecological services within investment projects**
  - pollution of soil by petroleum hydrocarbons and phenols

Unipetrol, Kralupy – industrial complex and other locations

- **Block 19 (goudrons)**
  - acidic residues from the process of refining gasoline
  - The "goudrons" remediation Feasibility Study was presented and approved
  - CEI issued a decision to rehabilitate the location
  - remediation works are halted due to priorities of Finance Ministry
- **Nelahozeves landfill**
  - styrene residues stored in steel barrels
  - AAR addendum was drawn up
  - CEI issued a decision regarding changes to the deadline for completion of remediation and implementation of the "pre-remediation monitoring"
  - the "pre-remediation monitoring" and preparation for the remediation contractor tender took place
- **Industrial complex in Kralupy**
  - contamination by refined and petrochemical products
  - the final draft of the "Supplement no. 1 to the updated risk analysis of the industrial complex in Kralupy nad Vltavou" was drawn up
  - the Protective remedial pumping of the contamination cloud E took place

Benzina

- **Remediation of 58 contaminated areas pertaining to filing stations**
  - contamination by motor fuels
- **Remediation of 13 contaminated areas of the former fuel distribution warehouses**
  - contamination by motor fuels

Paramo, Pardubice

- **Landfill in Časy**
- **Hlavečník and Nová Ves landfills**
- **The main plant of Paramo and its surroundings**
- **Acid resin landfill (LIDL, ČSAD BUS area)**

Paramo, Kolín (former Koramo)

- **Remediation of soil and groundwater**
- **Liquidation of acid resin repository (rhododendron lagoon)**

7.3. The course of works in 2015

The following remedial works were performed within the removal of old environmental burdens (ROEB) in 2015.

Unipetrol, Litvínov:

- Groundwater remediation was performed in 4 areas of contamination clouds in the plant´s premises. Extraction from underground drains was performed in 6 areas of contamination clouds,
- Environmental services (supervision) – monitoring and bioremediation of soils were performed within 2 investment projects, remediation of the block 32 –remediation groundwater pumping and performance of exploration works,
- Liquidation of the lagoons in Růžodol – completion of construction of the remediation drain, commencement of project works for a new rehabilitation system,
- Draft version of the report on research carried out in within the updated risk analysis, draft version of the updated risk analysis,
- Protective remediation drainage of water from lime sludge dumps was performed,
- Ethylbenzene pipelines in Miletice – water monitoring was implemented under the new decision of CEI.

Unipetrol, Kralupy:

- Protective remediation drainage of the contamination cloud E in blocks 14 and 15 (II. stage) consisting in preventing pollution migration (the pollutants are ethylbenzene and styrene) into the environment,
- Addendum 1 to the Updated risk analysis for the industrial complex in Kralupy, Aecom 2014,
- Negotiations with the Ministry of Finance on the main framework conditions for issuance of decision on measures to remedy old environmental burdens in the Kralupy complex,
- Four rounds of "pre-remedial" monitoring on the location "Landfill Nelahozeves" took place,
- Cancellation of the tender on rehabilitation of the landfill "Nelahozeves" due to mistakes in the tender documentation,
- Tender on the revision of the project documentation "Landfill Nelahozeves".

Paramo, Pardubice / Kolín

- Protective remediation pumping and monitoring at the location Časy took place,
- Remediation pumping and monitoring at the location LIDL, ČSAD BUS was finished,
- Ongoing remediation at the location U Trojice, which means remediation pumping in the borehole system HOPV and redevelopment drains,
- Protective pumping of meteoric water of the location Hlavečník took place,
- The Ministry of Finance is preparing the tender doucments for the open call for tender for the remediation of PARAMO a.s.
- Pardubice main plant - – stage 1.A,
- Remediation takes place on the Nová Ves dump – collection of petroleum hydrocarbons,
- Finished remedial pumping of petroleum hydrocarbons from the rock environment in the HS Kolín.

Benzina:

- Maintenance remedial works (protective remediation pumping) in distribution stores Nov. Bohumín, Šumperk, and Točník. At the fuel station Čáslav the remediation was physically completed, the final report was submitted and post-remedial monitor¬ing was started. At the fuel station Tachov the final KD took place, where the finish of works was agreed. The final protocol CEI was issued, corrective measure have been terminated and dwell disposal approved. In other localities there is ongoing additional exploration phase, remediation project processing, protective pumping tenders, monitoring or post-remedial mon¬itoring.

Other remedial works performed in 2015:

- Pumping and purifying of groundwater financed by Česká rafinérská in the Litvínov complex (2 centers of contamination in the area of warehouses and terminal) and in the Kralupy complex (deployment of hydraulic barrier),
- Underground drain pumping in Petrochemie in the Litvínov complex financed by Unipetrol RPA.

7.4 Disbursement of funds in 2015

Overview of financial guarantees from the Ministry of Finance and disbursement of funds in the Unipetrol Group (mil. CZK) as of December 31, 2015

	Unipetrol Litvínov	Unipetrol Kralupy	Paramo Kolín	Paramo Pardubice	Benzina	Group total
Financial guarantee by the MoF	6,012	4,244	1,907	1,241	1,349	**14,753**
Costs paid by the MoF in 2014	146	0.6	34	12	5,75	**198,4**
Costs paid by the MoF since the commencement of works	4,014	51,3	1,762	512	476 [1)]	**6,815.3**
Expected cost of future works	2,688	881	243	2,802	875	**7,489**
Total (estimated) remedial costs	**6,702**	**932,3**	**2,005**	**3,314**	**1,351**	**14,304.3**
Balance of the financial guarantee by the MoF	-690	3,311.7	-98 [2)]	(2,073) [2)]	-2	**448,7**

[1)] Benzina – without the costs of Benzina spent on remedial works to 1997 in the approximate amount of CZK 500 mil.

[2)] Paramo – requests to increase the guarantees for HS Pardubice and Kolín were submitted to the Ministry of Finance. Ministry of Finance suspended the discussion over requests to increase the guarantees in 2015.

VIII. Sustainable development

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[2)] Paramo – requests to increase the guarantees for HS Pardubice and Kolín were submitted to the Ministry of Finance. Ministry of Finance suspended the discussion over requests to increase the guarantees in 2015.

Based on the audit of the annual reports for 2015, it can be stated that the annual quantity of allowances allocated to Unipetrol RPA covers about 46% of annual emissions. The increase compared to 2014 was due to lower CO2 emissions caused by the four-month steam cracker shutdown. To cover the deficit allowances in 2015, it will be necessary to partly use surplus allowances from the previous period; the other part will be covered by the next year's allocation and the remaining deficit will be purchased. In Paramo (HS Pardubice), the Decision on the amount of free allowances allocated for 2013 – 2020 has been checked and the compliance with the current Decision of the Ministry of Environment confirmed. Paramo runs a significant long-term allowance surplus from the previous allocation periods.

Protection of the Ozone Layer

All group companies operate their production facilities in accordance with the requirements for the ozone layer protection and applicable international agreements. Česká rafnérská stopped using halons in fire protection system and implemented environmentally friendlier solutions already in 1999. Chemopetrol (today Unipetrol RPA) replaced refrigerants used in low-temperature petrochemical operations with environmentally friendlier fillings already in the previous years.

The original refrigerant consisting of partially halogenated chlorine-containing refrigerant used in the cooling unit of the C4 fraction was replaced by a environmentally friendlier chlorine-free refrigerant.

8.2. Chemical safety

All Group companies handle chemical substances and mixtures in accordance with applicable law concerning chemical substances and mixtures and with the Regulation of the European Parliament and of the Council No. 1907/2006 (REACH).

Companies classify their marketed chemical products in accordance with the Regulation of the European Parliament and of the Council No. 1272/2008 (CLP), and they issue their safety data sheets, the format, and content of which meet the requirements of Annex II of REACH. The safety data sheets are provided for free to all customers, and they can be also found on the company website. In compliance with REACH, Unipetrol RPA makes the safety data sheets of both produced and purchased hazardous chemical substances and mixtures available to all employees through the internet network. Česká rafinérská makes the safety data sheets of manufactured products available on the company's internet. The company also operates an extranet portal for shareholders and processors on which the safety data sheets are available in three languages. In accordance with the Act No. 258/2000 Public Health Protection, companies process Rules for handling hazardous chemical substances and mixtures and conduct regular trainings of employees.

All companies continuously monitor handling of chemical substances and mixtures from raw materials to finished products and ensure compliance with applicable laws, including obtaining certificates for specific applications of selected products – e.g. the certificate of health for contact with food, drinking water, for medical use etc. The companies have customer service that provides detailed information about the characteristics of the products in relation to their specific use.

Group companies are subject to international inspection of the United Nations (UN-OPCW) which monitors the observance of the "Convention on the Prohibition of Chemical Weapons". All the previous controls carried out by state authorities and international inspections in the group companies showed a thorough fulfillment of the "Convention".

Fulflment of obligations under the Regulation of the European Parliament and of the Council No. 1907/2006 (REACH)

Unipetrol companies that produce or import chemical products had to, in accordance with the Regulation of the European Parliament and of the Council No. 1907/2006 altogether 63 chemical substances.

ECHA Agency evaluates the subsequent testing proposals that were a mandatory part of registration dossiers of high-volume products and issues a decision on the implementation of additional tests. The documentations are completed by their supplementing.

The submitted registration dossiers are also subject to further control processes by ECHA. Based on the IT screening selects chemical substances, the Member States shall decide whether their submitted registration dossiers will be checked within the evaluation of completeness of the accordance with the REACH regulation requirements ("compliance check"), evaluated within Rolling action plan ("CoRAP"), or the measures at EU level will be set for them. When detecting a discrepancy or insufficient quality of the data examined, ECHA will issue a decision on completion of the data. Failure to comply with the decision will be forwarded by the Agency to the further solution to the relevant national authority responsible for the asserting of regulations.

Following products of the Unipetrol Group were included into mentioned control processes:

- **soot:**

compliance check – draft decision on the identifcation data completion and nano-material tests, placement into CoRAp process due to possible carcinogenicity;

- **naphthalene concentrate:**

compliance check – draft decision on the possible completion of reproductive toxicity tests, placement into CoRAp process;

- **SDA desulphurization product:**

draft decision to perform follow-up (mutagenicity, reproductive toxicity, harmful efects for the environment).

In accordance with the current legislation, Paramo implemented the necessary registrations of substances and isolated intermediates. Paramo's registration dossier underwent an IT screening by the European Chemicals Agency ECHA in Q2/2014. Paramo was asked to update some registration documents in five of the registration dossiers (correction in the section Substance Identity). Safety data sheets of substances and mixtures are updated as necessary and supplemented by exposure scenarios. Paramo serves as the main registrant within SIEF for "Lubricating oils" substance – EC 278-012-2 with all the associated obligations.

All companies continue to pay great attention to communication in the supply chains, which is the basis for implementation of measures to protect workers' health and environmental protection measures when using hazardous chemicals alone or in mixtures. The companies monitor and apply in practice the changes that occur as a result of refining the concepts and processes associated with the registration and classification of chemicals and they reflect the changes when updating their safety data sheets. Processors of safety data sheets attend regular training courses, seminars, or workshops in order to meet the condition of professional competence. Finally, the companies continuously fulfill the requirement of REACH – continuously update registration dossiers and therefore they must also ensure that their software application IUCLID, which is the processed technical documentation for both registered and notified substances, is in line with the latest version published on ECHA website.

8.3. Management of primary sources of raw materials and energy

Regarding the savings of primary sources of raw materials and energy, the Unipetrol Group adheres to principles of sustainable development and focuses its basic strategy on innovative approaches that lead to the minimization of energy and material inputs and promotes continuous improvement in environmental performance. Group companies have undergone energy audits in order to achieve further energy savings. Simultaneously, the Energy Management System certification according to ISO 50001 is being prepared for 2016.

In České rafinérská in 2015 final preparations for investment projects took place where the implementation planned within the scope of the turnaround in 2016 in Litvínov:

- Replacing of the air preheating in VD PSP furnace – reducing of furnace operation energy intensity;
- Replacing of the internals in the VD PSP column – reduction of the pressure differential of the column and increase in the energy efficiency of the operation unit;
- Modifcations to ŠJ PSP, CCR and Claus units related to increasing the reliability of operation of these units.

In coordination with Unipetrol RPA, solutions regarding the operation optimization for both companies when using clean and wastewater are implemented. It has been further continued with the regular monitoring of the functionality of steam traps.

Significant savings are achieved through better use of primary materials. For example, Česká rafinérská implemented an extensive modernization program. The aim was to deepen processing of crude oil in favor of "light products", particularly motor fuels.

In Česká rafinérská, Litvínov refinery was implemented as a project of reconstruction of air preheating units on atmospheric-vacuum distillation units and the hydro treating chamber 5/6. The project increased the efficiency of furnaces and reduced fuel consumption and costs of heating the pipeline branches. The compliance with the operating parameters defend for the individual operating units to optimize energy consumption and utilities was examined in both refineries. Investment projects for the period 2014-2018 are being prepared in both refineries. The projects are aimed at increasing reliability of the equipment and optimizing the energy performance of production units.

Unipetrol RPA continuously implements diverse investments and technological changes that have directly or indirectly resulted in reduced consumption of energy, raw materials, and production of waste and wastewater, as well as a re-use of by-products or raw materials, etc. in the operator´s facilities.

Among the most significant investment activities, in order to reduce energy consumption are projects of higher control implementation (APC) on the Heating oil gasification unit (POX) with benefits in medium and low pressure steam saving. The systems of higher control will be implemented gradually. Unipetrol RPA also aims to reduce energy losses from pipeline systems. This is primarily an

extensive replacement of pipeline isolation and their monitoring as well as the preparation for the building heating project. Another energy-intensive node is gas compression where Unipetrol RPA is focused on improving the compressor control in terms of specific consumption and reducing of reached pressures for individual chemical processes

For the future, the most important are those activities in the definitions of operational strategy of energy resources, their size and fulfillment of all legal parameters.

A constant attention is paid to water saving in the Unipetrol Group. Significant results in this field were achieved especially by Paramo which implemented closed cooling circuits. The newly installed chemical water treatment facility in Paramo leads to reduction in the amount of leach and thereby reduction of additional water consumption.

In the area of reducing energy intensity, Paramo implemented KPI index monitoring across the whole oil production spectrum. This step helps significantly and consistently not only to control energy consumption effectively but also to achieve significant savings in line with set objectives and company aim.

Water consumption in the Group (mil. m³/year)

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Unipetrol RPA	23.7	22.2	24.5	23.0	22.0	20.0	19.4	21.4	17.8	**16.8**
Česká rafinérská	2.0	1.7	1.8	1.8	2.9	2.7	2.8	2.7	3.0	**2.9**
Paramo	1.0	1.0	1.0	1.0	1.0	1.0	0.7	0.5	0.3	**0.3**
Unipetrol Group	**26.7**	**24.9**	**27.3**	**25.8**	**25.8**	**23.7**	**22.9**	**24.5**	**21.1**	**20.0**

The stabilized energy consumption in the Unipetrol group is accompanied by a significant growth in production volumes. Development of production processes energy efficiency can therefore be better seen in the following table of specific energy consumption.The efficiency is expressed by the energy consumption coefficient calculated as tons of oil equivalent (TOE) related to tons of production per year:

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

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Unipetrol RPA	5.6	5.3	4.8	9.8	10.1	9.4	9.9	8.8	8.4	**8.6**
Česká rafinérská	15.1	13.6	16.8	16.6	14.6	12.6	13.7	16.1	16.8	**16.7**
Paramo	2.8	2.7	2.7	2.6	2.4	2.9	1.8	1.0	0.9	**0.8**
Unipetrol Group	**23.5**	**21.6**	**24.3**	**29.0**	**27.0**	**24.9**	**25.4**	**25.9**	**26.1**	**26.1**

Note: Paramo´s data for 2004 and 2005 without the former Koramo

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

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Unipetrol RPA	0.173	0.159	0.153	0.163	0.163	0.166	0.163	0.166	0.145	**0.189**
Česká rafinérská Litvínov	0.038	0.035	0.032	0.034	0.049	0.053	0.043	0.047	0.043	**0.047**
Česká rafinérská Kralupy	0.056	0.056	0.057	0.053	0.058	0.056	0.057	0.060	0.055	**0.054**
Paramo HS Pardubice	0.096	0.087	0.086	0.097	0.106	0.115	0.151*)	0.202	0.124	**0.133**
Paramo HS Kolín	0.303	0.297	0.221	0.355	0.333	0.245	0.221	0.227	0.184	**0.225**

*) oil processing was shut down in Q2 2012 was shut down oil processing – the value thus lacks continuity with data between 2004 and 2011

IX. Occupational safety and health at work and fire protection

Unipetrol Group considers occupational safety and health at work and fire protection as one of the priorities of its corporate policy. Unipetrol Group companies:

- improve the quality of working conditions and measures to protect health and safety at work and fire protection in accordance with the relevant regulations and standards;
- improve the quality of methods of risk assessment and prevention of accidents and occupational diseases;
- introduce measures to improve work efficiency;
- develop the skills of their employees and introduce measures aimed at improving the working environment;
- inform their employees and the public about the applicable internal standards to ensure occupational safety and health and fire protection and impacts of these standards.

Accident rate

Number of injuries in Unipetrol Group companies increased in the past year in all examined categories of work-related accidents. These are fluctuations affected by the major accident of August 13, 2015 which occurred in Chempark Záluží in Litvíno. In Unipetrol RPA, s.r.o. an explosion happened followed by fire of the steam cracker facility and 19 members of the company fire brigade were injured during the subsequent fire intervention. Among the other negative impacts were then climatic events, transport or railway accidents and loss of attention. Unfortunately, a fatal accident of a train driver in Unipetrol Doprava was also reported last year. On the national track, a train's head collided with another train's end, resulting in the fatal injury.

The development of work-related injuries in Unipetrol Group can be seen in the summary table below.

The frequency of accidents in the Unipetrol Group (number of injuries per 100 employees)

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Unipetrol RPA	0.17	0.27	0	0.24	0.26	0.06	0.06	0.19	0.13	**0.66**
Česká rafinérská	0	0.3	0.14	0.45	0.15	0	0.16	0.16	0.32	**0.33**
Paramo	0.7	0.49	0.39	0.28	0.3	0.92	0.17	0	0	**0**
Benzina	0	0	0	0	0	0	0	0	0	**0**
Unipetrol Doprava	0.58	0.81	0.41	0.22	0.46	0	0	0.24	0.24	**0.73**

The frequency of occupational accidents (number of accidents/mil. of hours worked)

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Unipetrol RPA	1.02	1.71	0	1.45	1.53	0.33	0.36	1.15	0.78	**3.99**
Česká rafinérská	0	1.7	0.8	2.8	0.89	0	0.9	0.89	1.84	**1.87**
Paramo	4.21	2.94	2.31	1.65	1.74	5.39	2.02	0	0	**0**
Benzina	0	0	0	0	0	0	0	0	0	**0**
Unipetrol Group	**3.28**	**4.54**	**2.25**	**1.18**	**2.42**	**0**	**0**	**1.36**	**1.35**	**3.75**

The number of fatal accidents

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Unipetrol RPA	0	0	0	0	0	0	0	0	0	**0**
Česká rafinérská	0	0	0	0	0	0	0	0	0	**0**
Paramo	0	1	0	0	0	0	0	0	0	**0**
Benzina	0	0	0	0	0	0	0	0	0	**0**
Unipetrol Doprava	0	0	0	0	0	0	0	0	0	**1**
Unipetrol Group	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**

The number of registered occupational accidents

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Unipetrol RPA	11	13	10	14	14	7	8	6	8	**32**
Česká rafinérská	9	10	3	4	7	4	4	3	8	**9**
Paramo	20	14	8	3	2	13	5	4	1	**0**
Benzina	0	0	0	0	0	0	0	0	0	**0**
Unipetrol Doprava	10	11	9	1	8	3	2	1	2	**3**
Unipetrol Group	**50**	**48**	**33**	**23**	**31**	**27**	**19**	**14**	**19**	**44**

The number of occupational accidents resulting in more than three-days´ incapacity for work

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Unipetrol RPA	4	6	0	5	5	1	1	3	2	**10**
Česká rafinérská	0	2	1	3	1	0	1	1	2	**2**
Paramo	6	4	3	2	2	6	1	0	0	**0**
Benzina	0	0	0	0	0	0	0	0	0	**0**
Unipetrol Doprava	3	4	2	1	2	0	0	1	1	**3**
Unipetrol Group	**13**	**16**	**6**	**11**	**10**	**7**	**3**	**5**	**5**	**15**

Occupational diseases

In 2015, there was one case of an occupational disease in Paramo Center of Occupational Medicine has recognized Lung Asbestosis as an occupational disease. The employee was employed 1985 – 1988.

The number of new cases of occupational disease

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Unipetrol RPA	0	1 [1)]	1 [1)]	0	0	0	0	0	0	**0**
Česká rafinérská	0	0	0	0	0	0	0	0	0	**0**
Paramo	0	0	0	0	0	0	0	0	1	**1** [2)]
Benzina	0	0	0	0	0	0	0	0	0	**0**
Unipetrol Doprava	0	0	0	0	0	0	0	0	0	**0**
Unipetrol Group	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**1**

[1)] a disease caused by condensed polycyclic hydrocarbons

[2)] a disease caused by exposure to asbestor (currently not being used)

Prevention and personal protective equipment and tools

Prevention of occupational safety is ensured by employees qualified in risk assessment who carry out inspections of individual work-places. Personal protective equipment is issued to company employees on the basis of hazard identification and the assessment of possible threats to life and death.

The quality of the work environment

On the basis of categorization of works working conditions in Unipetrol Group, companies are regularly checked by measuring work environment factors, especially the exposure of workers to noise, chemicals and dust. Measurements carried out in 2015 confirmed the decreasing number of exceeded permissible exposure limits and highest permissible concentrations.

Health care and prevention

Unipetrol Group companies have concluded agreements with physicians on provision of occupational health services. Preventive medical examinations are conducted in compliance with the relevant laws and internal regulations.

Important milestones of the Unipetrol Group in 2015 from the perspective of environment, health, and safety protection

Unipetrol RPA

- During 2015, Unipetrol RPA requested issuance of a total of fourteen non-substantial changes to integrated permits.
- Due to the change in the integrated permit the regional authority approved the project of implementation technologies for reducing NOx emissions from the T700 heating plant using ammonia water.
- Within the change of the integrated permits the regional authority ordered monitoring of quality of the groundwater which may be adversely affected due to the operation of the facility.
- The preparatory phase for the implementation of projects to reduce air emissions from the T700 heating plant T700 and the ethylene unit energy block was commenced so that the facility can meet the stricter emission limits set by the current legislation after the end of the transitional national plan in mid-2020.
- The project of segregation sewage from storm sewers and conversion of the sewage to biological treatment was completed.
- Continuing cooperation with the Czech Fishing Union on increasing fish population in river Bílina until 2016.
- Active participation in the consultation process to the new legislation of the Czech Republic and the EU and related documents (e.g. BREF documents for large combustion plants, large-scale production of organic substances and waste water and gas purification, amendment to the law on the prevention of major accidents, amendment to the law on the assessment of environmental impact and related methodologies, and others).
- Extension of validity of the permit to collect surface water until December 31, 2040.
- Extension of the permit to discharge wastewater into surface waters until June 30, 2019.

Unipetrol Doprava

- The company performed emergency drills the aim of which was to verify the functionality of the internal emergency plan pursuant to the Act No. 59/2006 and Act No. 224/2015 Coll., On the prevention of major accidents in all plants. The drills were performed in cooperation with fire brigades of the owners of complexes.

Benzina

- FS (filling station) Čáslav: the final report on remediation submitted, the post-remedial monitoring launched.
- FS Stod: soil and groundwater remediation implemented from Benzina s.r.o. resources within the FS renovation; the final report on soil remediation approved, the proposed scope of post-remediation monitoring approved.
- FS Tachov: the final KD took place, completion of works approved.
- Ensured continuation of protective remedial pumping financed by the MoF.

Česká rafinérská

- In February 2015, the company submitted changes of the integrated permits for the Litvínov and Kralupy refinery. The changes implemented the requirements of the Act No. 201 / 2012, On air protection and some requirements of the Act No. 76/2002, On integrated prevention.
- In August 2015, applications for the issuing of changes to integrated permits of Litvínov and Kralupy refineries which implement the requirements of European legislation in the field of so-called Best Available Techniques BAT.
- The areas were identified that require implementation of measures ensuring compliance with the requirements of the

Best Available Techniques BAT in both refineries and relevant projects were initiated.

In Kralupy plant there was an ongoing operation of the extended hydraulic barrier the result of which was a further decrease in groundwater pollution.

- Completion of the project of reconstruction of the wastewater treatment plant in the Kralupy refinery. The wastewater treatment plant will ensure achievement of the parameters corresponding to the best available technologies and complete repairs of the sewer system of the refinery.

Paramo

- Successful recertification audit LRQA related to meeting the requirements of ISO 14001, ISO 9001 and OHSAS 18001.
- Completion of the H29.705 C tank reconstruction (receiving MN through pipeline) and VR43 tank reconstruction in P02 operation (HS Pardubice).
- Reconstruction of 563 and 564 tanks in the operation of oils (RDH – HS Kolín).
- Ongoing negotiations with the Ministry of Finance on initiation of the remediation phase 1A in Paramo Pardubice main plant and completion of remediation in HS Kolín
- Scrutiny of conditions of integrated permits with regard to meeting the requirements of the Best Available Techniques (REF BAT) in HS Pardubice and in HS Kolín.
- Update of the Safety report, Internal Emergency Plan and Physical Protection Plan.
- Exchange of the existing solvent cresol that was used in selective refining in HS Paramo Pardubice for a greener solvent N-Methyl 2-Pyrrolidone

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