



GRUPA LOTOS S.A.
ENVIRONMENTAL REPORT 2006





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Letter from the CEO of Grupa LOTOS S.A.



Ladies and Gentlemen,

I have the pleasure to present to you the environmental report which states that Grupa LOTOS S.A. belongs among those Polish companies for whom environmental protection represents one of their priorities.

The corporation of which I have the honour of being the CEO puts environmental protection at the top of the list of its key priorities even during the planning phase of investment projects supporting our growth. We use only environmentally-friendly technologies which meet the requirements and criteria of Best Available Technology (BAT).

We invest only in the latest technological solutions, which at the same time improve the effectiveness and efficiency of production processes. They are characterized by high recycling rates for raw materials and semi-finished inputs, relatively low consumption of utilities and energy, and low environmental emission rates for pollutants, aggressive gases or noise.

This strictly followed principle of practice makes it easier for us to effectively reduce and, wherever possible, prevent emissions of contaminants into the environment. It also markedly improves the energy and material efficiency of production processes.

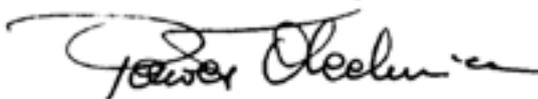
I have no doubt that a modern enterprise, as is Grupa LOTOS S.A., must do its best to prevent the release of pollutants or minimize their adverse effects. We achieve this through appropriate planning and execution of production processes, using the most effective techniques and equipment. Thanks to this approach, we are able to maintain the highest environmental protection standards and meet the strictest environmental quality criteria long before they become universally binding and, above all, strictly observe the regulations of national and international laws in the field of environmental protection.

One of the fundamental objectives of the Comprehensive Technical Upgrade Programme (PKRT), a unique and – for Poland – extremely innovative project implemented by Grupa LOTOS S.A., is to meet the most stringent environmental quality requirements for petroleum-based fuels and reduce our impact on the surrounding environment. We are equally determined to take responsibility of the environmental safety of all our investment projects all over Poland. At the same time, we pay special attention to air emissions caused by our facility, and to the quantity and quality of wastewater discharged into the Rozwójka canal and the Martwa Wisła, as well as to safe waste management. Being situated close to such a large urban agglomeration as the Tri-City, represents for us an enormous responsibility to the public, placing us under obligation to keep any environmental damage to a minimum. Therefore, from our extensive catalogue of environmental initiatives, I would like to list, among others, constant monitoring of emissions, both into the air and water, systematic control of the concentration of hydrocarbons in the air around our facility, upgrading the biological treatment unit for industrial wastewater, which improved the effectiveness of treatment by about 40% and, finally, fully hermetising the filling process for road and rail tankers.

It is a well-known fact that the oil refining industry is perceived all over the world to be a nuisance to the environment, both by public opinion and legal regulations. We are aware of this. Despite the fact that in 2005 we increased our oil processing capacity by 30% (up to the level of 6 million tonnes) we take every effort to ensure that the Gdańsk refinery is considered to be a facility which meets the most stringent environmental standards and requirements with a considerable "safety margin".

I would like to assure you that environmental safety will continue to be the dominant concern in the actions and development of Grupa LOTOS S.A. We will do everything possible to ensure that our environmental policy is unequivocally associated with cleaner production, safety of the manufactured products, and appropriate care for the condition of the environment around us. I am convinced that we will achieve these objectives.

Best regards,



Paweł Olechnowicz
President of the Management Board, Chief Executive Officer
Grupa LOTOS S.A.

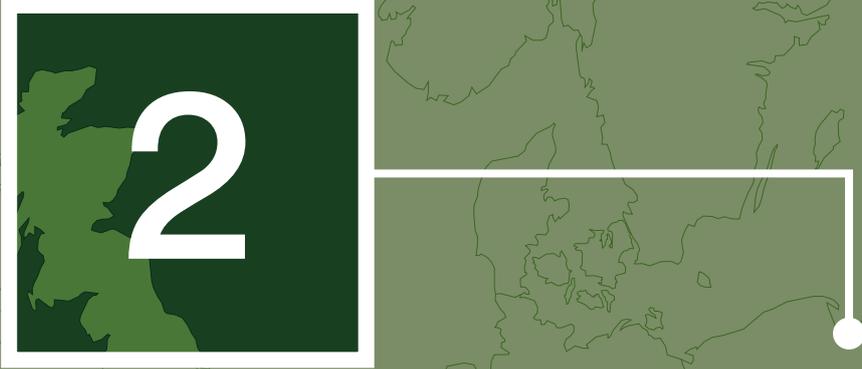
...An environmentally-friendly company...

(part of the Corporate mission of Grupa LOTOS S.A.)

For many years already, our environmental policy has focused on cleaner production and safe products.

We have been the first company in the Polish oil sector to implement an Environmental Management System – this facilitates better control over the environmental impact of our facility and helps to constantly reduce that impact.





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An environmentally-friendly company

WHAT ARE OUR GOALS

All over the world the oil refining industry is perceived as a nuisance to the environment, both by public opinion and legal regulations. However, our belief, which is supported by our day-to-day activities, is that the element of nuisance can be at least minimized and, in many cases, eliminated altogether.

We make every effort to ensure that the oil refinery our company operates in Gdańsk is considered at worst as a potential nuisance, as in practice, it meets the most stringent environmental standards and requirements.

We have prepared our first environmental report in the belief that an open information policy and dialogue with the public, and specifically with our closest neighbours, represent the key to further successful development of Grupa LOTOS S.A. The Report presents the environmental strategy of our Company, fundamental facts about the condition of the environment in the areas surrounding our installations, and the methods to limit adverse

environmental effects. This thus opens a series of publications where changes to these aspects will be presented, with special emphasis on information about the quality of the natural environment and the effects of our actions.

In compiling and editing the contents of our first report, we tried to eliminate specialized terminology and description wherever possible. We wish to make our actions understandable for everyone, including also all those for whom, until now, the environmental impacts of the oil refining industry and the principles and methods used to minimize these impacts have represented uncharted territory. Therefore, we have selected such ratios and indicators which, in our opinion, will make it possible to describe the specific character of our operations in the context of their environmental impact. We want to determine the scale of this impact and also to dispel the concerns of all those who feel anxious about the existence of such a large industrial facility.

Our actions to date clearly prove that environmental aspects are of fundamental importance for Grupa LOTOS S.A. We strive to ensure the best possible quality of air, surface water deposits and underground water around our refinery, while we limit to the necessary minimum the quantity of waste we produce. Thanks to the efforts taken, waste emissions and environmental quality parameters are below the allowed threshold values, despite the fact that we have considerably increased the quantity of processed oil since the establishment of our company, and that we keep expanding our product range.

For many years already, our environmental policy has focused on:

- cleaner production – i.e. systematically reducing the consumption of utilities and raw materials, reducing production-related waste emissions, full treatment of wastewater and waste management, environmentally-safe operation of industrial processes and effective prevention of breakdowns
- safe products – i.e. manufacturing high quality fuels with the lowest environmental noxiousness possible – unleaded gasoline and low-sulphur fuels (diesel fuels, heating oil, and gasoline).

Among our priorities are: ongoing monitoring of and improvements to:

- product quality
- professional management
- environmental actions and initiatives
- customer service quality
- work safety.

In our operations, we maintain full compliance with the legal requirements, preparing for their implementation in good time and often getting ahead of the regulations.

We have been the first company in the Polish oil sector to:

- implement an Environmental Management System – this facilitates better control over the environmental impact of our facility and helps to constantly reduce that impact

- launch diesel fuels on the Polish market with a sulphur content below 0.001% (five times less than required by current EU standards) and gasoline fuels with a sulphur content at approx 0.001% (much below the legally-accepted values)
- start using adjuvants that ensure appropriately clean combustion, both in gasoline and diesel fuels, thus reducing the emissions of noxious car engine exhaust fumes.

Because we care about minimizing the adverse impact of our operations on the surrounding environment, we:

- constantly monitor the emissions, both into air and water
- systematically control the concentration of hydrocarbons around our plant – we have installed five monitoring stations with continuous monitoring
- monitor water quality in the Rozwójka canal, which receives the treated wastewater from our treatment plant
- have built a three-stage industrial wastewater treatment plant – the waste treated there is perfectly safe for the environment and meets the requirements of the Helsinki Convention
- have in place detailed supervision of waste management – there's control at every stage of waste generation and neutralization
- have a double-seal system in our floating-roof tanks
- ensure all technological installations have been hermetised and connected to an emergency discharge system where hydrocarbons are burnt off in flares
- use a system of hermetisation and vapour recycling when filling rail and road tankers.

LEARN MORE ABOUT US

Our Company, located in Gdańsk, processes crude oil and also distributes the manufactured oil products. We have been doing this since 1975.

We not only process crude oil by distillation (in other words by splitting crude oil into its economically useful components – gaseous, liquid or solid hydrocarbons), but in practice we also carry out complicated, multi-stage production processes, using very complex technologies and equipment. Both the users of our products and the constantly

increasing environmental requirements, Polish as well as European (EU), result in the need to apply increasingly advanced technologies. Our state-of-the-art installations cover almost 300 ha and allow us to process approximately 6m tonnes of crude oil per year.

Among other products, we manufacture unleaded gasoline, diesel oil, heating oil, aviation fuel, engine and industrial lubricants, bitumen products and gases.



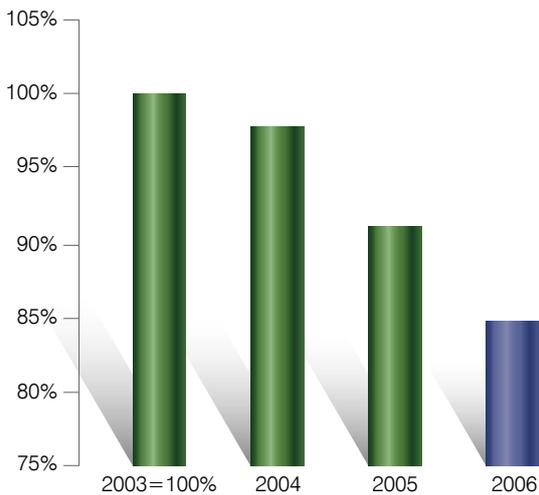
Our plans are to further expand the manufacturing plant and add new products to our range. All of this is aimed at maximum utilization of the precious raw material while, at the same time, we rationalize energy consumption, reduce the negative impact of our facility on the environment, and manufacture good quality products whose environmental impact is minimal.

Our high quality vehicle fuels meet the EU quality and environmental standards, and are friendly both to the environment and car engines. These fuels are classified into the 4th (highest) category of the World Fuel Charter.

To meet the needs of our facility, we also operate a combined heat-and-power plant which generates:

- process steam for our core manufacturing operations
- process water for recycling boilers
- heat for the central heating system
- electricity for our own use and to be exchanged for conventional energy.

To meet the needs of our operations, our company also buys electricity from the power network, re-selling part of it to the companies located in the area of our facility.



Demand for electric power relative to the quantity of crude oil processed in Grupa LOTOS S.A. in the years 2003-2006

WE WANT TO KEEP IMPROVING OURSELVES

We are the first oil refinery in Poland (and the second of all companies in Poland) to have obtained the Integrated Management System (IMS) certificate, integrating Environment, Quality, Safety and Internal Control. We received the Certificate on 21 February 2003.

The purpose of implementing the Internal Control System and having it certified was, among others, to meet the regulations concerning international trade in goods, technologies and services of strategic importance.

The implementation of the Integrated Management System in our company is also a sign of our focus on the product quality we can guarantee to our customers. For those outside us – this is proof of our environmental focus, and for our staff – of our focus on work safety.

Developing the Integrated Management System, covering a number of areas, we wanted to meet several objectives:

- in quality management (ISO 9001) – our objective was to meet the expectations of our customers, increase the organizational efficiency by implementing a process management system, and obtain more complete supervision over the processes which ensure an optimum level of product quality
- in environmental management (ISO 14001) – our objective was to identify environmental aspects and to manage significant environmental aspects, and to plan and monitor our environmental actions
- in work safety and hygiene management (PN-N-18001) – our aim was to identify threats and get an assessment of occupational risk, manage significant risks to ensure safety at our company, and to plan for and monitor the whole area of work safety and hygiene.

In our Company we adhere to the principle that every person working for us has the responsibility for quality, environmental protection, and work safety and hygiene.

The objectives of the Integrated Management System are met through:

- ongoing improvement in effectiveness and meeting the IMS requirements
- reducing the harmful impact our operations have on the environment
- preventing workplace accidents and occupational diseases
- continuous training and upgrading the professional skills of our staff
- expanding the range of our products in a way which allows us to acquire new customer groups and secure a position in new market segments
- ongoing monitoring of the market and responding to customer needs and requirements.

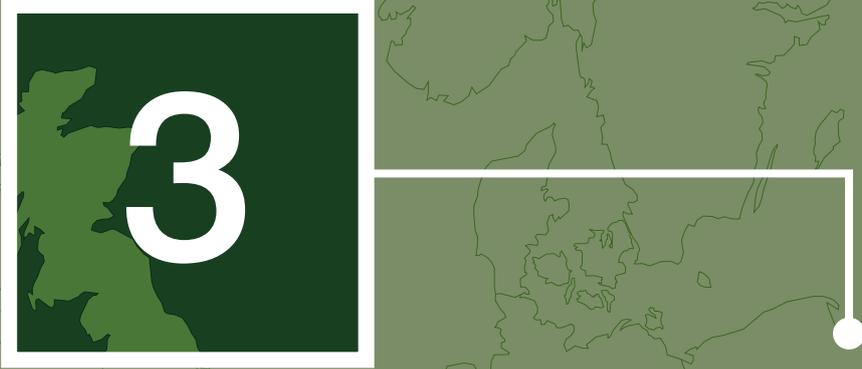


Taking care to observe standards

We pay special attention to air emissions, and to the quantity and quality of wastewater discharged into the Rozwójka canal and the Martwa Wisła, as well as to safe waste management.

We want and are able to comply with all the related standards and requirements, so that we keep any environmental damage to the minimum.





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Taking care to observe standards

US IN THE ENVIRONMENT

Our Company operates a large oil refinery, dozens of process plants, hundreds of items of equipment, machinery and tanks, as well as kilometres of transport pipelines necessary for the manufacturing of oil products. Some of them are or can be a source of environmental impact. However, we make every effort to keep that to an achievable minimum and specifically, to always comply with the legally set limit values thresholds.

We pay special attention to air emissions, and to the quantity and quality of wastewater discharged into the Rozwójka canal and the Martwa Wisła, as well as to safe waste management. We want and are able to comply with all the related standards and requirements, so that we keep any environmental damage to the minimum.

Some technological processes at our facility will also require large quantities of water. Mostly, we use surface water deposits which we take from the Mottawa River. To balance the water flows, we also dam up water in a retention-and-sediment tank in the old Mottawa river bed in the Pruszcz

Gdański municipality. At the same time, we strive to be prudent and rational in our water management policies, recycling a considerable portion of wastewater into the facility water system, after it has been purified in our treatment plant.

We also operate our own underground water source (two wells). We use underground water for human consumption. About 30% of water taken from this source is being sold to companies located on the company grounds and to individual clients.

TAKING CARE OF AIR QUALITY

For us, taking care of the quality of the air in the vicinity of the refinery and compliance with the legal requirements represents the highest environmental protection priority.

On the site of our refinery, there are organized and unorganized sources of substance emissions into the atmospheric air, with possible environmental impacts.

The most important organized source of emissions in the facility is the heat-and-power plant emitter. We also operate smaller-scale process

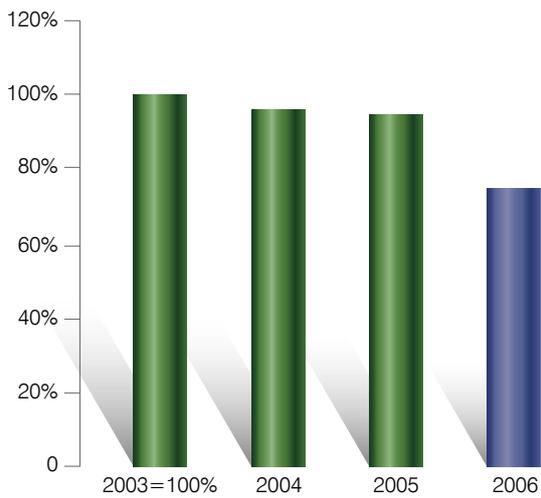
emitters for manufacturing blocks and gas purification plants. The gases released into the atmosphere are, mainly, so called greenhouse gases (including, first of all, carbon dioxide) and, in significantly smaller quantities, other compounds such as sulphur dioxide, nitrogen oxides, volatile organic compounds (VOCs) or dust.

Unorganized sources of emissions are, for example: flares, wastewater treatment plant equipment and storage tanks for raw materials and products.

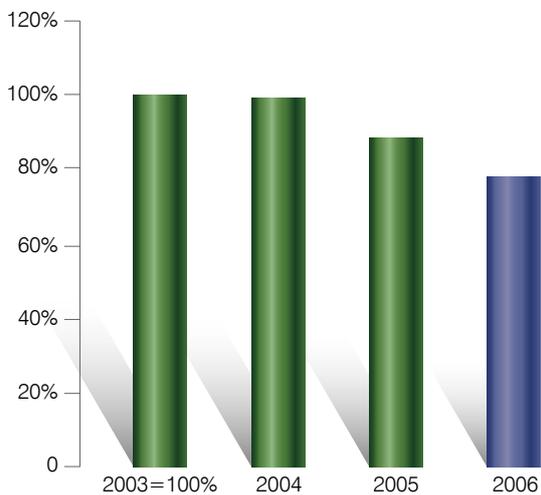
We strive to minimize pollution emissions into the air. To this end, we apply rationalization and re-

duction of the demand for process heat, use high quality fuels and install, if necessary, high performance purification systems. We also successively eliminate process sources of unorganized emissions by ensuring the maximum degree of hermetisation of the manufacturing process as well as transport-and-storage installations.

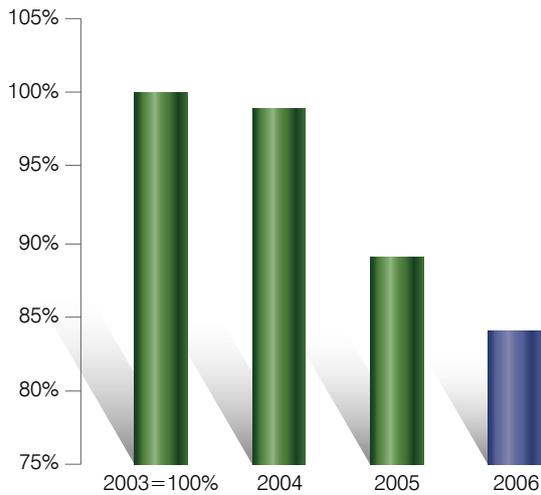
To provide a picture of the data on the size of and changes to emissions of individual substances from our refinery and heat-and-power plant, we present, in the following charts, aggregate data on emissions, relative to the quantity of oil processed in the years 2003-2006.



SO₂ emissions in relation to the quantity of crude oil processed in Grupa LOTOS S.A. in the years 2003-2006



NO₂ emissions in relation to the quantity of crude oil processed in Grupa LOTOS S.A. in the years 2003-2006



Emissions of greenhouse gases (based on CO₂) in relation to the quantity of crude oil processed in Grupa LOTOS S.A. in the years 2003-2006

Monitoring pollution emissions on the main emitters is run either continuously or periodically, which provides the possibility to check the compliance with emission limits for gases and dust. Among others, emissions are monitored for gases such as sulphur dioxide (SO₂), nitrogen oxides (NO_x), carbon oxide (CO), as well as dust. Thanks to this, we can always prove that our efforts to comply with the legal emission limits lead to the expected results and, consequently, that the environment is safe.

EFFECTIVE TREATMENT OF WASTEWATER

At our facility we generate industrial and municipal liquid waste which, after having been treated at our waste treatment plant, is discharged into

the Rozwójka canal and into the Martwa Wisła River. This issue is also of great importance to us. We are aware of the fact that we also influence the delicate environmental balance of the Bay of Gdańsk and, consequently, of the whole Baltic Sea. The results achieved in our waste treatment plant confirm that this concern is not limited to declarations only.

We constantly optimize the quantity of liquid waste we generate and we monitor the composition of the waste we discharge. In order to fully comply with legal requirements for environmental protection, we monitor a number of parameters. We also supervise water intake and monitor the reservoirs where the wastewater is being discharged after treatment, in order to fully diagnose our own impact on surface water deposits.



The sewage treatment plant at our facility receives water and liquid waste generated at the facility. These are:

- clean precipitation waters
- precipitation waters contaminated with oil
- drainage waters
- process waste
- municipal waste.

Our sewage treatment plant at our facility ensures full purification through:

- mechanical treatment
- chemical treatment
- biological treatment.

Clean precipitation waters undergo mechanical treatment.

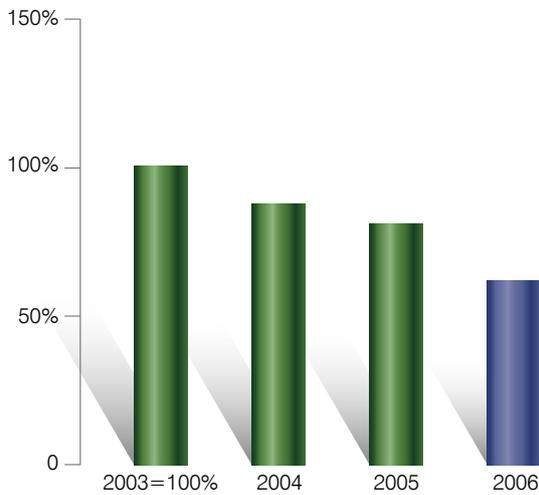
Drainage waters are purified in a two-stage process – mechanically and chemically. Precipitation waters contaminated with oil and process waste first undergo the two-stage (mechanical and chemical) treatment. Into this pre-processed stream, municipal waste is released. These three waste groups then undergo biological treatment. Biologically treated waste is then discharged into the Martwa Wisła River – through the Rozwójka canal.

In order to conserve water, part of the biologically treated waste is re-used to obtain process water. Water obtained in this way is then distributed for repeat use in process installations or for fire-fighting purposes.



The scale of impact of our facility on surface water supply is very well portrayed by the chemical oxygen demand ratio. This is a measure of water quality, expressing the quantity of oxygen necessary to use in the oxidation processes of organic and inorganic compounds (e.g. ferrous salts, sulphides). It makes it possible to assess the chemical load to water environment, and also to check the effectiveness of our water treatment plant.

The objective we set for ourselves is to gradually reduce the COD ratio relative to its 2003 value.



RATIONAL WASTE MANAGEMENT

Running a rational waste management represents one of our priorities. We understood long ago that reducing the quantity of waste not only creates less nuisance for the environment, but also brings specific measurable economic benefits – better utilization of raw materials, reducing the costs of waste disposal. That's why our Company aims, predominantly, at reducing waste generation using, first of all, the methods of "prevention at the source".

Chemical oxygen demand ratio in purified liquid waste in relation to the quantity of crude oil processed in Grupa LOTOS S.A. in the years 2003-2006



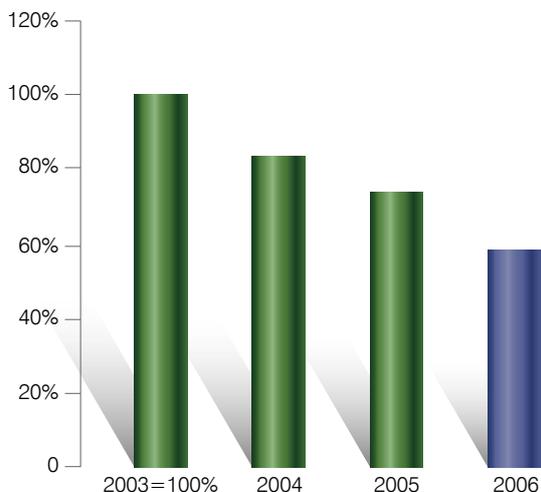
Waste which we can't avoid producing will, first of all, be recycled and will be neutralized only if absolutely necessary. All waste generated at our facility is selectively collected at specifically designed locations or in specially prepared containers, and then handed over to the collectors authorized to transport, collect, recycle or neutralize waste.

Among the main sources of waste at our facility, including dangerous waste, are: the processes of manufacturing products and semi-finished products, storage of raw materials, semi-finished and finished products, scheduled repair projects, as well as the operations of the direct administrative and support services.

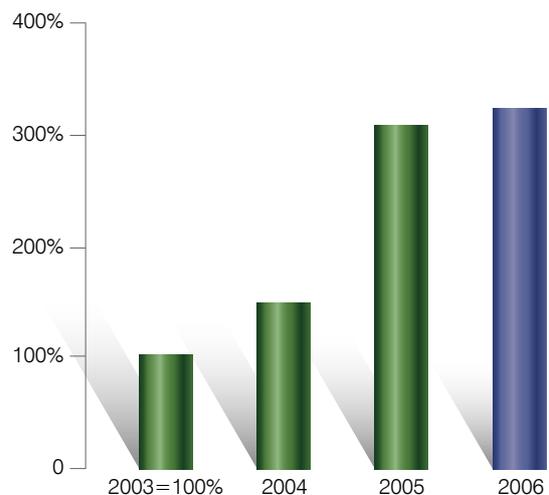
Our endeavours to reduce the quantity of waste produced by our company and to obtain the highest ratio of recycling, bring expected results. Below, we show the ratios which in the best way portray waste management at our facility.

The objective our company sets itself is to gradually decrease the ratio shown above, relative to its 2003 value.

We also strive to gradually improve the recycling ratio, relative to the waste generated. We recycle more and more of the waste generated in our facility, instead of neutralizing it, in compliance with waste management principles (Chapter 2 of the Waste Act of 21 April 2001, as amended).



Ratio of recycled waste related to generated waste in the years 2003-2006



Ratio of waste generated relative to the quantity of crude oil processed in the years 2003-2006

US AND THE LAW

Our Company strives to reduce its impact on all aspects of the natural environment and to improve work safety and conditions. The facility operates in compliance with legal requirements for environmental protection.

We possess an integrated permit for the operation of a crude oil refining installation (capacity of processing up to 6m tonnes of crude oil per year) and for the combined power and heating plant (output rating of 516.8 MW) issued by the governor of the Pomorskie province.

The permit covers:

- releasing gases and dust into the air
- generation of waste and waste management
- noise emissions into the environment
- discharge of wastewater into surface waters
- intake of underground water.

The integrated permit was issued on 30 December 2005 for a period of 10 years. We obtained it after having undergone a detailed analysis, on the basis of which it was assessed that the instal-

lations of Grupa LOTOS S.A. meet the requirements of the Best Available Technology (BAT) and cause no cross-border environmental impacts.

Moreover, we possess valid sector permits with regard to:

- intake of underground water – valid until 2015
- intake of surface water – valid until 2011
- monitoring of underground water – with unlimited validity
- CO₂ emissions trading – valid until 2015 and the Dangerous Waste Management Programme – valid until 2016.

In our company, we continuously monitor the current legal status and accordingly adapt our permits to changing regulations, so as to remain in compliance with all environmental requirements at all times.

Here are several examples of our facility's emissions compared to the limit values in the years 2003-2006.



	2003	2004	2005	2006
SO₂ emissions for Grupa LOTOS S.A. were:				
SO ₂ [t/year]	6,273	6,220	6,216	4,859
Limit values*	6,276	6,276	8,256	8,256
NO₂ emissions were:				
NO ₂ [t/year]	1,537	1,569	1,442	1,601
Limit values*	1,961	1,961	2,262	2,262
Parameters of treated wastewater discharged from Grupa LOTOS S.A. into the reservoir in the years 2003-2006 were as follows:				
COD [mg O ₂ /dm ³]	57.8	45.7	46.3	43.4
Limit values*	70	70	70	100
BOD [mg O ₂ /dm ³]	6.9	7.9	11.6	7.4
Limit values*	15	15	15	20
General sediment [mg /dm ³]	16.5	9.8	12.1	7.2
Limit values*	30	30	30	35
General nitrogen [mg N/dm ³]	8.0	5.8	6.8	5.7
Limit values*	15	15	25	25
General phosphorus [mg P/dm ³]	0.51	0.44	0.65	0.50
Limit values*	1.5	1.5	2.5	2.5
Sulphides [mg S/dm ³]	0.022	0.020	0.027	0.008
Limit values*	0.2	0.2	0.2	0.16
Volatile phenols [mg /dm ³]	0.017	0.010	0.011	0.009
Limit values*	0.3	0.3	0.3/0.1	0.08
In Grupa LOTOS S.A., the following quantities of waste were generated:				
Generated waste [tonnes]	10,726	9,206	8,280	8,294
Limit values*	34,691	95,258	57,991	57,991

* - limit values for Grupa LOTOS S.A., determined in the administrative decisions for each year





Our objective – effective self-limitation

Our Company endeavours to implement environmentally focused investment projects each year.

We want to keep improving the technologies used at our facility so as to minimize its impact on the surrounding environment.



4

Our objective – effective self-limitation

From the information presented in the report, it follows that we try to prevent pollution or minimize its adverse impact, whenever possible, by correct planning and running manufacturing processes at our facility using the most effective techniques and equipment.

Environment protection presents for us a priority already in the phase of development planning and investment projects geared to that purpose. We care about selecting “environment-friendly” technologies, which meet the requirements of the Best Available Technology (BAT). We invest only in such new technology solutions that will improve the effectiveness and efficiency of production processes, and are characterized by a high ratio of the utilization of raw materials and semi-finished products, relatively low requirements for production media and energy, and low emission ratios for pollutants, malodorous gases, or noise. This will ensure the reduction of and, where possible, prevent environmental pollution, and will improve energy and material efficiency in production processes.

We also work on improving our products in order to reduce their adverse environmental impact to a minimum.

MONITORING EMISSIONS

In order to constantly monitor the impact of our operations on the environment, we monitor the quality and quantity of pollution at our facility.

Monitoring air quality around our refinery (emissions monitoring) is continuously done at five monitoring stations. Methane and total hydrocarbons tests are done at all the stations, while we test for benzene, toluene, xylene and ethylbenzene at the three stations designated in the integrated permit.

We continuously monitor air emissions in the installation for energy-releasing fuel combustion. We measure the emissions of SO₂, NO₂, CO₂, dust and CO when using reference methodologies. Air emissions in the installation for refining crude oil are monitored periodically (twice a year). Among others, we test for the emissions of SO₂, NO₂, CO and dust. Also, each year we develop a balance for the emissions of substances emitted in an organized way from the surroundings of our facility.

Once a month, we analyze the quality of wastewater for normal conditions of our waste treatment

plant and monitor the quality of water in the Rozwójka canal. In the test we monitor, among others, pH, general suspended solids, BOD/COD, volatile phenols, substances extracted by naphtha-ether, crude-oil derivative hydrocarbons, general nitrogen and general phosphorus.

Noise measurements are taken once every two years. In order to eliminate a possible increase in noise emissions which may be caused by technical malfunctions of equipment, we also carry out periodical technical inspections of the noise-emitting equipment which creates the highest level of nuisance.

LIMITING IMPACT

We have accepted and we apply the principle that preventing pollution does not mean removing the effects of but rather preventing the reasons for pollution. Therefore, in the first place, we strive to eliminate the sources of pollution and reasons why it happens, doing this for example by optimizing technological processes, increasing their

energy efficiency and applying waste recycling. We look for preventive solutions, especially those that prevent pollution from occurring.

By doing this, we reduce to the necessary minimum the importance of the “end-of-pipe” solutions aimed at limiting the quantity of pollutants discharged into the environment at the end of the production process, which are often necessary, but also very costly, in their implementation. Those solutions include, for example, the wastewater treatment plant reducing pollutant loads discharged into the Martwa Wisła River (and through it – into the Baltic Sea), or the equipment which cuts down on emissions of harmful gases into the atmosphere.

We are also careful about efficient use of raw materials and other inputs used for production, doing this, for example, by monitoring process parameters in specific devices. We try to upgrade our production processes and to develop new solution for our facility in such a way as to minimize the loss of raw materials and products. We also restrict the use of water for technological purposes.



At the same time, energy management at our facility takes into consideration reducing energy consumption and improving combustion processes, as well as optimizing the consumption of steam in refinery processes. We produce power in a combined cycle, whereby we convert the chemical energy of fuel into the heat of process steam and electric power. We also care about increasing recuperation of energy inside the refinery and recuperation of heat from process streams. We also strive to use purified refinery gas as the basic fuel for process heating furnaces and, if necessary, we supplement this with liquid fuels.

WHAT WE HAVE ALREADY DONE

In order to improve the quality of our fuels, we started to manufacture:

- a new kind of diesel oil – Eurodiesel City (with a maximum sulphur content of 10 ppm) – 2003
- a light heating oil LOTOS Red 0.1 (with a maximum sulphur content of 0.1%) – 2003
- a basic kind of diesel oil Eurodiesel LOTOS (with a maximum sulphur content of 10 ppm) – 2004
- a diesel oil containing up to 5% V/V FAME (methyl esters of higher fatty acids) – 2006.



In 2005, we upgraded our crude oil processing installation. We upgraded the three basic installations (atmospheric distillation, vacuum distillation and gasoline hydrotreating) so that they could process 6m tonnes of crude oil. It was the first step towards implementing the Comprehensive Technical Development Programme of our Company, among whose fundamental objectives we list both meeting the most stringent environmental requirements for oil-based fuels and limiting our impact on the surrounding environment. By implementing this project, we strive to reduce the sulphur content:

- in heavy heating oil to 1% max. (in force since 1 January 2007)
- in light heating oil to 0.1% max. (will be in force from 1 January 2008)
- in gasoline and diesel oil to 10 ppm max. in the whole production pool (will be in force from 1 January 2009).

In December 2005, we launched the second installation for the “oil sweetening” process used in manufacturing high-quality Jet A1 aviation fuel.

We have upgraded the biological phase of wastewater treatment, based on the BIOGRADEX technology, which led to an improvement in the effectiveness of wastewater treatment by about 40%, and by this – also to an improvement in the effectiveness of the in-house wastewater treatment plant.

In order to protect the air against pollution, we equipped our storage tanks and fuel pouring sta-

tions with devices which restrict the emissions of hydrocarbons. Storage tanks for gasoline and crude oil have floating roofs and double seals that minimize the emissions of hydrocarbons. And the gasoline pouring installations have been hermetised and connected to a hydrocarbon vapour recuperation system. All plants at our facilities which create unorganized hydrocarbon emissions meet the BAT requirements.

Should there be any disturbance in the oil processing production process, all production installations are equipped with devices protecting against the leakage of hydrocarbons into the air and have been connected to discharge flares, in accordance with the BAT requirements. Before being emitted into the air, discharge gases are stoichiometrically burned off in two flares, in an environmentally safe way.

ENVIRONMENTAL PROTECTION INVESTMENT PROJECTS

Each year, our Company strives to implement environmental investment projects. We want to keep improving the technologies at our facility, to minimize its impact on the surrounding environment. In recent years, we have increased the outlays targeted at investment projects related to environmental protection, because it is a priority for us to maintain our facility as an environmentally-friendly one. In 2007 we plan to assign about PLN 180m to this aim.

Investment outlays and costs of environmental investment projects in Grupa LOTOS S.A. in the years 2003-2006

	Outlays (in PLN thousand)			
	2003	2004	2005	2006
Investment outlays (total)	32,954	123,650	246,123	284,104
Outlays for environmental investment projects	649	1,805	7,265	34,387

In the years 2003-2006 we have completed the following environmentally-friendly projects:

- protection of LPG storage tanks
- upgrading the automated road tanker filling station and construction of a new road tank terminal
- upgrading the automated control of the wastewater treatment plant
- upgrading the metering and controls of the Port-Refinery pipeline
- upgrading the system for air pollution emission measurement
- constructing the installation for chlorine dioxide production
- constructing the foam pumping plant
- upgrading the biological treatment section
- new layout of kindling gas system in the heat-and-power plant.

We also continue working on the following projects:

- construction of the pipeline for discharging treated wastewater into the Martwa Wisła – commenced in 2004

- xylenes emissions installation – commenced in 2005
- construction of the oil de-sulphuring installation – commenced in 2005
- construction of an anti-theft environmental monitoring system along the Port-Refinery pipeline – commenced in 2006
- upgrading the hearths of energy boilers – commenced in 2006
- upgrading the refinery system for heating oil – commenced in 2006.

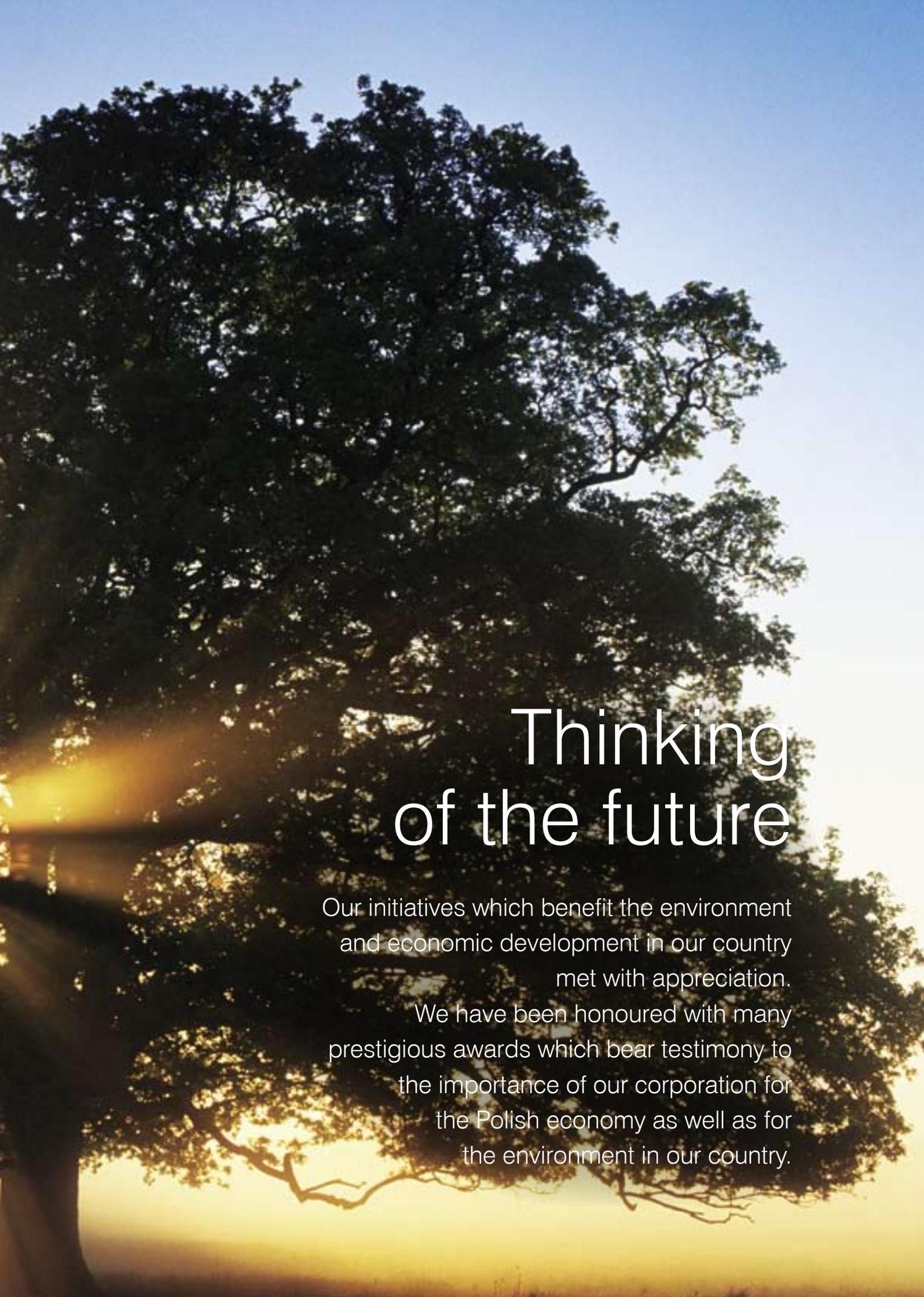
Our Company transfers significant funds each year to municipal and county funds, the chief Environmental Protection Inspectorate and environmental funds, via the fees it pays for using the environment for commercial purposes. These funds support municipalities and local businesses which have problems to comply with pollution limit values outlined in environment protection regulations. In this way, our company contributes to an improvement in the natural environment, also in other places, outside its direct neighbourhood.

Fees for commercial use of the environment by Grupa LOTOS S.A. in the years 2003-2006

	PLN thousand			
	2003	2004	2005	2006
Emissions into the air	3,720	3,850	3,594	3,518
Water intake	86	92	87	109
Wastewater discharge	277	251	259	266
TOTAL	4,083	4,193	3,940	3,893



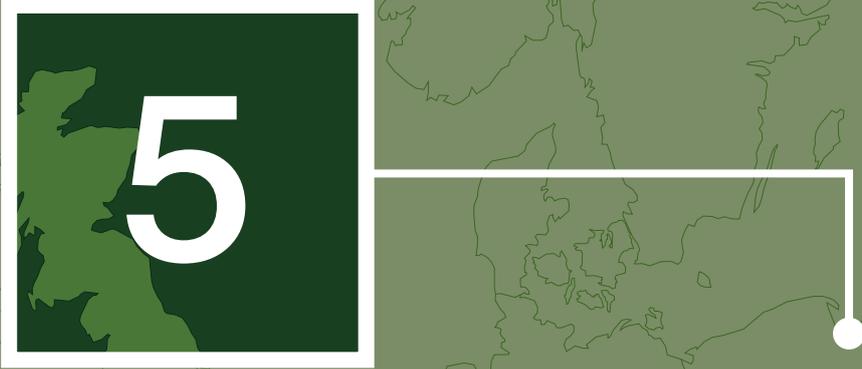


A large, leafy tree is silhouetted against a bright, golden sunset sky. The sun is low on the horizon, creating a strong lens flare effect on the left side of the image. The tree's branches are spread out, and its leaves are dense, creating a dark, textured shape against the light background.

Thinking of the future

Our initiatives which benefit the environment
and economic development in our country
met with appreciation.

We have been honoured with many
prestigious awards which bear testimony to
the importance of our corporation for
the Polish economy as well as for
the environment in our country.



5

Thinking of the future

HOW WE ARE PERCEIVED BY OTHERS

Grupa LOTOS S.A. constantly participates in initiatives that bring benefits to the environment and economic development in our country. In connection with this, we have been honoured with many prestigious awards which bear testimony to the importance of our corporation for the Polish economy as well as for the environment in our country. The most important among those awards are, inter alia:

- the title of “The Company of Central and Eastern Europe” awarded at the 25th Economic Forum in Krynica
- the “Poland Now” (Teraz Polska) logo awarded to our LOTOS Traffic Thermal Control engine oil, a laureate of the 15th edition of the competition;
- the “Vector” Prize awarded by the Confederation of Polish Employers for innovative business initiatives, which can be recommended as examples to follow
- the title of an “Environmentally-friendly company”, awarded during the 4th Environmental Competition “Friends of the Environment” (Przyjaźni Środowisku)
- a certificate of “The Partner of Polish Ecology” awarded at the gala event of the 8th Edition of the National Environmental Competition “Friends of the Environment”.

We are also a laureate of the “Polish Ecology Pantheon” competition for our support in Polish environmental initiatives.

DEVELOPMENT PLANS

Taking care to ensure the sustainability and competitiveness of our Company, we are planning for its further development and modernization. At the same time, we want to meet all the legal requirements concerning the operations of our facility and, specifically, to be “an environmentally-friendly company” – thus remaining true to our corporate mission.

We will constantly look for technological solutions that could make it possible for us to reduce the emissions of environmental pollutants to a minimum.

We will continue pursuing further improvements to our products in order to make them as harmless to the environment as possible.

OUR FUTURE

We plan our future development to follow the path of using the Best Available Techniques in manufacturing practice, which meet the most stringent environmental criteria and requirements that have been specified in the BREF reference document (Reference Document on Best Available Technology for Mineral Oil and Gas Refineries. Integrated Pollution Prevention and Control (IPPC), February 2003 – oil and gas refineries).

A prominent place in our technological development strategy is also taken by the optimization of our current systems, increasing their energy efficiency and preventing, or at least limiting, the effects and the time of potential breakdowns. Besides, our company wants to significantly reduce the emissions of sulphur dioxide and nitrogen oxides in the near future, and also to eliminate the production of high-sulphur heating oil.

By 2009, we plan to implement many investment projects which will benefit environmental causes both directly and indirectly, such as:

- an installation for diesel hydro-desulphurization (minimizing the sulphur contents in diesel fuel and light heating oil)
- a xylenes removal installation (minimizing the aromatic content in gasoline products)
- expansion and upgrade of the wastewater plant.

BIOFUELS

Our company is aware that increasing the production share of renewable energy is necessary for ensuring sustainable development on a global scale, and that it is also unavoidable

because of Poland's international commitments. Specifically, in view of the 2003/30/EU on the promotion of the use of biofuels or other renewable fuels, which will come into force from 1 January 2008, EU member states will be under obligation to continue increasing the share of biocomponents in fuels. In the case of gasoline, a biocomponent can be bioethanol, e.g. obtained from grains or potatoes and, in the case of diesel fuel – one can use methyl esters obtained from rapeseed oil. Biofuel is any fuel with the biocomponent contents exceeding 5% (V/V).

We can meet this challenge as well. Our company has been manufacturing fuels with biocomponent additives since as early as 1997. In 2005, we manufactured over 280 000 tonnes of unleaded gasoline containing bioethanol additives.

At the moment, we are working intensively to expand our offering. We believe that the key to success in the biofuel market and, at the same time, the way to avoid problems with raw materials supply, is to find the technical solutions that would make it possible to efficiently process other types of raw materials that could represent a source of biocomponents. Therefore, we will pursue the development of installations which will be able to process not only rapeseed oil, but also other vegetable and animal oils.







Figures

6

Figures

Quantity of crude oil processed in Grupa LOTOS S.A. in the years 2003-2006

	2003	2004	2005	2006
Volume of crude oil processed [t]	4,592,254	4,743,690	4,836,900	6,098,600

Quantity of electric power used for oil processing in Grupa LOTOS S.A. in the years 2003-2006

	2003	2004	2005	2006
Electric power * [MWh]	314,959.9	318,126.1	301,323.1	353,974.3

Usage of surface water and underground water deposits by Grupa LOTOS S.A. in the years 2003-2006

	2003	2004	2005	2006
Surface water [m ³]	2,095,230	2,227,362	2,252,811	2,559,165
Underground water [m ³]	196,480	156,342	136,065	168,110
TOTAL [m ³]	2,291,710	2,383,704	2,388,876	2,727,275

Actual emissions of air pollutants in Grupa LOTOS S.A. in the years 2003-2006

	2003	2004	2005	2006*	
	[t]	[t]	[t]	[t]	[t per million tonnes of crude oil processed]
SO ₂	6,273	6,220	6,216	4,859	796.69
NO ₂	1,537	1,569	1,442	1,601	262.55
Dust	387	326	339	364	59.72
CO ₂	1,045,212	1,068,758	979,074	1,153,625	0.19 [t per one tonne of crude oil processed]

* - according to the information concerning the oil refining industry, provided in BREF (Chapter 3, "Current Consumption and Emission Levels"), at the end of the 1990s, on average, European oil refinery emissions of SO₂ resulting from combustion processes reached between 49 and 10,000 tonnes per year, while emissions resulting from other processes (de-sulphurisation, cracking, etc.) – stood between 30 to 6,000 tonnes of SO₂ per each million of crude oil processed.

At the same time, NO_x emission rates were between 50 and 5,000 tonnes per year for combustion processes, and between 60 and 500 tonnes of NO_x for each million tonnes of the crude oil processed.

Analogous dust emission rates were, respectively, between 100 and 20,000 tonnes of dust per year, and between 10 and 3,000 tonnes of dust per each million tonnes of the crude oil processed. The range of CO₂ emissions was between 28,500 and 1,120,000 tonnes per year for each refinery, and from 0.02 to 0.82 tonnes of CO₂ per each tonne of raw material processed.

Parameters of the purified wastewater discharged into a reservoir by Grupa LOTOS S.A. in the years 2003-2006

year	Q	pH	BOD ₅		COD	
	quantity of wastewater discharged		kg/year	avg.	kg/year	avg.
	m ³ /year			mg/dm ³		mg/dm ³
2003	3,626,630	7.6	24,937.23	6.9	209,533.8	57.8
2004	4,102,030	7.7	32,547.98	7.9	187,399.2	45.7
2005	3,837,217	7.9	44,491.25	11.6	177,835.2	46.3
2006	3,960,830	7.9	29,475.18	7.4	171,966.1	43.4
BAT				2-20		30-125

year	Phenols		General phosphorus		General nitrogen	
	kg/year	avg.	kg/year	avg.	kg/year	avg.
		mg/dm ³		mg/dm ³		mg/dm ³
2003	62.399	0.017	1,854.09	0.51	28,832.10	8.0
2004	42.533	0.010	1,787.96	0.44	23,701.81	5.8
2005	41.796	0.011	2,492.88	0.65	26,142.54	6.8
2006	34.657	0.009	1,980.42	0.50	22,741.77	5.7
BAT						1.5-25

Parameters of the purified wastewater discharged into a reservoir by Grupa LOTOS S.A. in the years 2003-2006

year	General suspended solids		Sulphides		Ether extract	
	kg/year	avg.	kg/year	avg.	kg/year	avg.
		mg/dm ³		mg/dm ³		mg/dm ³
2003	59,849.54	16.5	80.54	0.022	5,212.61	1.4
2004	40,400.19	9.8	81.42	0.020	3,456.85	0.8
2005	46,368.31	12.1	102.80	0.027	4,232.54	1.1
2006	28,683.01	7.2	29.71	0.008	4,290.90	1.1
BAT		2-50				

Pollution load in the treated wastewater discharge for the COD parameter is 30-125 mg per each tonne of crude oil processed (annual average).

For Grupa LOTOS S.A. this ratio was equal to:

	2003	2004	2005	2006
COD/crude oil [mg/tonne]	46	40	37	28

Quantity (in tonnes) of waste generated, recycled, and neutralized in Grupa LOTOS S.A. in the years 2003-2006

	2003	2004	2005	2006
Generated waste [t]	10,726	9,206	8,280	8,294
Recycled waste [t] [t]	3,362	4,238	8,012	8,369
Neutralized waste	5,624	4,973	1,058	361

For European refineries, the ratio of solid waste and sediments equals up to 2 kg per each tonne of crude oil processed.

For Grupa LOTOS S.A. this ratio stayed at:

	2003	2004	2005	2006
Solid waste /crude oil processed [kg/t]	2.34	1.94	1.71	1.36



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