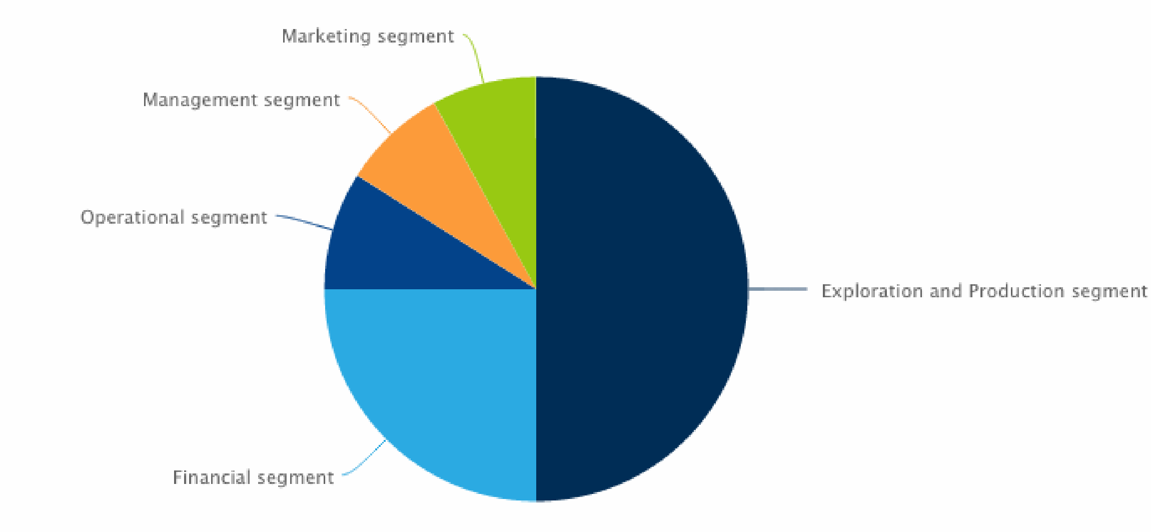
Risks and opportunities

Risks and opportunities

Given the extent of its business and its dynamic growth, the LOTOS Group is exposed to a variety of risks, ranging from exploration and production risks, to process risks, technical risks, market risks and financial risks.

Material risks incurred by the LOTOS Group, by business segments (%)



We analyse every risk and develop appropriate mitigation strategies. Throughout 2013, we continued to implement appropriate measures in response to individual threats.

Key risks in the LOTOS Group

Operational risks related to the refinery	Political and legal risks
Trading risks	Reputation and social risks
Exploration and production risks	Financial risks

Approach to management

The LOTOS Group has an Enterprise Risk Management (ERM) system in place, which provides the framework for our internal procedures and regulations. By implementing the ERM system, we can ensure that the impact of potential threats to achieving our business and operational objectives is being minimized and that we can effectively take advantage of newly emerging opportunities and business possibilities identified in our environment.

ERM document hierarchy at the LOTOS Group

LOTOS Group Enterprise Risk Management Policy
Defines the general division of responsibility within the system, and the key risk management policies operated by the LOTOS Group.

LOTOS Group Enterprise Risk Management Procedure
Specifies detailed rules for risk identification and assessment, as well as monitoring and reporting methods designed to evaluate the effectiveness of mitigating actions taken.

Risk Management Charts
Contain specific risk management guidelines, procedures for response to and mitigation of materialised risks, and indicators for monitoring risk. The charts are prepared chiefly for material risks.

The Enterprise Risk Management system is applicable to all LOTOS Group employees. Every employee can report new risks and every individual risk is managed by a risk owner. The Enterprise Risk Management Committee formulates recommendations on risk management and monitors the execution of mitigation measures. The Board of Grupa LOTOS takes key decisions regarding the ERM system and approves Risk Maps. Risk management is coordinated at all stages, from identification and assessment to response planning and execution, and finally, monitoring and reporting.

Hierarchy of responsibility for enterprise risk management at the LOTOS Group

Risk management coordination
(Business Process Management Office – Risk Management Coordinator)

Supervisory Board
Monitors and supervises the risk management system

Board of Grupa LOTOS
Makes key ERM decisions and approves Risk Maps

Enterprise Risk Management Committee
Recommends ERM actions and monitors their progress

Risk owners
Determine risk management strategies, monitor risk levels and report the results of steps taken

LOTOS Group employees
Implement mitigation strategies and identify new risks

We evaluate our ERM system's effectiveness every year, as part of our organizational maturity assessment, the conclusions and recommendations of which are used to further improve the system.
A final assessment score, expressed as a percentage, reflects:

- the degree to which the system implemented in the Company complies with best practices,
- the degree of its implementation.

ERM score as part of the annual organizational maturity assessment

Year	Planned score [%]	Compliance with planned score [%]	Total score [%]*
2011	97	93	90
2012	96	97	93
2013	96	97	93

* The total is the product of the planned score and the compliance score.

Information on the operation of the Enterprise Risk Management System is regularly provided to the Board of Grupa LOTOS and the Audit Committee of the Company's Supervisory Board.

Key instruments

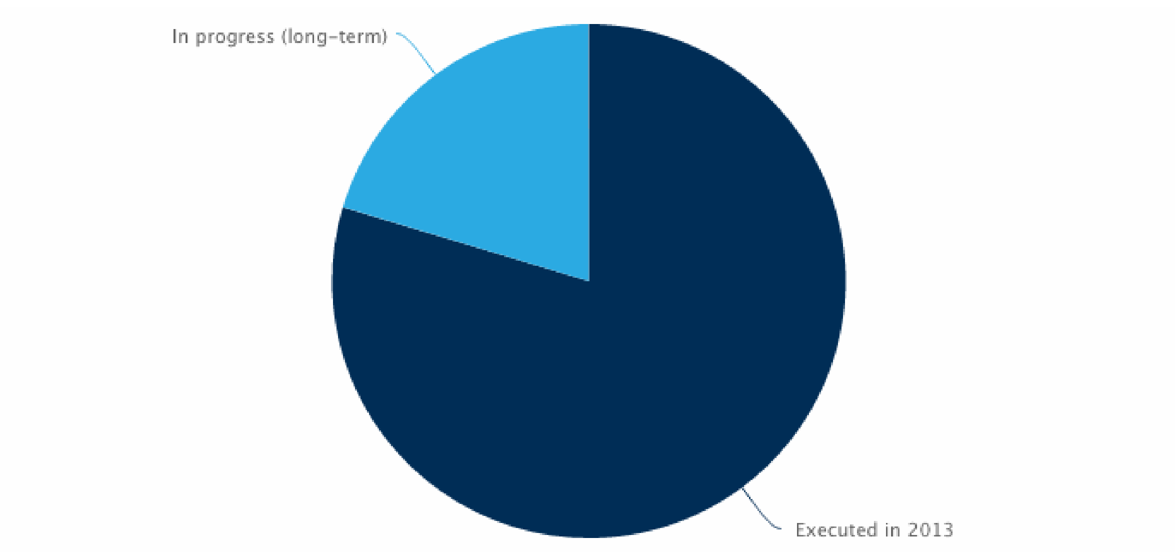
The methods used by the LOTOS Group to identify and assess risk remained unchanged in 2013. Risks are identified by their bearing on the organization's strategic and operational objectives. They are then assessed in two different time frames – until the following year, and until the end of the period covered by the current strategy. The probability of a risk actually materialising is estimated using a Risk Matrix, following which an assessment is made of its possible impact on the LOTOS Group's financial standing and reputation. This takes into consideration the predicted impact on human safety and the environment, as well as how key stakeholders may perceive the risk. Based on these criteria, risks are classified as Material, Moderate or Low.

Risk Maps are developed from the risk assessment and are submitted to the Enterprise Risk Management Committee for an opinion and to the Board of Grupa LOTOS for approval.

> Each risk is assigned to an owner, who is responsible for its management, including its oversight and monitoring and the implementation of the recommended mitigation strategy.

In addition, we prepare detailed analyses of Material risks and selected Moderate risks, which we use to develop mitigation plans and response procedures in case of their occurrence. We also define Key Risk Indicators (KRIs), which are subject to periodic monitoring and reporting.

Actions mitigating key risks



> Enterprise Risk Management initiatives at the LOTOS Group are supported by the ERM Portal, an IT tool.

Apart from recording information about risks and risk-related actions, the ERM Portal can also be used to monitor current risk indicators and the automatic flow of information on actions in progress.
To better serve the needs of its users, in 2013 we updated the ERM Portal with numerous improvements and new functionalities, including a database of risks audit results, as well as a risk management chart generator. All of these initiatives were designed to improve the Enterprise Risk Management system.

Implementation costs of hedging strategies

The costs of hedging strategies depend on the materiality of the risk and the potential benefits derived from hedging.

> Whenever possible, we use the ALARP (As Low As Reasonably Practicable) principle to reduce risk to a level considered economically acceptable.

Furthermore, when preparing risk analyses or action plans, potential costs are among the factors considered in making the final decision on actions necessary to be taken. This approach enables the LOTOS Group to deploy the financial resources required for risk management in the most efficient manner possible.

Management Segment

> Political and legal risks

> Reputation and social risks

> Project Risk

Political and legal risks

Political and legal risks are considered to be among the greatest challenges faced by companies in the oil industry. The passing and functioning of enforceable and effective laws, particularly where new business legislation is drafted not only at the national but also at the EU level, is of great importance to the entire sector.

The year 2013 was a busy one for Polish lawmakers working on regulations with direct or indirect implications for the oil sector. Their work was driven by the need to implement the enacted EU directives into the national law, recognise plans for new EU regulations, and align the Polish legal framework with the new operating conditions of the Polish oil industry (including in the upstream segment). Although a lot has already been done, risks stemming from laws and government policies for the oil sector remain real. These include:

- **Insufficient number of comprehensive regulatory frameworks and inconsistent law** – the Polish oil sector is regulated under multiple legal acts, compliance with which is overseen by different ministries, and this hampers the industry's smooth functioning.
- **Delays in the implementation of EU directives and protracted law-making processes** – despite the immense effort of the Polish administration, a number of EU directives still remain to be incorporated into national law. Moreover, many areas are under-regulated and the legislative process is lengthy. Since the regulator is not inclined to share clear outlines of planned laws, the regulatory framework is a source of considerable uncertainty or significant consequences, often forcing Polish oil industry players to incur excessive costs.
- **The Polish voice remains largely unheard in the EU arena** – even though members of the government administration meet with representatives of the oil industry to discuss draft EU legislation, in many cases the Polish voice has gone unheard. This stems from, among other things, insufficient dialogue maintained with other countries to work out a common position and promote certain views and initiatives. The Polish administration should find ways to support not only local, but also international groups whose business goals converge with Poland's national interests. As the interests of individual EU member states vary, the adopted legislation does not always correspond with the needs and expectations of the Polish refiners.

Risks and opportunities related to national and EU regulations, which were the focus of attention in 2013 and which will have a bearing on the oil industry's operations in 2014.

Regulations on mandatory stocks

The drafting of amendments to the Act on Stocks of Crude Oil, Petroleum Products and Natural Gas, and on the Rules to be Followed in the Event of Threat to National Fuel Security or Disruptions on the Petroleum Market of February 16th 2007, was completed in 2013. The primary purpose of the amendments is to implement Council Directive 2009/119/EC imposing an obligation on Member States to maintain minimum stocks of crude oil and/or petroleum products.

The draft amendment to the Act prepared by the Polish government puts in place measures beneficial to producers and importers of fuels such as a mechanism enabling companies to gradually reduce their mandatory stocks (by a total of approximately 30% by the end of 2017) in exchange for a stock charge, to be paid by the companies on a monthly basis. By reducing the volume of mandatory stocks:

- an immense amount of funds tied up in the stocks will be released,
- the companies' balance sheets will improve,
- valuations of the companies' assets will be less affected by market price fluctuations, and
- the logistics costs and administrative expenses of holding mandatory stocks will decrease.

All these factors combined should have the effect of enhancing the competitiveness of Polish oil companies in global markets. The amendments also introduce long-awaited non-discriminatory rules for building and maintaining mandatory stocks, applicable to all producers and importers of crude oil and petroleum products operating in the Polish market.

Regulations on hydrocarbon exploration and production

Regulations on hydrocarbon exploration and production provided an important focus for Grupa LOTOS in 2013.

Work on regulations governing upstream operations in Poland was accelerated by the required implementation of Directive 2009/31/EC of the European Parliament and of the Council of April 23rd 2009 on the geological storage of carbon dioxide, as well as the Polish government's increased interest in developing the unconventional gas industry.

The drafting of amendments to the Geological and Mining Law consisted of two parallel processes to enable faster implementation of the Directive mentioned above and to adjust the law to cover unconventional hydrocarbon exploration.

Directive on carbon dioxide storage demonstration projects was implemented into Polish law by an act of September 27th 2013, which came into force on November 24th 2013.

In contrast, work on new regulations regarding hydrocarbon exploration and production was at the drafting and consultation stage in 2013 and has not been completed yet. On April 23rd 2014, Polish Prime Minister passed to the Parliament the *Draft Act Amending the Act - Geological and Mining Law*, *and Certain Other Acts together with Draft Secondary Legislation*, which is a huge advancement on previous proposals of hydrocarbon exploration and production regulations in Poland. However, many of its provisions could be changed to help create an even more transparent and investor-friendly regulatory framework which would be secure for our country and still conducive to effective development of the upstream sector. Issues requiring further clarification and provisions needing to be formulated more precisely or to be changed are as follows:

- performing geophysical surveys for hydrocarbon exploration without the need to secure a licence – the proposed provisions allow for conducting geophysical surveys also in areas covered by a hydrogen licence awarded to another entity, which denies the licence holding company its exclusive right resulting from the mining usufruct contract signed to use the given area for mining purposes;

- conducting exploration operations without the need to secure a licence gives rise to uncertainty as to whether the licence will be awarded after substantial expenditure has been made to complete the exploration programme. This will increase risk for the operators, and inhibit exploration activity in Poland;

- determining the legal status of mining usufruct in a comprehensive manner;

- sharing the right to geological information acquired when conducting operations in cooperation with other entities and determining who will have the right to it after the consortium has been dissolved;

- possibility of receiving a decision on licence award upon a request of the company without a tender;
- a considerably higher mineral production royalty, which will increase the costs of exploration and production operations;

Key to development of the hydrogen exploration and production segment are transparent and investor-friendly regulations.

The final draft passed to the Parliament takes into account the proposals and recommendations put forward to previous draft amendments to the Geological and Mining Law. In particular, the following provisions are welcome:

- introducing the possibility to acquire a uniform licence covering all stages of the hydrogen exploration and production programme;
- dropping the plans of establishing a National Energy Minerals Operator (Narodowy Operator Kopalin Energetycznych, NOKE) and its obligatory participation in all consortiums intending to conduct hydrogen exploration, appraisal and production activities;
- introducing the possibility of having a licence awarded to a consortium of entities interested in developing the given licence area together;
- the proposed amendments to the Act on the Provision of Information on the Environment and its Protection, Public Participation in Environmental Protection and Environmental Impact Assessments, as aiming for streamlining hydrogen field development programmes.

EU regulations for biofuels

In 2013, the European Commission and the European Parliament continued the work on amendments to Directive 2009/28/EC, proposed in 2012 by the European Commission. However, no final decisions were made. The individual Commissions, the European Parliament, the member states, as well as international industry organizations all had differing views on matters of key importance to the future of renewable energy sources in transport, which prevented a consensus. Work on the proposed amendments will continue.

The European Commission's proposal to amend Directive 2009/28/EC with respect to biofuels stems from a discussion, ongoing for several years now, about the indirect impact of biofuels on changes of land use, and biofuels competing for land suitable for cultivating food crops and animal feed (Indirect Land Use Change, ILUC).

Also, the Council of Ministers issued the Regulation on National Indicative Targets (NIT) for 2013-2018. It should be noted that all National Indicative Targets for 2013-2016 have been set at 7.10%.

In addition, the Council of Ministers issued the Regulation on the level of the reduction rates for 2014 and 2015. In 2013, Grupa LOTOS availed itself of the right to reduce the National Indicative Targets, which helped to decrease the costs of their achievement.

Carbon dioxide (CO_2) emission allowances

In 2013, the EU Council approved the European Commission's proposal, earlier adopted by the European Parliament, to suspend the auction of 900m CO_2 allowances in 2013-2015 (backloading). The number of allowances until 2020 is to be increased annually by the same amount. The purpose of these steps is to raise the price of emission allowances. There is a risk that the Commission will next propose a permanent removal of suspended allowances from the market.

In 2013, the government continued work on the amendments to the Act on Monitoring and Control of Fuel Quality, which are designed to introduce into the Polish legal system the National Reduction Target following from Article 7a of Directive 2009/28/EC. However, no transparent regulations on the methodology for calculating emission reductions have been developed so far, on either EU or national levels. This will therefore require the greater involvement of industry representatives in providing support to the state administration in the process of developing the EU and Polish laws in this area.

Reputation and social risks

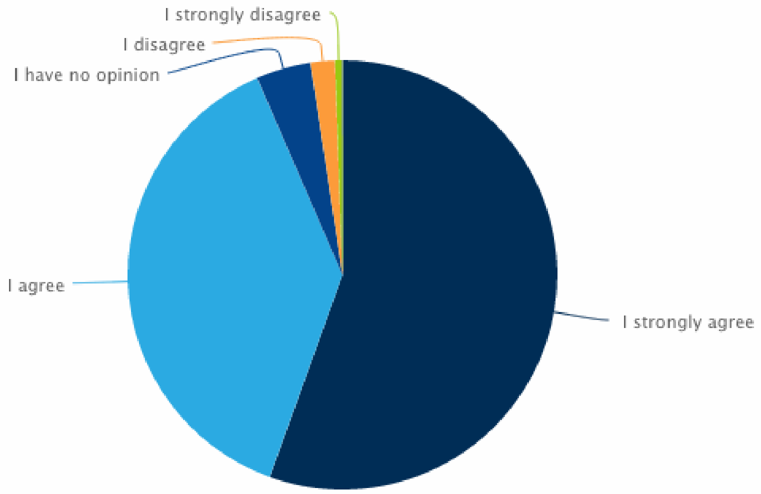
Reputation risk

stems from events that may affect the perception of the LOTOS Group and the value of the LOTOS brand. As most of the risks in each business segment may affect this perception and value of the LOTOS brand, they are evaluated in the context of both finance and reputation. As both evaluation criteria are equally important, risks with a potentially significant effect on reputation are subject to detailed analyses, and mitigation plans are developed in accordance with relevant risk management rules.

Social risk

relates to the environment of the LOTOS Group and its employees. In 2013, we commenced implementation of the 2013-2015 Effective and Rising Programme to increase efficiency and support the continued dynamic development of all LOTOS Group companies. However, we realize that the planned changes, in particular those involving restructuring, may give rise to concerns and the disapproval of employees and our immediate social environment. For this reason a series of meetings was held between LOTOS Group employees and the Board of Grupa LOTOS as well as the Management Boards of its subsidiaries to discuss the Programme's objectives and address any doubts and concerns. The majority of the employees who participated in these voluntary meetings expressed a good understanding of the changes being implemented at the Company.

I understand the key objectives of the 2013-2015 Effective and Rising Programme (%)



As the process moves forward, we continue to engage in open communication about the Programme and its individual projects.

Misconduct risk

is construed at the LOTOS Group to mean an intentional act or omission which constitutes a violation of the applicable laws, committed to secure unlawful gains or resulting in a loss for the Company, including any forms of corruption. To minimise this risk, we take a systematic approach to misconduct prevention, consisting in comprehensive and organized efforts to identify and assess the risk. Under the Misconduct prevention system implemented at the LOTOS Group, solutions for preventing and identifying misconduct and minimising its consequences have been put in place. The system is subject to an annual survey as part of the Company's organizational maturity assessment, the results of which testify to the effectiveness of the solutions applied.

Project Risk

Project risk

is related to the possibility that a given project may fail, may be delayed, or may suffer budget overruns. As we implement various significant projects, any materialisation of project risks may adversely affect our operations and financial performance as a result of budget overruns or a project's failure to bring the expected profits or to bring such profits at the expected time. In the case of key projects, materialisation of such risks may also prevent the achievement of strategic objectives. In order to minimise these risks, we have implemented uniform project management policies across the LOTOS Group. These policies require that a risk management plan is in place for each project. Individual risks related to the given project are analysed and assessed in detail, risk mitigation measures are identified, and responsibility for their implementation is assigned to specific individuals. Implementation of each project is duly monitored and reported.

Exploration and Production Segment

> Exploration risks

> Technical and production risks

> Risks related to exploration and production projects

> Financial risks

Technical and production risks

Risk of failure of production equipment and facilities due to their limited durability or improper operation

– should this risk materialise, it may result in financial losses due to production stoppages. To effectively manage this risk, we employ a number of measures, including regular overhauls and repairs, and vibration and wear measurements of bearings. We also have certification bodies to perform periodic inspections of the equipment.

Risks from infrastructure operation, such as the risk of oil spill, sea collision, fire or blowout

– which may cause environmental contamination, death of personnel, downsizing or stoppage of production, and entail significant costs remedying the resulting damage or paying fines. This production-related risk is a function of how well E&P infrastructure is operated, the use of appropriate technical solutions, as well as staff awareness and skills. We therefore take steps to prevent such accidents. Should they nevertheless occur, action plans have been prepared to mitigate their consequences.

As a result of our approach, no such process safety events as which would meet the criteria specified in the definitions provided by API RP 754 regarding upstream activities were reported in the E&P segment in 2013.

Risks related to exploration and production projects

Risk of limited control of joint ventures

– since at least two partners are involved in such projects, there is a risk that they will not be executed in accordance with the LOTOS Group's expectations. We mitigate this risk by properly defining the acceptable conditions on which we can become involved in a project, and by vetting the other interest holders, their goals, motivation, financial standing, ownership structure and perception. For this, we rely on our in-house resources and/or business intelligence agencies. Another important thing is to properly define the common interests, analyse the legal, tax and business regulations in a due diligence process, and study the provisions of partnership agreements to ensure our interests are secured. The risk is also minimised by devising an appropriate negotiation strategy at the time of entering into a new partnership and while it continues, as well as by ongoing monitoring of contractual provisions, evaluating and approving budgets and schedules, appointing committees, and recommending decisions to be made by the relevant governing bodies.

All of these steps were taken in 2013 for our licences held jointly with partners in both Norway and Poland. In Poland, one example is the operation of the B4/B6 gas fields in partnership with CalEnergy Resources.
Risk of involving capital in projects which yield unsatisfactory returns – this risk is related to partnership agreements which may result in financial losses. To counteract this risk materializing, we make sure to properly define the goals and conditions on which we can participate in a project. Proper tools for assessing each such project are identified and multidisciplinary teams are set up to perform its economic, legal, tax or technical analyses.

Risk of failure to fully recover funds invested in the Yme project

– given the significance of the Yme project, we have brought it under special supervision. We are implementing a number of measures mitigating the attendant risks. Currently, efforts are being made to sell the interests in the Yme field. We have defined two sub-projects – removal of the MOPU (Mobile Offshore Production Unit) from the field and submission of a new Yme field development plan to Norway's Ministry of Petroleum and Energy to raise the value of the interests we intend to sell. To mitigate the associated risk, an agreement was signed with SBM, the MOPU's manufacturer, in which SBM agreed to cover the costs of the unit's removal from the field, and paid compensation to the consortium members. In 2013, we also held a process to select a contractor for the MOPU's removal. We evaluated the quality of work performed by the operator, helped to build an agreement between those partners that were not consortium operators to strengthen our position, engaged international advisers and, to ensure we have greater control, seconded one of our employees to the operator. We also held talks with the Norwegian authorities to clearly confirm the intention of continuing our activities on the Norwegian Continental Shelf, outlining the planned steps.

Risk of bad weather conditions

– this is a crucial risk factor in a marine environment, which may delay projects and, in extreme cases, force us to suspend production. To minimise the adverse effect of this risk, systems are deployed to monitor weather conditions and trigger appropriate safety procedures when necessary.

Financial risks

The segment's most significant risks in 2013 included risks associated with macroeconomic conditions, limited availability of funding for investments, and changes in legal regulations, including tax legislation. These are described in detail in the section on risks of the financial segment. (more information)

Operating segment

- Technical risk
- Risk of unavailability or limited availability of natural gas
- Work safety risk
- Risks related to carbon dioxide (CO2) emission allowance limits
- Environmental risks
- Risk related to legislative changes with respect to REACH
- Risk of introduction of stricter quality requirements for petroleum products

Technical risk

Technical risk is related to the possibility of occurrence of serious industrial failures or irreparable damage to infrastructure.

Any materialisation of this risk may seriously affect our operations and financial performance by necessitating additional expenditure on repair or replacement of installations or equipment, or by causing disruptions to the production process. A number of measures are implemented within the LOTOS Group to mitigate the risk. We prioritise installations and equipment based on their criticality. The technologies and equipment which we use are in line with the Best Available Techniques (BAT). We have emergency shutdown systems in place to prevent uncontrollable escalation of incidents, and our process units are also fitted with their own safety and protection systems. In addition, in order to raise standards for assessment of the technical condition of high-pressure installations and equipment, we commenced implementation of the Risk-Based Inspection method, which utilises risk assessment principles. We are also working on implementing the Risk-Based Work Selection method, which involves plant engineering planning based on previous risk analyses for individual units. Having implemented these methodologies, we will be able to manage the Grupa LOTOS infrastructure in a better and more efficient way.

In 2013, we carried out the Spring 2013 Overhaul Shutdown, during which thousands of different tasks were performed, and a total of over five thousand pieces of equipment were examined, repaired or replaced. The overhaul shutdown also provided an opportunity to carry out all the necessary inspections and tests of installations and equipment subject to certification by the Office of Technical Inspection. All the apparatus and piping required to meet the Office of Technical Inspection's standards successfully did so and obtained relevant validation extensions, which improved the refinery's process safety (more information).

It should be noted that no such process safety events as which would meet the criteria specified in the definitions provided by API RP 754 were reported at Grupa LOTOS's refinery in Gdańsk in 2013.

Risk of unavailability or limited availability of natural gas

Risk of unavailability or limited availability of natural gas

– Currently, natural gas is the refinery's main energy carrier; through the refinery's fuel gas network it is fed to process furnaces and, separately, to the CHP plant. Natural gas is also a feedstock processed at two hydrogen production plants. If the risk materialises, it could temporarily affect sales of selected products and result in higher operating costs. To reduce the potential impact of this risk, we continue to maintain infrastructure allowing us to revert to the fuels which we used before natural gas was introduced at the refinery.

Work safety risk

Work safety risk

relates to potential occurrence of accidents and other threats involving exposure of employees to dangerous and onerous factors. We continuously improve and implement new technical and organizational measures in order to ensure safe working conditions for anyone visiting the premises or working there for the Company. Grupa LOTOS's internal requirements in this respect are communicated to its trading partners via a dedicated website. Relevant rules of conduct are regularly monitored for compliance and post-inspection requirements are enforced. Education programmes are also operated to raise the employees' awareness of safety standards and to encourage them to observe these standards at work (more information).

Risks related to carbon dioxide (CO_2) emission allowance limits

Risks related to carbon dioxide (CO_2) emission allowance limits

involve insufficient allocation of CO_2 emission allowances, which would force the Company to incur certain costs in order to purchase a sufficient number of allowances. 2013 was the first year of operation of the National Allocation Plan 2013-2020 (phase three NAP), and was in many respects an unusual year. Thus far, oil refineries had been allocated allowances on the basis of their throughput capacity utilization. Starting from 2013, for the first time refineries were to be assigned allowances calculated using the CWT (Complexity Weighted Tonnage) benchmarking. Another unusual development was that the European Commission not only declined to approve free allocation of allowances to installations covered by the Emission Trading Scheme, but also, from time to time, changed the general rules of such allocation. Therefore, Grupa LOTOS, just like other EU ETS participants, faced the risk of having to make decisions without knowing the precise rules.

According to information from the Ministry of Environment, Grupa LOTOS is going to be assigned 1,521,342 CO_2 emission allowances to cover its emissions for 2013, and will be granted 11,303,332 allowances for the entire 2013-2020 trading period. This, as we are already aware, will result in a shortage of allowances and the Company will have to purchase them from other participants of the scheme. With a view to minimising the volume of additional emission allowance purchases, in recent years we have embarked on a number of projects, such as switchover to natural gas as the fuel used for power generation and as the key feedstock in hydrogen production; recovery of flare gases; upgrades of process furnaces, and implementation of a continuous energy efficiency improvement programme for the refinery's production units.

Environmental risks

Environmental risks relate to the potential adverse environmental impact of Grupa LOTOS. The environmental risks are interrelated with a number of other risks, in particular the technical and process risks, whose materialization may cause a threat to the environment (through increased emission of flue gases, ground leakage of hydrocarbons, etc.). For these reasons, each risk we identify is assessed also in terms of potential damage to the environment, and appropriate preventive measures are put in place. In addition, to ensure compliance with all environmental regulations and standards, we monitor the national and community laws on a daily basis, and where possible actively participate in the legislative process. Applications for any requisite permits and decisions are made well in advance, in consideration of the risk that administrative proceedings may last longer than expected.

Risk related to legislative changes with respect to REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals)

Risk related to legislative changes with respect to REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals) – at present, this risk is particularly related to the possibility of placing the EDC (1,2–dichloroethane) solvent, used by Grupa LOTOS, on the list of priority substances to be included in Annex XIV to the REACH Regulation. If this solvent is finally listed in Annex XIV, a permit for its use will have to be sought. Therefore, we have taken a number of measures to minimise the risk in this respect. In 2013, we joined the EDC DU Consortium, an association of EDC users. The association will develop the documentation necessary to apply for the permit. An in-house project to coordinate the actions described above was also launched. In parallel, relevant installations are being upgraded with a special focus on the impact of regulatory changes on the use of the EDC solvent.

Risk of introduction of stricter quality requirements for petroleum products

Risk of introduction of stricter quality requirements for petroleum products

– this risk involves potential difficulties in ensuring timely compliance with future quality standards. To mitigate this risk, we are monitoring proposed new standards and regulations which have a bearing on our production and trading operations; we closely follow the relevant plans of various authorities, institutions and international organizations such as the European Commission or the International Maritime Organization (IMO). Our work on Technical Committee 222 at the Polish Committee for Standardisation, responsible for petroleum products and process liquids, has provided us with an opportunity to voice our opinions on the proposed European standards during their drafting. We also have a say on quality requirements, in particular requirements applicable to engine fuels, through our participation in the work of the Polish Organization of Oil Industry and Trade (POPiHN).

Financial segment

Grupa LOTOS operates a Financial Risk Management Office responsible for coordinating and supervising steps taken to ensure that decisions made by LOTOS Group companies are optimised in terms of financial risks. The aim of these efforts is to ensure that the financial risk management policy is up-to-date, coherent and consistent with Grupa LOTOS's strategic objectives, and to provide for the efficiency, effectiveness and operational security of the financial risk management process.

The Company has also established a Price Risk and Trading Committee, whose tasks include supervision and coordination of price risk management at Grupa LOTOS in relation to prices of crude oil, petroleum products (including biofuels and biocomponents), natural gas and other raw materials, as well as prices of carbon emission allowances and electricity.

In order to ensure that financial risks are effectively managed and to minimise the risk of error, all data used to support the assessment process are thoroughly verified, and the decisions made are based on in-depth analyses in accordance with risk management policy, limit structure and operating procedures. Financial risk management policies, instruments and the impact of key risk factors on individual items of our financial results are presented in the consolidated financial statements. (see Notes to the consolidated financial statements)

> Feedstock and petroleum products price risk

> Risk related to prices of carbon (CO2) allowances

> Liquidity risk

> Currency risk

> Interest rate risk

> Risk of limited access to external financing or changes in lending terms

> Counterparty credit risk in financial transactions

> Credit risk in trade transactions

> Risk of adverse changes in tax regulations, interpretations or court rulings

Feedstock and petroleum products price risk

Feedstock and petroleum products price risk

– to manage the risk, we continue work to develop a new risk management policy. Our efforts in this respect depend on implementation of the Energy Trading and Risk Management (ETRM) system. In 2012, work on implementation of the Allegro 8.0 system began; the project is to be completed in 2014.

Risk related to prices of carbon (CO_2) allowances

Risk related to prices of carbon (CO_2) allowances – in 2013, Grupa LOTOS managed phase III of the EU CO2 Emissions Trading Scheme covering the 2013-2020 trading period. Given the lack of liquidity on the futures market and the instability of the underlying position in the period until 2020, the end of the risk management period for the risk related to the prices of CO_2 emission allowances in phase III was set for the end of 2019. However, with the passage of time, the risk management period will be extended until 2020. For detailed information on exposure and derivative transactions open as at December 31st 2013, see the consolidated financial statements. (more information)

Liquidity risk

Liquidity risk

– this is one of the key risks to the security of the Company's operations, and involves its ability to discharge all liabilities in a timely manner. Liquidity is managed for the entire LOTOS Group based on current liquidity forecasts. The process consists in using an appropriate selection of financial instruments (including cash pooling and diversified sources of financing), optimising the working capital position (including payment terms at LOTOS Group companies and under trading contracts) and applying IT solutions to improve the security and effectiveness of the process.

Currency risk

Currency risk

– this risk is managed based on the Strategy of Currency Risk Management at Grupa LOTOS. The US dollar (USD) is the currency of the market on which we operate. Thus we have a structurally long position in US dollars. The US dollar was chosen as the most adequate currency for contracting and repaying long-term facilities, including those used to finance the 10+ Programme. The LOTOS Group operates a group bank, which allows the LOTOS Group companies to enter into FX transactions with Grupa LOTOS, improving the effectiveness of currency risk management.

Interest rate risk

Interest rate risk

– this risk is related to the expected schedule of payments under the loans taken out to finance inventories and the 10+ Programme, with the resulting interest accruing at the USD LIBOR floating rate.

Risk of limited access to external financing or changes in lending terms

Risk of limited access to external financing or changes in lending terms

– this risk is minimised by maintaining relationships with a diversified group of creditworthy partners, use of a wide range of financial instruments, fulfilment of disclosure obligations, as well as monitoring of and compliance with financial ratios, covenants and any other obligations towards the banks. The financial position and overall standing of the banks providing financing for the LOTOS Group are also monitored, as are any factors driven by developments on the global financial markets that may threaten the LOTOS Group's ability to raise financing.

The risk of limiting financing for our investment projects is particularly significant in the case of our exploration and production segment. As the risk depends on the quality of particular projects, each project is prepared with due care, in accordance with pre-defined rules. As part of ongoing risk management, a project's readiness for financing is determined by assessing its technical, organizational, legal, administrative and financial maturity. Next, the banking market is surveyed to determine availability and terms of financing.

The most recent large exploration and production project for which financing was raised was the development of the B8 field. The financing for the project was arranged from both commercial banks and other financing institutions (Polskie Inwestycje Rozwojowe - Polish Investments for Development).

Counterparty credit risk in financial transactions

Counterparty credit risk in financial transactions

– we limit this risk by entering into transactions only with financial institutions or companies holding the minimum acceptable credit rating assigned by rating agencies, or holding appropriate guarantees (if they do not hold their own credit ratings at the required levels) issued by a financial institution or company holding the minimum acceptable credit rating assigned by credit agencies and meeting the requirements adopted by Grupa LOTOS and resulting from contractual obligations. Credit limits in financial transactions are determined by reference to the Company's equity and a ratio calculated based on agency credit ratings updated on an ongoing basis. The utilisation of credit limits is regularly monitored.

Credit risk in trade transactions

Credit risk in trade transactions

– The LOTOS Group operates an internal procedure for verifying the creditworthiness of trading partners seeking an open credit limit. Grupa LOTOS grants such limits based on assessment of partners' creditworthiness, taking into account the available data and information. The final decision on the amount of trade credit limit is made by persons responsible for credit decisions in line with their assigned responsibilities. The utilisation of credit limits is monitored on an ongoing basis.

Risk of adverse changes in tax regulations, interpretations or court rulings

Risk of adverse changes in tax regulations, interpretations or court rulings – this risk may result in higher tax burden (excise duty, property tax, CIT), and give rise to tax risk in transactions where such risk was previously non-existent. Differing legal interpretations of the tax regulations lead to uncertainty, and in international trading may affect our credibility and force us to withdraw from valuable projects.

The level of tax risk faced by businesses in Poland is high, and continues to grow. One of the risk factors is non-observance by the legislator of the principle of vacatio legis when enacting amendments to tax laws. This prevents businesses from adjusting to the new requirements in time and may expose them to the risk of additional costs or sanctions. Where a tax risk arises from possible disparate interpretations of a law, we request the Minister of Finance to present a binding interpretation of such law. As a member of respectable organizations of employers and entrepreneurs, we also voice our opinions on proposed bills and are thus able to respond appropriately to the changing legal environment. In light of the numerous changes in interpretation of the tax laws and the introduction of new regulations, we regularly update our internal procedures to ensure compliance with legal requirements and to identify and mitigate any tax risks, particularly their effect on the LOTOS Group's financial statements.

The risk related to changes in legislation, including in tax laws, is particularly important in our exploration and production business as it may hurt our profits and delay project implementation. We monitor the legal environment in Poland, in other EU countries, and in Norway (we operate in countries with stable tax regimes and high standards, hence the risk of sudden changes is limited). We take part in public and industry consultations on drafts of legal acts, we consult legal and tax advisers when assessing the effects of proposed changes and drafting commentaries and remarks regarding legal acts, and we are also engaged in lobbying activities. In 2013, we undertook a range of activities which resulted in the development of more favourable solutions compared with the originally proposed provisions of the law on new hydrocarbon tax, and in the proposal of numerous amendments to the mining and geological law.

Marketing segment

- Risks related to diversification of supply sources
- Competition risk
- Risk of decline in domestic demand
- Risk from grey market expansion
- Risk related to sea freight safety

Risks related to diversification of supply sources

Risks related to diversification of supply sources

– at Grupa LOTOS, feedstock is supplied mainly via a system of pipelines and by sea, which means that the key risks in this area lie in the political situation of the countries exporting crude oil and the condition of the infrastructure. We are consistently pursuing our policy to diversify the directions and sources of our crude oil supplies by focusing on the following aspects:

- supply security – through progressive expansion of our presence on the international oil markets, regular contracting of various crudes transported by sea, creating conditions to radically increase the share of such crudes in total supplies to the refinery in case of any disruption of supplies from the main import market, and expanding the share of our own production in total feedstock volumes.
- improvement of competitive position – by fully capitalising on the coastal location of the refinery in Gdańsk and the possibility of sourcing crude supplies through two independent channels: Russian oil through the Druzhba Pipeline and various types of oil through Naftoport (an offshore oil terminal).

The appropriate selection of crude types and supply directions is a result of continuous efforts to maximise the integrated margin.

Competition risk

Competition risk

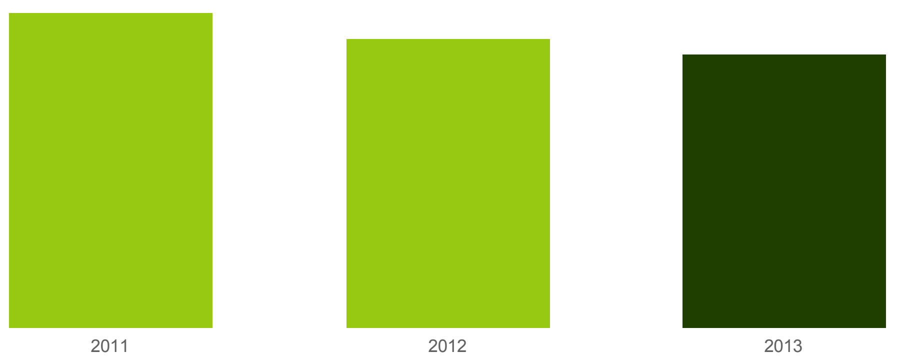
– as market conditions need to be factored into the pricing policy, this type of risk may lead to erosion of margins and profits. Risk factors here include the unrelenting price competition on the fuel market, and also the strong volatility of global macroeconomic conditions. We are continuously refining our tools for monitoring variables affecting prices and margins. In retail sales, we are pursuing market diversification, including diversification into segments less prone to competition-induced margin erosion, as well as other initiatives aimed at winning and retaining customers.

Risk of decline in domestic demand

Risk of decline in domestic demand

– due, among other things, to macro factors, such as economic slowdown, decline in investments, and shrinking industrial output. Various factors, such as growing unemployment, could adversely affect consumption of our products and services. Therefore we use a variety of distribution channels to sell our products while pursuing a pricing policy designed to ensure they remain competitive, and seek to optimise our operating expenses.

Gasoline and diesel oil consumption in Poland in 2011-2013 ['000 tonnes]



Source: In-house analysis on the basis of Polish Organization of Oil Industry and Trade (POPiHN) data.

Risk from grey market expansion

Risk from grey market expansion

– in recent years, Poland has seen an increase in illegal trade, especially of diesel oil and gasoline, which significantly affects the LOTOS Group's sales. According to the Polish Organization of Oil Industry and Trade (POPiHN), the resulting losses to legitimate businesses may continue to grow. Whether the situation improves will depend chiefly on new legal regulations, which are now being developed by the government. The legislative work is being supported by POPiHN, in which we are working with the other member companies to support and fund initiatives aimed at supplying market data and analyses that could later be used to assess the size of the grey market and the associated risks.

Risk related to sea freight safety

Risk related to sea freight safety

– we put in place measures designed to mitigate the risk of an environmental disaster in the event of hydrocarbon spills from ship tankers. We have established relationships with providers of maritime transport services which operate fleets meeting high technical standards and which observe maritime conventions. The shipping companies we work with meet very strict requirements regarding safety and prevention of accidents at sea. Moreover, in 2013 we evaluated the possibility of implementing much more stringent safety standards in the area of sea freight at our organization.

Beata Ossowska-Lango

Internal Audit Office Director, Grupa LOTOS, President of the Ethics Committee, CSR Strategy Leader for ethics and corporate misconduct prevention

"Increasing our organization's resistance to misconduct by 2015 is part of the key objective of the LOTOS Group's Corporate Social Responsibility Strategy. This objective is to improve management by ensuring ethical conduct and the transparency of business processes, as well as protecting the organization against the risk of irregularities that may threaten its operations. We plan to achieve this through our Ethical Conduct Programme and Misconduct Risk Management Programme.

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As of the beginning of 2013, the key document of the Ethical Conduct Programme, the LOTOS Group's Code of Ethics, became effective. The Board of Grupa LOTOS also decided on relevant institutional solutions to ensure efficient implementation and operations of the Programme, in the form of the Ethics Committee and the Ethics Officer. Among the earliest steps taken by the newly appointed Ethics Committee was inviting the employees to take part in public consultations on the current status of ethical culture within our organization and the type of Ethics Officer selection process preferred by them. Over five hundred LOTOS Group employees participated in the consultations.

The vast majority declared that the Company's efforts to develop the desired ethical corporate culture were suitable, and that ethical culture itself was essential in their everyday work. Last year's comprehensive communication and education programmes for all LOTOS Group employees certainly helped to bring about these positive results. We also began promoting our values and principles of ethical business conduct among our key trading partners.

In 2012, before the enactment of the Code of Ethics, we developed and published another important document, the Misconduct Prevention Policy. We appointed persons coordinating and responsible for misconduct prevention activities, and established channels for reporting suspected misconduct, as well as appropriate organizational arrangements and processes. Furthermore, education and awareness initiatives were undertaken amongst staff, focusing on misconduct prevention and the relevance of the system.

In 2013, we conducted a periodic assessment of the risk of misconduct in individual processes, the aim of which was to find out where the risk was the highest from the perspective of the Company as a whole. Based on the assessment, processes to be thoroughly inspected in the near future were selected. In line with the adopted Corporate Social Responsibility Strategy until 2015, we intend to introduce the comprehensive misconduct risk management process throughout the LOTOS Group.

What distinguishes our efforts within the misconduct prevention system is transparency in communication related to both programmes. Key documents and channels for reporting suspected misconduct have been published and we also openly communicate ethical issues throughout our supply chain. This approach complies with LOTOS ethical values, originating in the Company's culture and the concept of corporate social responsibility.

Our efforts were reflected in the relatively high score achieved in the organizational maturity assessment of Grupa LOTOS. This was largely the result of steps taken in the last few years, designed to secure the company's value and operations, demonstrated through the effectively working internal control system and corporate governance solutions intended to ensure compliance.

Misconduct prevention system

Ethical issues and misconduct prevention form an area covered by the LOTOS Group Corporate Social Responsibility Strategy for 2012-2015, approved by the Board of Grupa LOTOS in 2012. For this area, the following key objective was defined: to improve management by ensuring ethical conduct and the transparency of business processes, as well as protecting of the organization against the risk of irregularities that may threaten its operations.

With a view to achieving this objective, in 2012 the LOTOS Group implemented a misconduct prevention system, which undergoes constant development. The system is rooted in, and further refined, based on Managing the Business Risk of Fraud: A Practical Guide – a manual prepared by the Institute of Internal Auditors, the American Institute of Certified Public Accountants, and the Association of Certified Fraud Examiners.

The prevention system in place at the LOTOS Group is geared towards ensuring an optimum degree of resistance to misconduct.

> Resistance to misconduct is achieved by companies which utilise their awareness of real and perceived misconduct threats arising in the course of their operations to implement and apply the solutions that are best adapted to the scale and nature of the risk, and that are geared towards preventing, detecting and responding to such threats.

The purpose of these efforts is to secure the organization's ability to:

- mitigate the risk of misconduct,
- reduce the harmful effects of misconduct,
- gather resources which will accelerate the organization's return to its pre-misconduct state.

The implementation of a comprehensive misconduct risk management system has been confirmed as a valid course of action by the Association of Certified Fraud Examiners in its 2012 Report to the Nations, which presented the results of research into the nature and scale of misconduct in individual industries.

> Oil and gas companies rank fourth in terms of losses incurred as a result of individual cases of misconduct and second in terms of the number of corruption incidents. The latter accounted for some 50% of all misconduct cases.

The LOTOS Group's misconduct prevention system has been developed based on solutions taking into account the importance and effectiveness of internal auditing procedures and independent reviews carried out by management staff. This is in compliance with the approach presented by the results of the ACFE report and in line with the best market practice.

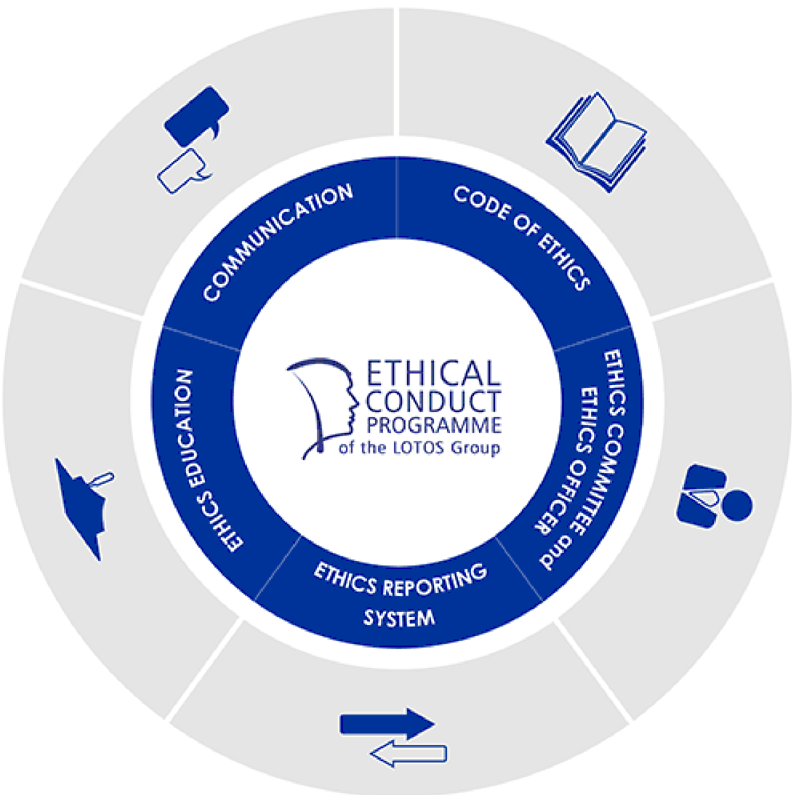
With this in mind, we decided to incorporate misconduct prevention into our enterprise risk management procedure. We construe misconduct as an intentional act or omission which constitutes a violation of the applicable laws, committed to secure unlawful gains or resulting in a loss for the Company, including any forms of corruption.

> The Ethical Conduct Programme and the Misconduct Risk Management Policy in place at the LOTOS Group serve to mitigate the risk of misconduct. By comprehensively pursuing these programmes, we intend to safeguard the Company's reputation and assets, as well as to ensure that our decisions are effective and enhance the value of the Company.

The Ethical Conduct Programme

is pursued with the use of the Code of Ethics, the Ethics Officer and the Ethics Hotline, and by promoting awareness of and communication of ethical issues. The purpose of these efforts is to encourage the LOTOS Group's employees to behave in accordance with an appropriate ethical culture.

Elements of the Ethical Conduct Programme



The centrepiece of the Ethical Conduct Programme is the LOTOS Group's Code of Ethics, which has been in force since January 2013. The Ethical Conduct Programme is overseen by the President of the Board of Grupa LOTOS, the Ethics Committee, and the Ethics Officer.

The Ethics Committee is a body assigned to support the work of the Ethical Conduct Programme to develop a corporate culture based on ethical values. The Committee is composed of widely respected representatives of each of the LOTOS Group's operating segments.

The responsibilities of the Ethical Officer include promoting knowledge of the Code of Ethics, providing support in discussing ethical dilemmas voiced by employees, and organizing the process of reporting and investigating violations of the Code.

Reporting channels for violations of the LOTOS Group's code of ethics

- Consultation with immediate superior
- Consultation with the Ethics Officer
- Ethics Hotline: liniaetyki@grupalotos.pl
- By telephone: +48 58 308 80 70
- By post

Ethics education plays a key role in developing desirable attitudes, by familiarising the recipients of the Code of Ethics with its provisions and educating them on proper ethical conduct in specific business situations. In 2013, we pursued a number of initiatives aimed at increasing the awareness and knowledge of business ethics at the LOTOS Group, which included:

- Discussing ethical issues as part of the training for newly hired employees;
- Organizing voluntary 'The LOTOS Group Ethical Principles in Practice' workshops for employees and management personnel;
- Organizing meetings with the LOTOS Group's management staff to discuss the implementation of the Code of Ethics;
- Incorporating the issue of business ethics into regular communication both at the LOTOS Group and with the LOTOS service station operators.

Ethics education at the LOTOS Group in 2013	
Number of newly hired employees trained	56
Number of participants of the 'The LOTOS Group Ethical Principles in Practice' workshops	69
Number of management staff participating in meetings implementing the Code of Ethics	282
Number of LOTOS service station operators to whom the knowledge of ethical issues was directly communicated	261

The Misconduct Risk Management Policy

consists in the coordination of misconduct prevention and detection measures (identification and evaluation) implemented in individual business processes, misconduct prevention education, as well as overall assessment of the organization's resistance to misconduct.

Elements of the Misconduct Risk Management Policy

As in the case of the Ethical Conduct Programme, under the Misconduct Risk Management Programme we also aim to educate senior executives and managers in corporate misconduct issues. The purpose is to raise their awareness of corporate misconduct, making them realize the potential losses and risks to the organization, how it is committed, as well as how it is identified and prevented. In 2013, the operation of the LOTOS Group's misconduct prevention system was discussed, with a particular emphasis on compliance with the Misconduct Prevention Policy adopted by the Board of Grupa LOTOS to define the employees' responsibilities and methods of communicating any identified instances of misconduct, including corruption.

Percentage of Grupa LOTOS employees trained in the organization's anti-corruption policies and procedures			
Position type	2011	2012	2013
Management positions	8.9	62.5	32
Other positions	7.4	5.7	7

Channels dedicated to reporting suspected misconduct are available to all employees, as well as external stakeholders. According to the Misconduct Prevention Policy, every employee is obliged to immediately report any such suspicion.

Reporting channels for suspected misconduct at the LOTOS Group

Chief Executive Officer

Head of the Internal Audit Office

Immediate superior

By e-mail:
audyt.wewnetrzny@grupalotos.pl or
lotos@grupalotos.pl

By telephone:
+48 58 326 43 00 or
801 345 678

A report is passed on to
the Internal Audit Office

As part of the misconduct prevention system, we conduct periodic assessments of the organization's resistance to misconduct. The first results of this exercise were available in 2013, confirming that the measures taken are both thorough and systematic.

As part of the assessment of the organization's resistance to misconduct, we also examined the risk of corruption. In line with the adopted methodology, the heads of the Company's organizational units were asked to comment on all processes in place at Grupa LOTOS in a questionnaire-based survey.

Business units of the LOTOS Group assessed for corruption risk in 2012-2013	
Total number of units	15
Percentage of units subject to assessment	7%

One noteworthy fact is that in 2013 there was no single event resulting in dismissal or disciplinary action against an employee at the LOTOS Group on charges of corruption, nor were there any instances of a business contract not being renewed because of a breach of the rules for counteracting corruption.