Risk management

In the LOTOS Group, an Enterprise Risk Management system has been implemented. We identify risks for the implementation of our strategic objectives along with process and operational risks. The strategy of dealing with the particular risks depends on our assessment of its importance for the company and for its environment. This assessment is done in the time perspective of the nearest year and until the end of the current business strategy. In our analyses, we pay particular attentionto the impact of the given risk on the security of people and the environment.

IN THIS CHAPTER

The system in place at the LOTOS Group supports fast, appropriate and informed decision-making based on prior risk analyses. The existing rules of risk identification and assessment allow us to promptly respond to threats and mitigate or eliminate them altogether. We have action plans prepared for particular types of risk. We also identify newly emerging opportunities and possibilities and strive to exploit them. Corporate risk management enables us to undertake the actions that best serve our business, while staying within acceptable risk limits.

In the LOTOS Group, we have identified dozens of risks, which have been assessed according to the methodology described in the Management systems (http://raportroczny.lotos.pl/en/corporate-governance/management-systems) chapter. Below, key risks from the point of view of our business activity and new risks which were not reported in previous years are described.

Key risks and opportunities

Risk is essentially inherent in LOTOS Group operations. For this reason, we continue to enhance our tools and methods for risk identification and assessment, as well as implement hedging strategies. Some of the measures we have taken enabled us to mitigate selected risks in 2012. As those risks materialised, we implemented previously developed plans to mitigate their impact. We also identified new risks, stemming both from changes within our organization and conditions prevailing in our general business environment.

Risks and opportunities in the context of the oil sector strategy prepared by the Polish government and the European Commission

In 2012, we undertook a number of initiatives to predict and minimise risks related to Polish and EU legislation. We monitored the EU policy for the oil sector, working closely with international organisations such as the CEEP (Central Europe Energy Partners) and CONCAWE (Conservation of Clean Air and Water in Europe), as well as the domestic POPiHN (Polish Organization of the Oil Industry and Trade). In addition, we continued to work with the state administration, taking part in consultations on drafts of Polish legal acts.

EU regulations for biofuels

2012 saw the publication of the European Commission's draft amendments to Directive 2009/28/EC. This draft contains a proposal to reduce the mandatory target for the share of renewable energy from biofuels in the transport sector to date from the current 10% to no more than 5%, with the mandatory target for overall use of renewable energy in the transport sector to be maintained at 10% until 2020. It also proposes to assign additional CO_2 emissions to selected biofuels, as a result of their indirect impact on changes in land use.

The proposal to amend the directive with respect to biofuels stems from a discussion, ongoing for a few years now, about the indirect impact of biofuels on changes of land use, and biofuels competing for land classified for cultivating food crops and animal feed.

The current draft amendments proposed by the European Commission confirm the possibility of considering twice the contribution made by biofuels produced from cellulose or lignocellulose, or four times the contribution made by biofuels produced from municipal waste and aquaculture to calculate the share of biofuels in the overall use of transport fuels. Solutions like this have already been implemented by 10 leading EU countries that decided not to wait for the directive. Having done so, those countries are now able to encourage the use of biomass waste.

Introduction of the proposed solutions in Poland will depend on the final shape of the directive. Their implementation into Polish legislation will also require strong expert support from the industry for the public administration bodies responsible for the process. Implementation of the directive may result in material changes to the amount of GHG emission reductions currently attributed to the biofuels used.

Domestic regulations concerning biofuels and NIT

In January 2012, the notification procedure for domestic regulations allowing higher biocomponent content in diesel oil was completed. Green light for the use of diesel oil with a 7% ester content (B7) had long been expected by the industry, as in previous years the National Indicative Target (NIT) required by law had exceeded the level achievable by adding 5% bio-components to diesel oil (B5) and gasoline (E5). Admission of B7 diesel to the market in 2012 slightly improved the economic aspects of the Polish biofuels policy.

Moreover, in 2012 the Group took advantage of the statutory regulations of 2011, which provided for a reduction of the NIT target level by a ratio of 0.85 upon fulfilment of certain statutory requirements concerning the origin of biocomponents. As the same regulation continues to apply in 2013, application of the reduction ratio may contribute to lower costs in meeting the NIT.

Regulations on mandatory stocks

Work continues on amendments to the Act on Mandatory Oil and Fuel Stocks that will allow for implementation of European Council Directive 2009/119/EC, and is at an advanced stage. Initially, its implementation may entail higher costs for the petroleum sector, but ultimately the companies will be released from the obligation of maintaining mandatory stocks. Companies associated within the Polish Organisation of Oil Industry and Trade (POPiHN) are postulating the need for urgent work on a comprehensive legal framework encompassing all segments of the petroleum sector in Poland.

Grupa LOTOS appointed a Workgroup on activities aimed at changing the mandatory stock system. The Workgroup has participated in public consultations on creating a new law by lodging motions favourable for the oil industry, part of which have been included in the proposed act.

Risks related to changes in and interpretations of tax law

Grupa LOTOS operates in a volatile legal environment. This instability is a source of risk that affects our functioning, the outcome of the actions we take, our tax policies, and the amount of tax we pay.

Changes in the interpretation of tax laws may give rise to tax risk in transactions where such risk was previously non-existent. An additional hurdle is the indolence of the tax authorities in their consideration of applications and conduct of tax proceedings. Differing legal interpretations of the tax regulations also increase uncertainty, and in international trading may affect our credibility and force us to withdraw from valuable projects and transactions.

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 increases the likelihood of their incurring additional costs or sanctions. The strict standards of the tax authorities are another factor demanding extra caution when managing tax risks. In doing business, an enterprise has to accept that incorrect interpretation of the law or mistakes made may inadvertently result in their entering tax arrears, as a consequence of which the enterprise may be charged with committing an offence.

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 our financial statements.

In situations where a tax risk arising from the possibility of disparate interpretations of a law is identified, we avail ourselves of the right to request a binding interpretation of that tax law by the Minister of Finance. As a member of respectable organisations of employers and entrepreneurs, we also take part in issuing opinions on proposed legal acts and are thus able to respond appropriately to the changing legal environment.

Financial risks

In 2012, Grupa LOTOS did not make any changes to the division of powers for coordination of management of individual risk types, as introduced in 2011.

With regards to **risk from prices of feedstock and petroleum products**, we are continuing work on preparation of a new risk management policy. Our efforts in this respect are dependent on the implementation of the Energy Trading and Risk Management (ETRM) system. In 2012, we signed an agreement with Allegro Development GmbH, thus initiating work on the implementation of Allegro 8.0, scheduled for completion in 2014.

Currency risk is managed in line with the Strategy of Currency Risk Management at Grupa LOTOS. The US dollar (USD) is the currency of the market on which we operate. Consequently, 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.

Interest rate risk management is connected with the expected schedule of payments under the facilities taken out to finance inventories and the implementation of the 10+ Programme, as well as the resulting interest accruing at the LIBOR USD floating rate.

As regards **liquidity risk**, in 2012 real cash pooling and IT tools enhancing the efficiency of liquidity management at the LOTOS Group were implemented.

The risk of restricted access to external financing or changes in lending terms is minimised through cooperation 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. We also monitor the financial position and overall standing of the banks providing financing for the LOTOS Group, as well as any factors driven by developments on the global financial markets that may threaten our ability to raise financing.

In order to limit **counterparty credit risk in financial transactions**, we only enter into transactions with financial institutions or firms that:

- have the lowest acceptable rating assigned by a rating agency.
- If they lack the required rating, they must provide an appropriate guarantee issued by a financial institution or firm holding a minimum acceptable rating assigned by a rating agency and meeting the requirements set by Grupa LOTOS, as defined in relevant agreements.

Credit limits for counterparties in financial transactions are determined in reference to the Company's equity and a ratio calculated based on credit ratings updated on an ongoing basis. The utilisation of credit limits is monitored on a regular basis

Counterparty credit risk in trade transactions is managed at the LOTOS Group by an internal procedure that calls for verification of the creditworthiness of counterparties applying for open trade credit limits. Grupa LOTOS awards trade credit limits based on an assessment of the trade counterparties' creditworthiness, analysing the available data and information on that party. The final decision on the credit limit's amount is made by the person responsible for credit risk, in accordance with the area of their responsibilities. Utilisation of credit limits is monitored on a regular basis. In 2013, we plan to design an internal rating system for assessing the creditworthiness of business partners, and to adapt our IT system to ongoing monitoring of the use of credit facilities.

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, credit structure and operating procedures. Financial risk management policies, instruments

and the impact of risk factors on individual items of the financial results are entered in the Additional information and clarifications (http://raportroczny.lotos.pl/en/financial-information/consolidated-financial-statements-2012/notes-to-the-financial-statements/33.-objectives-and-policies-of-financial-risk-management) to the Consolidated Financial Statements.

Risks related to the exploration and production business

Exploration and production involves high risk, identified during the exploration, development and production of a field. An action plan for limiting this risk is developed for each of the above phases. 2012 was another year in which we implemented appropriate actions to minimise individual threats in this area of our operations.

Exploration risk is inherent in upstream activities and follows largely from potentially incorrect estimation of in-place resources. For this reason, resources in a field are assessed using three options. Quantities of potentially recoverable resources are specified for each option together with certainty levels of 10%, 50% and 90%. Necessary geological work and analyses are then performed to document potential prospects to an extent providing a sufficient basis for deciding whether to drill exploration wells.

Another significant risk in the upstream segment is **production risk** - risk strictly connected with the process of extraction. This includes risks of oil spills, marine collisions, fires, gas eruptions or other failures, which can have major consequences for the company and the natural environment. Therefore, a number of measures have been implemented to mitigate this risk, such as leakage testing, blow-out risk prevention by securing boreholes, and monitoring of fire risks. An important factor helping to reduce these risks is the awareness and competence of our personnel. We design, implement and review procedures applicable in both our day-to-day work and in emergency situations, and organise regular hands-on training sessions. In the event of an incident or accident, a thorough review is conducted and the event itself is discussed during subsequent training courses, with a view to preventing its recurrence.

Production risk depends on the quality of the exploration and production infrastructure in place, as well as on the application of appropriate technological solutions. **Technical risk** is mitigated through monitoring of the condition and performance of equipment, as well as technical supervision and necessary testing. Regular training courses are also organised to teach personnel how to operate the equipment. The production and process systems are subject to technical inspections and reliability tests. The specific nature of upstream operations requires that we constantly develop our precautionary approach and operating maintenance system, and monitor the best technologies in this area.

Other risks in the upstream area lie in the possible occurrence or intensification of phenomena which may cause loss of wells or declining well rates (e.g. falling reservoir pressure, entry of water). Even so, continuous monitoring of reserve parameters helps to mitigate such risks.

Weather is a vital factor in offshore oil extraction. In extreme cases, unfavourable weather conditions can halt planned work or crude production. To minimise the adverse effect of such risks, systems are deployed to monitor weather conditions and trigger appropriate safety procedures when necessary.

Given the need to increase our own production volume under new licenses and production projects and the need to implement such projects under consortium agreements, we also take steps to secure in-depth data and analyses. We assess risks for individual projects and prepare documents such as feasibility studies and economic viability studies, as well as analyses of legal and financial risks, in order to effectively minimise a project's risk.

Risks related to the supply of feedstock

It is necessary to supply feedstock for production purposes in a timely manner. At Grupa LOTOS, feedstock is supplied mainly via a system of pipelines and by sea, which means that the key risks lie in the political situation of the countries exporting crude oil and the condition of the infrastructure. In order to limit their effect on our operations, we seek to

diversify the directions and sources of our crude oil supplies. The objectives of the diversification policy are attained by focusing on the security of the supplies and improved competitiveness.

The security of crude supplies is enhanced through progressive expansion of our presence on the international oil market, regular contracting of various types of crude transported by sea, and the increased role of own production. Our competitive position is improved by capitalising on the coastal location of the Gdańsk refinery and the possibility of sourcing crude supplies through two independent channels: the Druzhba Pipeline and Naftoport (offshore oil terminal).

Risks related to operating activities

In its operating activities, Grupa LOTOS is required to effectively manage a variety of risks, including process risk, technical risk, technological risk, environmental risk, as well as risk related to safety at work.

In 2012, **technological changes** were made at the Company, which introduced high-pressure natural gas as the main energy carrier. Gas from a new pressure reduction station now flows to the refinery's fuel gas network, through which it fuels process furnaces and (separately) the CHP plant, as well as to two hydrogen production plants where it is used as production feedstock. The shift to using gas as fuel offers a wide range of benefits, such as:

- Environmental benefits – sulphur dioxide, nitrogen oxides, particulate and carbon dioxide emissions are lower than when using heavy fuel oil or LPG,
- Financial benefits – natural gas is a cheaper fuel and feedstock compared to its predecessors,
- Commercial benefits – additional quantities of oil components are distilled and placed on the market.

However, these changes carry new risks. The risk of sudden interruption of gas supplies, for example, as the result of an industrial failure, as well as the risk of limited gas availability in severe winter conditions, which may result in higher operating expenses and a periodic decrease in the sale of selected products. To reduce the impact of these threats, we maintain an infrastructure allowing us to return to the fuels used before the switch to natural gas.

Technical risk is further reduced by ensuring the continuous control and operation of production infrastructure. This also guarantees the safe operation and undisturbed functioning of the refinery. As part of these efforts, we assess and prioritise equipment in terms of its importance. Most of the equipment critical to operational safety has been classified based on the following criteria: safety for people and the environment, significance to the entire unit or plant, and probability of failure.

At the refinery, we also use technologies and equipment meeting BAT (*Best Available Techniques*) criteria. Industrial process installations have their own safety and protection systems, and emergency stop and shutdown systems are in place to prevent uncontrolled development of emergency situations and serious damage to the plant and equipment.

Human error also increases the risk of failure, especially in new installations. At the refinery, the risk of human error is minimised by improving the operational experience of the workforce. Training simulators are designed and implemented to train personnel under conditions very close to reality. Practical training and exercises are provided on a regular basis to all employees of the refinery, to ensure their prompt and effective response in case of emergency.

At our refinery we will also soon be carrying out the **Spring 2013 Overhaul Shutdown**, one of the largest projects we are currently implementing. The success of the project is a precondition for another four or even five years of stable operation of the plant, and will be a source of tangible financial benefit for the entire company. We have been engaged in planning to limit the risk of inappropriate preparation or execution of the project since 2011. Given the volatile conditions prevailing on the construction market, we have also taken into account the risk of adverse changes in the financial standing of the overhaul's contractors. A worsening of the contractors' financial situation could result in delays or non-performance of some of the planned work. We have therefore applied various controls and prevention measures with a view to limiting this risk.

Given the nature of the production processes involved, **workplace safety** is a matter of utmost importance to us. Many positions involve risks that expose employees to hazardous and burdensome substances or circumstances. Each work post is assessed for occupational risk, including for the presence of explosive atmospheres, noise, or exposure to hazardous biological or chemical substances. Based on these assessments, we continuously deploy and improve individual and collective security systems.

New technical and organizational measures are also in place to ensure safe working conditions for anyone visiting the premises or working there for or on behalf of the Company. Contractors are informed of our internal guidelines, which set out various documented procedures. We regularly check whether relevant rules of conduct are being followed correctly and enforce post-inspection requirements. In many cases, the rules implemented by us are more stringent than those required by law. In addition, we run programmes aimed at raising our employees' awareness and encouraging them to work in accordance with the safety rules. Detailed descriptions of risk minimisation activities in this area are presented in the Sustainable development/Employees (http://raportroczny.lotos.pl/en/sustainable-development/employees) chapter.

During the period of National Allocation Plan II (2008–2012) (KPRU II), a development programme was implemented which, over a two-year span, resulted in the launch of several new installations and the means of operation of existing installations being changed, leading to a significant increase in carbon dioxide emissions. Grupa LOTOS then faced the considerable challenge of having to acquire a large volume of additional allowances from the national reserve to cover the emissions from its new installations. Allocation uncertainty, or put another way, the risk that allocated allowances would not be sufficient to cover our emissions, was largely exacerbated by the fact that the 10+ Programme was launched half way through KPRU II, and so the likelihood of the national reserve being used up was high. However, our cooperation with the National Administrator and our involvement in the issuing of opinions on the proposed legislation brought the expected outcomes. Accordingly, for the entire five-year trading period under the emissions trading scheme, there was no need for the Company to purchase additional allowances to cater for its increased needs. The allowances held in the first year of KPRU II (2008) covered 1,135,348 tonnes of emissions (from the refinery and CHP plant combined), and last year (2012) – 1,964,925 tonnes.

We did not need to purchase additional carbon credits under KPRU II and were able to significantly reduce our deficit of allowances under KPRU III (2013–2020), thanks in part to current and completed investment and modernisation projects (introducing natural gas as the fuel and key feedstock in our hydrogen production, recovering our discharge gases and upgrading the furnaces), as well as an ongoing programme to enhance the energy efficiency of the refinery's production units. These projects are also important to the overall emissions balance to 2020, when carbon emissions will need to have been reduced by 20%, as stipulated by the EU.

The allocation rules for allowances in the period 2013–2020 have changed from those previously applied. Now, crude oil refineries receive allowances calculated on the basis of the CWT (“Complexity Weighted Tonne”) benchmark. Under the new rules, we as Grupa LOTOS have no control over the number of credits we are allocated, but for the trading period until 2020 it will probably amount to 12,757,079 tonnes of CO_2, meaning that we will have to purchase additional allowances on the auction market.

There are many aspects of the LOTOS Group's activities that have or may have an environmental impact. This is inherent in the type of business operations we conduct, which requires that the majority of identified risks are also assessed for their potential environmental impact. The most serious are technical and production-related risks, which – if they materialise as serious industrial disasters – can have a detrimental effect on our external environment. The previously-mentioned measures for prevention of fires, failures and similar incidents also aim to minimise possible environmental impact.

We have also adopted safety standards in sea transport, which help mitigate various risks, including the risk of environmental disaster caused by tankers leaking oil or petroleum products. We also have established relationships with providers of sea shipping services operating fleets that meet high technical requirements and properly observe maritime safety conventions. Similarly, we use the services of ship owners who satisfy very strict requirements on the mitigation of the risk of maritime accidents.

We minimise the risk of non-compliance with legal requirements concerning environmental impact through ongoing monitoring of Polish and EU laws, ensuring their efficient implementation and by participating in legislative processes. The processes of obtaining permits is carried out with time to spare, in consideration of the risk that administrative proceedings may last longer than expected.

Risk of stricter quality requirements on petroleum products

We keep a close eye on proposed new standards and regulations relevant to our production and sales. Our work on three subcommittees of 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 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 Organisation of Oil Industry and Trade (POPiHN). This substantially reduces the risk of delays in compliance with future quality standards for petroleum products.

Risks related to marketing activities

The background to the LOTOS Group's marketing activities is the ever-present price competition and the fast-changing global macroeconomic environment. Therefore, we are continuously improving our tools for monitoring the parameters related to prices and margins.

As for retail sales, we pursue market diversification, including diversification into segments less prone to competitor-induced margin erosion, as well as other initiatives aimed at winning and retaining customers.

We are also aware that domestic demand for our products may soften, either on the back of price pressures or macroeconomic factors. Various factors, such as growing unemployment, could lead to reduced consumption of our products and services. Therefore we use a variety of distribution channels to sell our products while pursuing a pricing policy that guarantees their competitiveness, and seek to optimise our operating expenses.

Risk management in our marketing is also focused on ensuring an uninterrupted supply of products to the market. This process is coordinated through sales, logistics, production and trading and optimisation, with the purpose of setting coherent and optimised development directions for the entire supply chain.

Reputation and social risks

Risks to reputation are those whose occurrence may undermine the value of the LOTOS brand. All risks identified within the LOTOS Group are evaluated from the financial and reputational point of view, with relevant mitigation plans developed in accordance with adopted policy.

The LOTOS Group builds its corporate culture on the four pillars of responsibility, innovativeness, openness and transparency. We place emphasis on qualities such as loyalty, commitment, cooperation and ethical conduct in our interactions with others. We are in constant dialogue with our social partners on critical decisions concerning our organization or employees. This is reflected by the high level of activity of the company trade unions and the Employee Council. Frequent meetings, consultation sessions and information exchanges help build good mutual relations.

Despite the slowdown in the economy, social stability prevailed at the LOTOS Group in 2012, with no collective disputes or strike warnings announced. In February 2012, social dialogue led to the signing of an agreement on 2012 salaries between the Grupa LOTOS Board and the trade unions. Another example of commitment and open communication between employer and employees was the organization-wide public consultation on the draft LOTOS Group Code of Ethics held in 2012, which concluded with the Company's Board adopting the document in December 2012.

Risk of misconduct

Risks related to corporate misconduct pose a serious threat to any organization. Hence in 2012, we began to implement a comprehensive approach to misconduct prevention, which involves acting in a systematic and orderly manner to identify and assess the risk of misconduct. As part of the process, prevention and detection mechanisms have been designed and put into use, and are monitored and evaluated for effectiveness. Moreover, in April 2012 we announced the Misconduct Prevention Policy, which outlines our stand on misconduct and the rules for dealing with it, as well as describing our open-access reporting channels.Risks related to corporate misconduct pose a serious threat to any organization. Hence in 2012, we began to implement a comprehensive approach to misconduct prevention, which involves acting in a systematic and orderly manner to identify and assess the risk of misconduct. As part of the process, prevention and detection mechanisms have been designed and put into use, and are monitored and evaluated for effectiveness. Moreover, in April 2012 we announced the Misconduct Prevention Policy, which outlines our stand on misconduct and the rules for dealing with it, as well as describing our open-access reporting channels.

Approach to management

At the LOTOS Group we have implemented an enterprise risk management (ERM) system based on the COSO II integrated framework published in 2004, which is compliant with ISO 31 000 guidelines and requirements. As part of our ERM system, we developed and implemented a set of internal standards, which consists of:

- Enterprise risk management policy, which defines the general scope of responsibility within the system and key risk management policies operated by the organization,
- Enterprise risk management procedure, which specifies detailed rules for risk identification and assessment, as well as monitoring and reporting methods designed to check whether any mitigating actions taken have brought the expected results.

Additionally, an Enterprise Risk Management Committee operates at Grupa LOTOS, primarily as an advisory body. The Committee provides recommendations for enterprise risk management actions in accordance with internal regulations, resolves controversies in this respect, and monitors and evaluates the progress and effects of implemented risk mitigation measures. The Committee also checks whether proposed projects are in line with the LOTOS Group's policies and whether their implementation is likely to cause a dangerous increase in risk levels in any other areas of the LOTOS Group's activities.

Once a year, a review of our ERM system is undertaken as part of the organizational maturity assessment, and the findings are used to further refine the system's mechanisms. Information on the operation of the Enterprise Risk Management System is regularly provided to the Board and the Audit Committee of the Company's Supervisory Board.

Altogether, the systematic risk management framework helps the LOTOS Group attain its pre-set objectives. Regular identification of risks that may compromise the delivery of objectives provides extensive knowledge on threats and opportunities related to the LOTOS Group's business and improves its ability to respond to emerging risks. Active enterprise risk management also serves to secure stability in our day-to-day operations and promotes sustainable development.

Key instruments

Grupa LOTOS identifies risks which may affect the achievement of its strategic, process and operational objectives. Risks are assessed using a risk matrix approved by the Company’s Board. Based on the rating criteria of this matrix, we classify risks as high, moderate or low. The strategy for dealing with a particular risk is devised depending on the results of a detailed risk analysis and the extent of its possible impact on the Company and its environment.

Risk assessment is undertaken from two different perspectives – for the coming year, and until the end of the current LOTOS Group strategy period (currently the end of 2015). For each risk, the probability of its occurrence is estimated, followed by an assessment of its possible impact on the company’s financial standing and reputation. The assessment takes into account the expected impact on the safety of people, the environmental impact and the reception of the impact by key stakeholders.

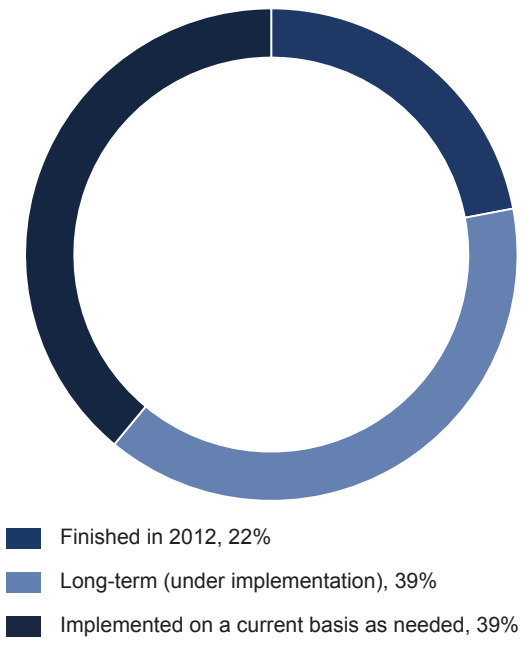
A risk map is constructed based on the identified and assessed risks, which is subject to approval by the Company's Board. Relevant controls and security measures are then indicated for these risks. Each risk is assigned an owner, who is responsible for overseeing the risk, monitoring it and implementing agreed mitigation plans.

Risks rated as high and selected risks classified as moderate have their own risk management charts prepared. These contain detailed risk descriptions, mitigation plans and relevant response procedures, as well as key risk indicators (KRIs), which are subject to periodic monitoring and reporting.

The LOTOS Group also manages risks for its individual projects, wherein the risk assessment procedures used are adjusted to the requirements of the project's management. Risk management procedures remain consistent for the entire LOTOS Group, enabling the effective execution of planned projects. With the adopted criteria applied, risks affecting our major projects are also entered in the ERM system to ensure their secure implementation through increased supervision.

The Company has also launched the ERM Portal, which is an IT tool designed to ensure automated support for enterprise risk management processes. In addition to functionality that records risks, incidents and indicators, work flow scenarios are created and implemented to systematise risk management processes. These scenarios cover the tasks performed by their users. The tool also enables linking of risks to various attributes, such as objectives pursued, processes implemented, persons involved or documents used, and generates risk maps in line with required criteria. Work flow procedures facilitate precise definition of risk management tasks and monitoring of their status. Key risk indicators can be calculated based on transactional and analytical data, which enables close monitoring and rational decision-making as regards risk management and possible allocation of financial resources.

Measures aimed at mititgating key risks



At the LOTOS Group we have identified and implemented measures aimed at mititgating key corporate risks. Part of these measures are of a long-term character, maximum three-year, which is consistent with our business strategy until 2015. Also of paramount importance to us is constant monitoring of risks and immediate reacting to prevent their negative impacts.

Development plans

We make a consistent effort to improve our ERM Portal, whose functionality develops as the enterprise risk management system matures. In 2013, we aim to focus on optimising the KRI base and integrating it with other systems, so that collected data can be sourced and used for the purpose of ongoing monitoring of various risks. We also plan to expand our incident database, to ensure that it is fully exploited in assessment and management of underlying risks.

Implementation costs of hedging strategies

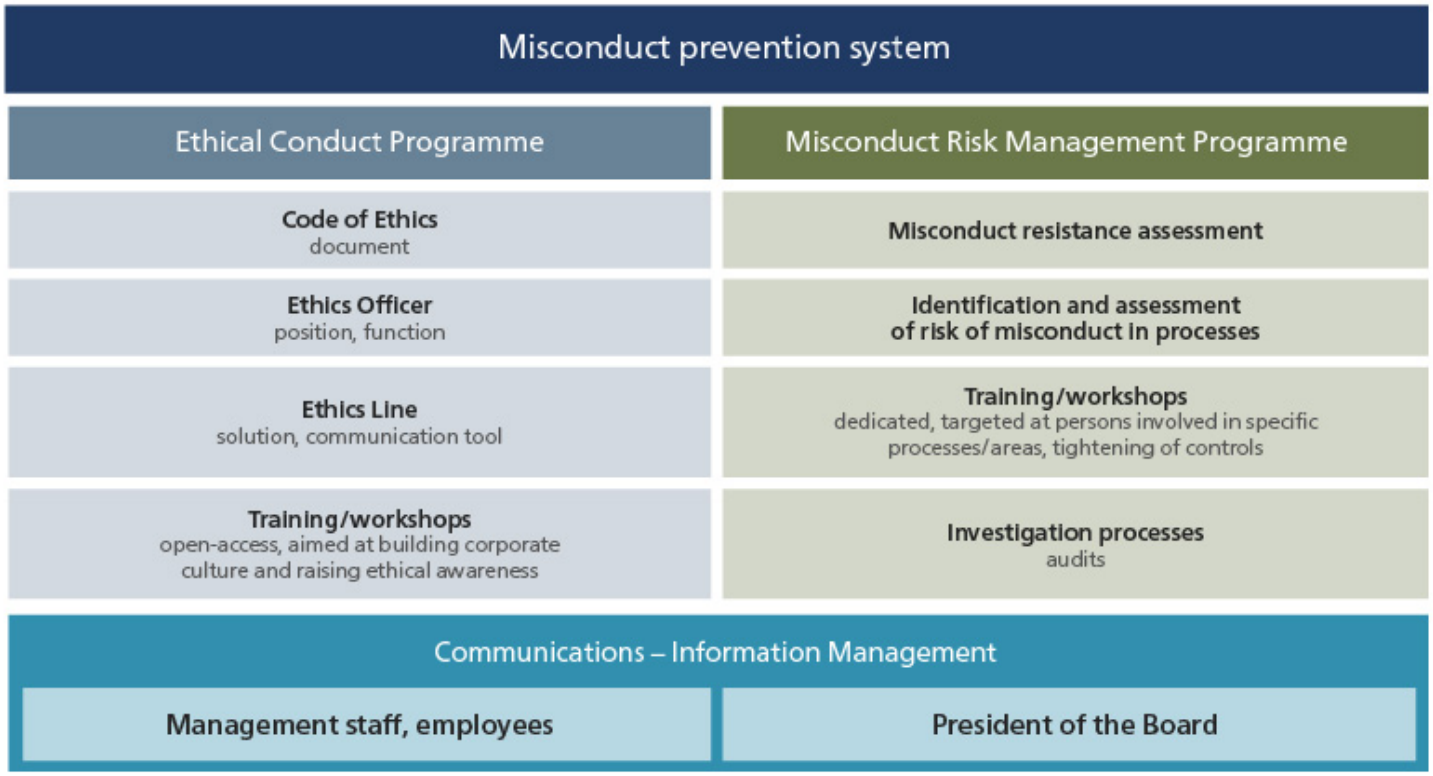
Risk mitigation strategies applied by Grupa LOTOS to individual risks are subject to cost analyses. In the process, the ALARP (As Low As Reasonably Practicable) principle is employed, whereby risks are reduced to a level as low as reasonably practicable. Risks are considered acceptable if it is impossible to reduce them any further or if the costs of their reduction outweigh the benefits of doing so. This approach enables Grupa LOTOS to deploy the financial resources required for risk management in the most efficient manner possible.

Preventing corporate misconduct

In 2012, we embarked on implementing a LOTOS Group-wide misconduct prevention system. In April of the reporting period, the Grupa LOTOS Board adopted the Misconduct Prevention Policy, which was made available to our employees and external stakeholders. Channels for reporting suspected misconduct were also established, together with adequate organizational arrangements, processes, and educational tools.

Efforts undertaken in misconduct prevention are geared towards devising and adopting such tools as will help the organization develop a resistance to misconduct, including bribery. These themes are addressed in the Ethical Conduct Programme and the Misconduct Risk Management Programme, which together make up the organization's misconduct prevention framework.

Misconduct prevention system



One component of the prevention system was a pilot assessment for 2011 of the organization’s resilience to misconduct, which is a source of information on how well we are prepared to effectively manage the risk of misconduct. As part of the assessment, the defined processes within Grupa LOTOS were graded, and the choice made as to which of those carry the greatest risk of misconduct in the Company as a whole. This assessment will be repeated periodically to monitor the effectiveness of the preventative measures taken.

Furthermore, reviews of selected process areas are conducted with a view to identifying and potentially modifying measures designed to reduce the likelihood of misconduct, both externally and internally. We also organize training sessions on issues related to counteracting such practices; in 2012, this subject was discussed at length by the management staff in connection with the work on the LOTOS Group's Code of Ethics.

Percentage of Grupa LOTOS employees trained in the organization's anti-corruption policies and procedures

Type of position	2010	2011	2012
Management positions	3.5%	8.9%	62.5%
Other positions	3.1%	7.4%	5.7%

Whenever suspected misconduct is reported, an investigation is carried out within the LOTOS Group, the principal goal of which is to collect the information necessary to correctly classify a given occurrence and determine the appropriate basis for action. In the reporting period there was one case of disciplinary action in Grupa LOTOS, concluded with a dismissal on charges of bribery.

In 2012 , no cases were identified when contracts with business partners had not been renewed because of breaking the rules for counteracting corruption.