

Results and prospects

# **Results and prospects**









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## **Business** environment

The key factor that had a strong impact on both the global and Polish petroleum markets in 2014, with significant consequences for the LOTOS Group's performance, was the price of crude oil, which also determined the price of petroleum products.

# Letter from the Vice-President of the Board

2014 ushered in a series of challenges for the companies in the fuel sector. The decisions made by the LOTOS Group have demonstrated that we are able to take rapid steps to adapt to a demanding environment and ensure the desired profitability for our projects.

## Segment performance

The segmental management model we have implemented enhances management efficiency, delivering cost and revenue synergies across the organization.

### Sustainable development

Our efforts undertaken in the social and business spheres, in our relations with key stakeholders and in corporate governance are aimed principally to increase our positive contribution to social development, to mitigate possible adverse impacts of our operations and to maximise our chances for sustainable development over the long term.



Results and prospects > Business environment

# **Business environment**

The global economic situation in 2014 was below market expectations. The world's leading economies kept expanding, but the growth rates were often lower than anticipated. The United States was a notable exception – the country's economic recovery was faster and stronger than predicted by the market. In contrast, Japan lagged behind other major economies. Developed economies were supported by loose monetary policies and efforts to maintain market liquidity. In 2014, global economy continued on a growth path, with the estimated growth rate (3.4%) slightly below that forecast in April last year. In 2014, eurozone GDP growth rate was 0.9%, whereas Poland's real GDP grew at a rate of 3.4%, faster than in 2013 by 1.7pp.

#### GDP growth in 2012-2014

	EU	USA	Japan	China	Russia	World
2012	-0.4%	2.3%	1.8%	7.8%	3.4%	3.4%
2013	0.1%	2.2%	1.6%	7.8%	1.3%	3.4%
2014E	1.4%	2.4%	-0.1%	7.4%	0.6%	3.4%

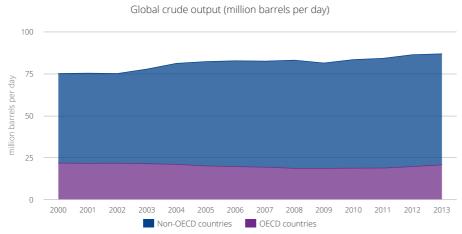
The key factor that had a strong impact on the global and Polish petroleum markets in 2014, with significant consequences for the LOTOS Group's performance, was the price of crude oil, which also determined the price of petroleum products. In mid-2014, the upward trend in crude oil prices reversed. Contrary to the market expectations, the decline in crude prices did not decelerate after OPEC failed to issue a decision on limiting production. Consequently, between June and December 2014 crude prices fell by approximately 50%, disrupting market stability, in particular in the production segment, and leading to bankruptcies of smaller production and service companies, chiefly in the US. The sudden downward trend emerged after nearly four years of stable prices.

This unstable crude market forced many international companies to adopt cost-cutting measures and substantially reduce capital expenditure, for instance by putting off investments until the market stabilises again.

Further, it was observed that resources available at low production cost will become depleted in the long term. New deposits require a lot more capital outlay, which drives up the per-barrel price of the oil produced. At present, hydrocarbon exploration and production activity is concentrated in the US shale plays, offshore areas with deposits located at great depths, and offshore polar regions. The expected increase in production of oil and gas from those sources will require higher expenditure per barrel of oil equivalent, which may be reflected in hydrocarbon market prices.

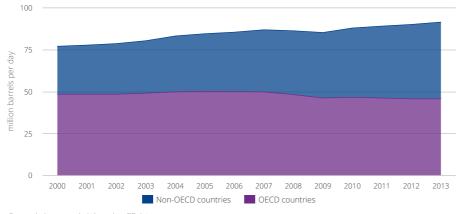
# Global refining market

For a number of years, global crude oil production and consumption has been on the rise. The trend has been accompanied by a shift of fuel consumption to non-OECD developing countries.



Source: In-house analysis based on BP data

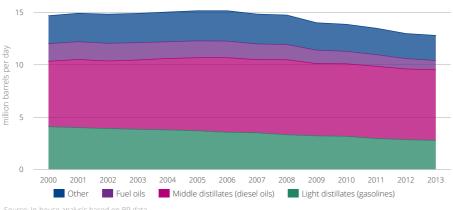
### Global fuel consumption (million barrels per day)



Source: In-house analysis based on BP data

The consequence of changes in the global economy, including in demography, were particularly felt in Europe. Demand for fuels in the EU has a consequence of changes in the global economy, including in demography, were particularly felt in Europe. Demand for fuels in the EU has a consequence of changes in the global economy, including in demography, were particularly felt in Europe. Demand for fuels in the EU has a consequence of changes in the global economy, including in demography, were particularly felt in Europe. Demand for fuels in the EU has a consequence of changes in the global economy, including in demography, were particularly felt in Europe. Demand for fuels in the EU has a consequence of changes iconsistently declined since 2007.

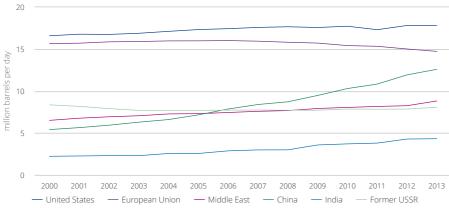
## Fuel consumption in the EU (million barrels per day)



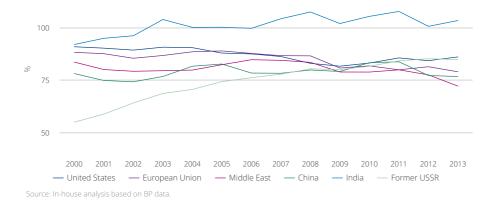
Source: In-house analysis based on BP data

The rising demand for fuels, in particular in Asia, results in expansion of refining capacities, with major projects executed in China and India, the two largest developing economies. EU's refineries show a rather different trend – it is necessary to reduce the least effective units.

# Refining capacity (million barrels per day)



Source: In-house analysis based on BP data.

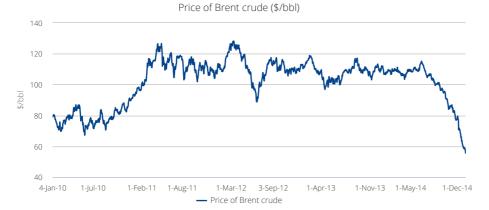


To ensure a balanced fuel market in Europe, fuel producers shut down several refineries in recent years. However, this scaling back still seems to be insufficient, as many European refineries generate small returns, and their processing capacities are relatively low. Small refineries with low complexity are particularly exposed to the risk of closure, given their high unit operating costs.

Year of shutdown	Refinery	Capacity ('000 bbl/d)	Owner	Country
2015	Collombey	72	Tamoil	Switzerland
2015	Gela	105	Eni	Italy
2014	Milford Haven	135	Murphy Oil	United Kingdom
2014	Stanlow	55	Essar Energy	United Kingdom
2014	Mantova	57	Eni	Italy
2014	Paramo	20	Unipetrol	Czech Republic
2013	Harburg	90	Shell	Germany
2013	Porto Marghera	80	Eni	Italy
2012	Coryton	172	Petroplus	United Kingdom
2012	Fawley	80	ExxonMobil	United Kingdom
2012	Kherson	138	Alliance Oil Co.	Ukraine
2012	Drogobich	78	Ukraine Oil Co.	Ukraine
2012	Petit Couronne	154	Petroplus	France
2012	Berre l'Etang	105	LyondellBasel	France
2012	Roma	85	Total ERG	Italy

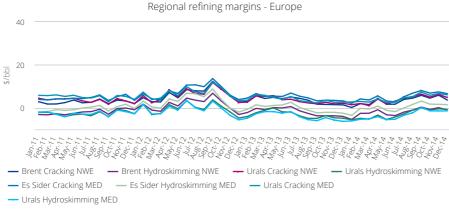
Source: In-house analysis based on JBC data.

A significant change in that landscape occurred in late 2014, spurred by a significant fall of oil prices, from approximately 110 USD/bbl to less than 60 USD/bbl. The price decline was chiefly driven by the structural oversupply of oil in the market (according to the International Energy Agency, the oversupply reached about 0.7m boe/d, i.e. 0.7%-0.8% of global demand), increased geopolitical risk, OPEC's abandonment of the policy of balancing global oil demand and supply, and appreciation of the US dollar.

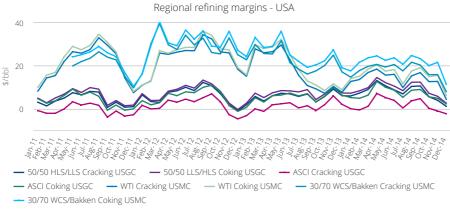


Source: In-house analysis based on Thomson Reuters data.

The US refineries very quickly lost one of their major elements of competitive advantage – inexpensive oil (shale oil produced in the United States had been much cheaper than oil traded on the international market). On the other hand, cheaper fuel encouraged a higher number of consumers to travel, boosting demand. In effect, the competitiveness of European refineries greatly improved. Refining margins earned by European refineries approached a level similar to that of refineries located in other parts of the world.



Source: In-house analysis based on International Energy Agency data.



Source: In-house analysis based on International Energy Agency data.

Source: In-house analysis based on International Energy Agency data.

— Tapis Hydroskimming Singapore

# International fuel market

Demand for oil refining products in 2014 rose by 0.9% globally. Stronger demand was seen in the gasolines (1.4%) and diesel oil (3.1%) segments. The estimated consumption of LPG and jet fuel also increased (by 1.0% and 1.9%, respectively). However, the demand for light fuel oil fell (by 5.4%).

### Global consumption of fuels ['000 bbl/d]

	2012	2013	2014E
Gasolines	22,824	23,183	23,514
Diesel oil	20,470	21,256	21,911
JET	6,435	6,530	6,658
LPG (Liquefied Petroleum Gas)	7,520	7,964	8,047
Light fuel oil	5,710	5,302	5,013

Source: In-house analysis based on JBC data, April 2015.

According to forecasts, the overall global consumption of refining products is expected to grow by over 6.5% until 2020. It is estimated that demand for LPG, diesel oil, and JET fuel will grow significantly over the 2014 consumption (up 14%, 13% and 12%, respectively). The global consumption should rise slightly (4%). Light fuel oil consumption is expected to fall by 21%.

#### Forecast global consumption of fuels ['000 bbl/d]

	2014E	2015P	2020P
Gasolines	23,514	23,945	24,463
Diesel oil	21,911	22,497	24,680
JET	6,658	6,805	7,463
LPG (Liquefied Petroleum Gas)	8,047	8,299	9,189
Light fuel oil	5,013	4,911	3,968

Source: In-house analysis based on JBC data, April 2015.

Consumption of petroleum products in Europe declined in 2014 by 1.0%. However, diesel oil, JET fuel and LPG saw an increase of 1.2% and 1.6% respectively. Consumption of gasolines, light fuel oil and LPG fell by 1.5%, 9.7% and 1.0% respectively. The changes in fuel consumption in Europe reflect the economic conditions in EU Member States and the Eurozone countries.

The demand for oil refining products is forecast to fall in Europe by 2.7% until 2020. According to estimates, one of the reasons behind the decline will be a significant drop in consumption of gasolines, exceeding 11%. Lower consumption is also expected to affect the light fuel oil market (-18%). Concurrently, a strong increase is expected in consumption of LPG – by 7.3%, JET fuel – by 6.8%, and diesel oil – by 2.2%.

### Forecast consumption of fuels in Europe ['000 bbl/d]

	2014E	2015P	2020P
Gasolines	2,110	2,071	1,877
Diesel oil	5,391	5,521	5,508

JET	1,260	1,269	1,346
LPG (Liquefied Petroleum Gas)	1,104	1,114	1,184
Light fuel oil	1,046	1,063	862

Source: In-house analysis based on JBC data, April 2015.

In the European car market, new car registrations grew by 5% in 2014, to 13m new cars. A marked improvement was also recorded in the utility vehicles segment, with new registrations up by 7% (to 1.9m new vehicles). In the group of registered new cars, there is a continued growing interest in diesel-fuelled cars. The share of such cars in total new car registrations in Western Europe was more than 53% in 2013 (compared with 46% in 2009).

## Polish fuel market

Domestic demand for fuels is shaped by the general economic situation in Poland and the region. In the last three years, the Polish fuel market has been faced with the challenge of the growing grey market driven by high fuel prices and the economic slowdown observed in the recent years. In 2014, the Polish government's efforts involving the implementation of a stricter control regime and change in regulations, including in the energy law, coupled with falling prices in the second half of the year, limited the growth of the grey market compared with the previous years, with official diesel oil consumption at 11,297 thousand tonnes, down 0.3% year on year. The real market for diesel oil is determined by the constantly growing number of vehicles running on diesel oil (by 7% per annum on average) and continued increase in transport activity. It is estimated that the present diesel oil consumption is similar to that recorded in 2011, when the number of diesel oil-fuelled vehicles on the market was smaller by approximately 1.5m.

Gasoline sales on the Polish market in 2014 followed the trends prevailing in other parts of Europe and continued to fall. The demand for gasoline dropped by 1.7%, to 3,655 thousand tonnes. Weaker demand is mainly attributable to improved effectiveness of vehicles and the growing attractiveness of alternative air transport. The economic conditions, including reduced unemployment and falling fuel prices recorded in the second half of the year, contributed to the fact that the decline in demand for gasoline was not as severe as in 2013.

The consumption of LPG, which serves as a substitute of gasoline, dropped in 2014 by 1.3%, to 2,292 thousand tonnes. The LPG market in Poland may be recognised as mature, with consumption at approximately 2,200 thousand tonnes in the last five years.

Demand for light fuel oil in 2014 continued to fall, and contracted by 15.5%, to 712 thousand tonnes. This market segment was affected by increased interest in alternative heating fuels and higher average temperatures in the heating season.

The fastest growing market was the aviation fuel market. Consumption of aviation fuel in 2014 rose 15.4%. Thanks to the growing number of airline services, expansion of new airlines and consistent increase in the number of passengers, the market is viewed as promising and is expected to grow in the years to come.

#### Consumption of fuels in Poland ['000 tonnes]

	2013	2014E
Diesel oil	11,332	11,297
Gasolines	3,719	3,655
Light fuel oil	843	712
LPG (Liquefied Petroleum Gas)	2,323	2,292
Aviation fuel	541	624

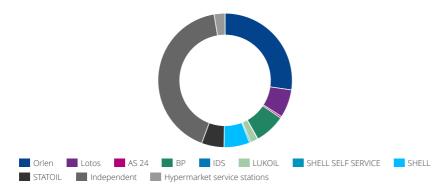
Source: In-house analysis of Polish Organization of Oil Industry and Trade (POPiHN) data.

## Polish retail fuel market

In 2014, there were nearly 6,500 service stations operating in Poland. As in the previous years, more than one third of the stations belonged to domestic operators, 22% were owned by international corporations, while 42% operated independently. The chains owned by oil companies were developed by opening both own stations (CODO) and partner stations (DOFO).

In 2014, according to POPiHN's estimates, 240 independent stations disappeared from the market, in most cases owing to the new technical requirements applicable to service stations. Over the same period, there was also a decline in the number of oil-company-owned stations, attributable mainly to Shell's sale of some of the stations purchased from Neste in the previous year.

Expansion of Poland's motorway network has been accompanied by the appearance of a growing number of motorway service stations. At the end of the year, there were 71 Motorway Service Areas (MSAs) in Poland.



Source: Polish Organization of Oil Industry and Trade (POPiHN).

#### RELATED CONTENT:

#### Letter from the President of the Board

The success of the Grupa LOTOS' SPO was a measure of trust of our shareholders and potential investors in our capacity to effectively operate amid economic and political turmoil. It was a resounding vote of trust of our shareholders and investors in the development strategy of Grupa LOTOS.

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Results and prospects > Letter from the Vice-President of the Board

# Letter from the Vice-President of the Board



Dear Stakeholders,

For the global fuel sector, 2014 was a year of dynamic transformations in the macroeconomic environment, the most important of which was the plunge in crude oil prices seen in the second half of the year (Brent DTD down from USD 111/bbl as at June 30th 2014 to USD 55/bbl as at December 31st 2014), which precipitated a similar decline in refining product prices. These changes had a bearing on the operations of the LOTOS Group, both in terms of the execution of its business strategy and the consolidated financial performance reported by the Company.

In 2014, we put particular focus on giving the LOTOS Group appropriate foundations for delivering its growth objectives. A rights issue was carried out to increase the Company's share capital. In what was the largest public offering on the Warsaw Stock Exchange in 2014, we generated proceeds of PLN 1bn, which will be applied towards financing of a delayed coking unit with auxiliary infrastructure to be constructed under the EFRA Project (the total cost of the project is estimated at ca. PLN 2.34bn, with the issue proceeds expected to contribute PLN 530m –650m), and development of the Baltic Sea's B4 and B6 fields, which hold gas reserves of up to 4 billion cubic metres (the project's estimated total capex is put in the region of PLN 800m, of which PLN 350m–470m will be covered using the issue proceeds). Testament to the success of the transaction is the considerable interest it attracted from the shareholders, who exercised 98.3% of their pre-emptive rights, and the equally high, at over 98%, reduction in the number of additional subscription orders, which shows the trust placed in us by our shareholders and their support of the strategic projects we are pursuing to enhance the value of Grupa LOTOS.

The consolidated financial performance under IFRS was negative, with 2014 closing with an operating loss (EBIT) of PLN -1,393m. It needs to be noted, however, that the weak result was attributable to a series of one-off non-cash events associated primarily with changes in the price of crude oil and key refining products, leading to a remeasurement of inventories, as well as an impairment loss for the full amount of the capital expenditure on the YME field recognised in June 2014. However, net of these events, the LIFO effect (measurement of inventories based on weighted average cost) and other non-cash events, LIFO-based EBIT would have amounted to more than PLN 580m. Before amortisation and depreciation, this would have yielded a normalised LIFO-based EBITDA of nearly PLN 1.4bn. These figures demonstrate the LOTOS Group's ability to generate cash in very challenging market conditions. This potential is fully supported by the operating cash flow of PLN 1,381m.

In the upstream segment, work continued on the development of the B8 field. It was decided that the scope of modernization of the 'Petrobaltic' platform consisting in converting the rig into a production centre would be changed. The goal was to achieve a reasonable rate of return from the investment amid the difficult situation on the global oil market. Following a series of analyses, relevant cost assumptions were revised to restore the original viability framework of the project. This will help achieve the expected increase in the economic viability of the project of field development. Thanks to reduced capital expenditure, the project is able to deliver a satisfactory rate of return despite significantly lower crude oil prices. In August 2014, B8 Sp. z o.o., Baltic S.K.A. (SPV), Polskie Inwestycje Rozwojowe S.A., Bank Gospodarstwa Krajowego, and Bank Pekao S.A. entered into a series of project finance agreements related to the financing of the development of the B8 field.

As for the segment's other key projects:

- The development concept for the B4 and B6 gas fields was chosen (ensuring off take of the natural gas produced and transported onshore by pipeline will be vital to the execution of the project);
- Production of gas and condensate from the Heimdal fields (Alta, Vale, and Skirne) was continued on the Norwegian Continental Shelf;
- Following completion of the overhaul of the Heimdal platform in June 2014 (Heimdal Extension Life Program or HELP), the life of the platform was extended until 2034.

The downstream segment's key growth-oriented task is the EFRA Project, which provides for the construction of a delayed coking unit (DCU) with auxiliary infrastructure. The LOTOS Group is currently in the final stages of preparation for the construction of the unit, which will directly enhance processing efficiency by minimising production of unprofitable heavy fuel oil. Following the project's completion, the annual output of high-margin products will grow by 900 thousand tonnes. We estimate that the launch of the DCU will add ca. 2 USD/bbl to its refining margin thanks to increased depth of crude processing and the resultant improved yield structure as well as synergies between the DCU unit and the upgraded and extended refinery. By the end of 2016, we also intend to complete a hydrogen recovery unit (HRU), which will further increase the

refining margin.

In 2014, we continued the expansion of our service station chain, which grew to 441 locations as at the year's end. Moreover, by eliminating the obsolete patronage (DODO) stations, we were able to improve the overall quality of the chain. This brought us closer to our strategic objective of securing a 10% share in the retail fuel market, at the same time increasing the chain's profitability by a significant margin.

The past year ushered in a series of challenges for the companies in the fuel sector. The decisions made by the LOTOS Group have demonstrated that we are able to take rapid steps to adapt to a demanding environment and ensure the desired profitability for our projects. Thanks to the trust placed in us by the shareholders, we obtained funds to finance a variety of promising growth-oriented investment projects, whose expected returns will ensure further value growth and reinforce our position as a dynamically-growing player in the oil industry in this part of Europe.

Yours sincerely,

Mariusz Machajewski Vice-President of the Board Chief Financial Officer Grupa LOTOS

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#### RELATED CONTENT:

#### Financial segment

In the financial segment, we identify the risk related to prices of raw materials and petroleum products, the risk related to prices of carbon allowances, liquidity risk, currency risk, interest rate risk, credit risk in financial and trade transactions, the risk of limited access to external financing or changes in lending terms and the risk related to debt servicing as well as the risk of adverse changes in tax regulations, interpretations or court rulings.

Go to the page  $\,$  » <a href="http://raportroczny.lotos.pl/en/risk-and-opportunities/financial-segment">http://raportroczny.lotos.pl/en/risk-and-opportunities/financial-segment>



Results and prospects > Segment performance

# **Segment performance**

### **Exploration and production**

In 2014, our annual crude oil and natural gas output reached more than 500 thousand tonnes of oil equivalent. The higher output was in large part attributable to the production assets on the Norwegian Continental Shelf purchased as part of the Heimdal portfolio.

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### Stock exchange

In 2014, Grupa LOTOS issued 55,000,000 Series D ordinary bearer shares in a public offering. The issue price of offered shares was set at PLN 18.10 per share. The issue proceeds will be applied towards co-financing of the EFRA Project, i.e. construction of a delayed coking unit at the Gdańsk refinery, and towards the development of our gas fields in the Baltic Sea.

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#### Processing operations

The LOTOS Group operates one of the most advanced and youngest refineries in Europe. 2014 was yet another record year in terms of crude oil processed by our refinery.

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### Marketing operations

The expansion of the LOTOS service station chain and increased efficiency of sales strengthened our presence on the retail market, pushing our share up to 9% at the end of 2014 (against 8.5% in 2013).

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Results and prospects > Segment performance > Exploration and production

# **Exploration and production**

#### STATEMENT

2014 brought many positive developments in the LOTOS Group's upstream segment. However, it was also a time when we had to cope with the implications of the changed business environment, in particular on the global oil market.

#### **Zbigniew Paszkowicz**

Vice-President of the Management Board, Exploration & Production, Grupa LOTOS, President of the Management Board, LOTOS Petrobaltic



The LOTOS Group's hydrocarbon production potential doubled last year, following the acquisition of Heimdal assets by LOTOS E&P Norge in December 2013. In February, the 'GSF Monitor' rig purchased in late 2013 was deployed in the Baltic Sea. With a capacity to drill to the depth of up to 9,000 m, it is more technologically-advanced than the 'Petrobaltic' rig (drilling to the depth of up to 6,000 m). Longer legs make it suitable for operation in areas with water depth of up to 106 m, or even up to 120 m with extended legs. This means that we can use the rig for drilling exploration wells in all our off-shore licence areas. After quick adjustment to the operating conditions in the Baltic Sea, in the spring the new rig, named 'LOTOS Petrobaltic', began to drill for oil and gas.

LOTOS Petrobaltic obtained extension of its production licence for the B3 field, from which we will produce oil and gas until 2026, that is ten years longer than assumed under the previous licence and plans. We now estimate that the field will yield one million tonnes of oil more, ensuring steady revenue streams and stable financial position. All this was made possible by our employees' expertise and experience in optimum hydrocarbon production.

In 2014, we signed an agreement with a consortium of banks and financial institutions for the financing of the development of the B8 field. Another milestone was the successful issue of Grupa LOTOS shares. A significant part of the issue proceeds are earmarked for the development of the B4 and B6 gas fields under a project executed jointly with CalEnergy, our world-class partner.

Last year, we also began onshore exploration activities. We partnered with Polskie Górnictwo Naftowe i Gazownictwo S.A. and signed an agreement on joint operations in the Górowo Iławeckie and Kamień Pomorski licence areas. Together we will carry out 2D seismic surveys.

In Norway, in 2014 LOTOS E&P Norge applied for new exploration licences in the APA 2014 licensing round, and won an interest in a licence as its operator.

In Lithuania, we stabilised oil production by LOTOS Geonafta and LOTOS Geonafta Group companies. It is worth noting that LOTOS Geonafta, the largest oil exploration and production company in Lithuania, with rightful pride and satisfaction celebrated the 50th anniversary of its operations.

The Miliana Group companies and TSM provided effective and efficient offshore logistics services to our rigs. In 2014, strong results were posted by Energobaltic, converting natural gas from the B3 field into LPG and environmentally friendly electricity and heat, which are then supplied to Władysławowo and the neighbouring towns and villages.

Since the second half of 2014, we have been operating under more challenging economic conditions. Given the rapid fall of oil prices on global markets, which started in August 2014, we made a professional assessment of our development plans and budgets, and revised them accordingly. Hydrocarbon exploration and production projects, especially on subsea deposits, are cost intensive and long-term in nature. We reviewed our projections in detail, taking into account the new economic reality and long-term forecasts, according to which oil prices may not return to pre-crisis levels in the years to come.

However, in this new environment we have made a key assumption: LOTOS will not give up investing in hydrocarbon exploration and production. This applies primarily to our strategic projects executed in the Baltic Sea, namely the development of the B8 oil field, and the B4 and B6 gas fields. The projects will be much more challenging and their implementation will require high flexibility, their scopes and deadlines may need to be adjusted to the present market situation, but we shall maintain our resolve to implement them.

Our achievements in 2014, including the ability to react quickly to the rapid changes in the economic environment, are the effect of the qualifications, commitment and hard work of employees of all LOTOS Group companies operating in the upstream segment. In difficult conditions, the value of people is put to a test. The developments in late 2014 again confirmed that people are LOTOS' most valuable asset.

Grupa LOTOS is engaged in exploration and production through the LOTOS Petrobaltic Group in the following countries:

- Poland LOTOS Petrobaltic and its subsidiaries (B8 Sp z o.o., B8 Sp. z o.o Baltic SKA, Baltic Gas Sp. z o.o. i Wspólnicy SK, Baltic Gas Sp. z o.o.),
- Lithuania AB LOTOS Geonafta and its subsidiaries (UAB Minijos Nafta, UAB Manifoldas, UAB Genciu Nafta),
- Norway LOTOS Exploration and Production Norge AS.

(See more <a href="http://raportroczny.lotos.pl/en/the-organization-and-its-report/the-organization">http://raportroczny.lotos.pl/en/the-organization-and-its-report/the-organization>)

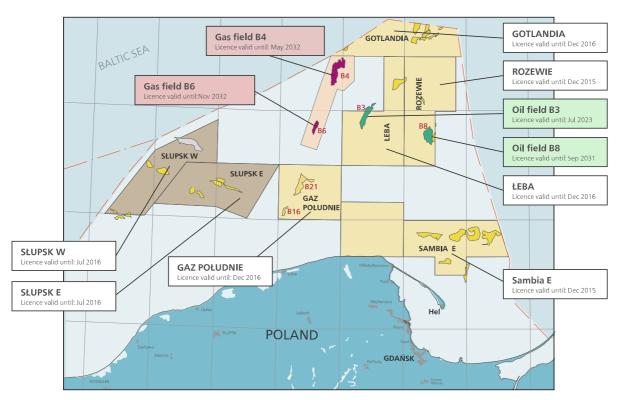
The LOTOS Petrobaltic Group includes companies conducting support activities: the Miliana Group, Energobaltic Sp. z o.o. and Aphrodite Offshore Services N.V., based in Curação, the Netherlands Antilles (which was dormant in 2014).

The Miliana Group renders sea logistics services to LOTOS Petrobaltic, including crude oil storage and transport, rescue and anti-spill assistance, geotechnical surveying, and intermediary services in organizing air transport services to the rig, using six own vessels: Icarus III tanker, multi-purpose vessels St. Barbara, Kambr and Aphrodite I, Granit and Bazalt tugboats, as well as tonnage chartered from third-party shipowners. In 2014, the services were extended to include those provided by the 'LOTOS Petrobaltic' rig.

Energobaltic's business comprises management of associated gas produced from the B3 oil field and – in the future – from other hydrocarbon accumulations located in the Baltic Sea. At the Władysławowo CHP Plant, the company produces electricity, heat, LPG and natural gas condensate using associated gas from an offshore oil production facility (the B3 field).

# Licences in Poland – Baltic Sea

#### Licences in Poland – Baltic Sea



#### LOTOS Petrobaltic holds:

- licences for the production of crude oil and natural gas from the B3 field,
- through Baltic Gas Sp. z o.o. i Wspólnicy SK interests in licences for the production of natural gas from the B4 and B6 fields,
- through B8 Sp. z o.o. Baltic S.K.A. interest in a licence for the production of crude oil and natural gas from the B8 field.

#### The total area covered by the production licences spans more than 147.84 km<sup>2</sup>.

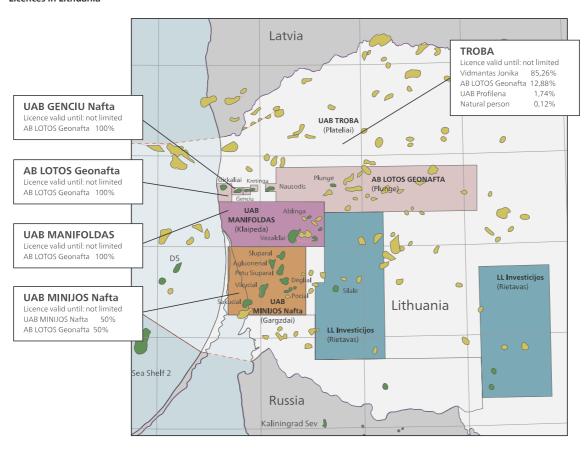
LOTOS Petrobaltic holds oil and gas exploration and production licences in the Polish economic zone of the Baltic Sea in the following regions: Gotlandia, Leba, Rozewie, Gaz Południe, Sambia E, Słupsk W and Słupsk E.

#### The total area covered by these exploration and appraisal licences is more than 7,300 km<sup>2</sup>.

In 2014, the company discontinued its exploration activities in the Sambia W region as there were no prospects for oil production, which resulted in the expiry of the relevant licence.

# Licences in Lithuania

#### Licences in Lithuania



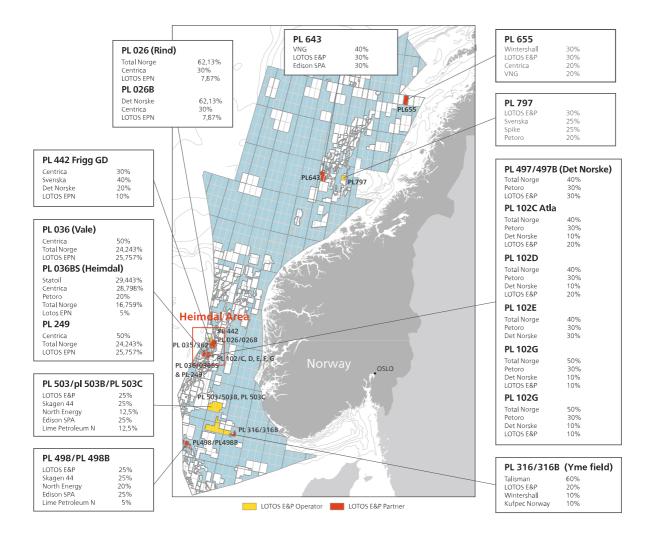
In Lithuania, LOTOS Petrobaltic conducts its activities through its subsidiary AB LOTOS Geonafta, in which it holds a 99.99% interest (1 share is held by Grupa LOTOS).

The AB LOTOS Geonafta Group comprises:

- UAB Genciu Nafta (a 100% share),
- UAB Manifoldas (a 100% share),
- UAB Minijos Nafta (a 50% share).

The core business of the AB LOTOS Geonafta Group is exploration for and production of crude oil and provision of drilling services in Lithuania. The company is also engaged in crude oil trading. In aggregate, as at the end of 2014 AB LOTOS Geonafta Group companies produced hydrocarbons from 15 onshore oil fields.

# Licences in Norway – Norwegian Continental Shelf



LOTOS Exploration & Production Norge AS (LOTOS E&P Norge) of Stavanger, Norway, is the subsidiary responsible for our operations on the Norwegian Continental Shelf.

Following the acquisition of Heimdal assets, LOTOS E&P Norge holds interests in 23 oil exploration and production licences in the Norwegian Continental Shelf, including: PL 498, PL 498B, PL 503, PL 503B, PL 503C, PL 643, PL 655, PL 442 FRIGG GD, PL 362 FULLA, PL 316/PL 316B YME, PL 249 VALE, PL 026 RIND, PL 026B FRIGG GD, PL 035B FULLA, PL 036 VALE, PL 036BS HEIMDAL, PL 102 SKIRNE BYGGVE, PL 102C ALTA, PL 102D, PL 102E SKIRNE. PL 102F TRELL. and PL 102G TRELL.

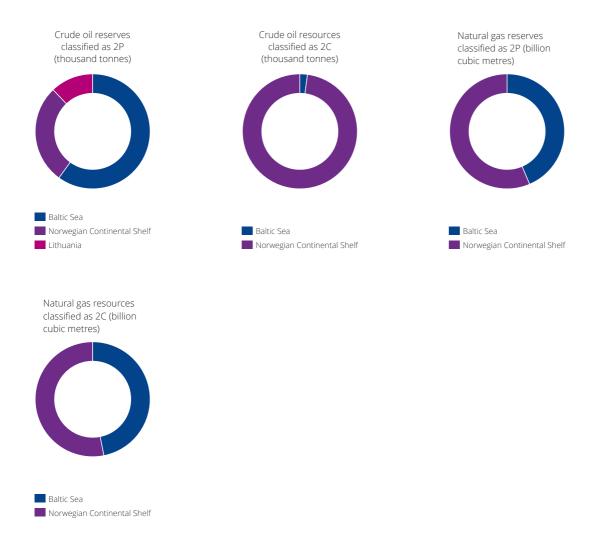
The company is the operator under seven licences: PL 498, PL 498B, PL 503, PL 503B, PL 503C, PL 362, and PL 035B.

# Oil and gas reserves

As at the end of 2014, the LOTOS Petrobaltic Group's 2P crude oil reserves totalled 6.1m tonnes and 2C resources amounted to 3.985m tonnes. In the Baltic Sea, on the Norwegian Continental Shelf and in Lithuania, 2P oil reserves were 4.9m tonnes, 0.23m tonnes and 0.98m tonnes, respectively, while 2C oil resources were 0.085m tonnes in the Baltic Sea and 3.9m tonnes on the Norwegian Continental Shelf.

Natural gas reserves and resources were 0.9 billion cubic metres (2P) and 6.4 billion cubic metres (2C). In the Baltic Sea and on the Norwegian Continental Shelf, 2P natural gas reserves were 0.39 billion cubic metres and 0.51 billion cubic metres, respectively, while 2C natural gas resources amounted to 3 billion cubic metres and 3.4 billion cubic metres, respectively.

As at December 31st 2014, total crude oil and natural gas reserves and resources amounted to 6.8 million toe (tonnes of oil equivalent) in oil reserves classified as 2P and 9.3 million toe in oil resources classified as 2C.



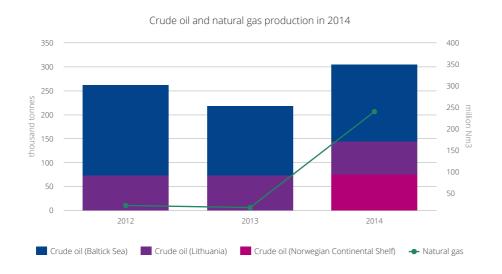
# Crude oil and natural gas production in 2014

In 2014, crude oil was produced from the B3 field in the Baltic Sea, from onshore fields in Lithuania, and on the Norwegian Continental Shelf. The production totalled 305.2 thousand tonnes, including 160.1 thousand tonnes from the Baltic Sea fields, 70 thousand tonnes in Lithuania, and 75.1 thousand tonnes on the Norwegian Continental Shelf. The output was 86 thousand tonnes higher than in 2013 (219 thousand tonnes).

Natural gas was produced from the B3 field in the Baltic Sea and on the Norwegian Continental Shelf. The output totalled 239.2 million cubic metres, including 17.8 million cubic metres from the B3 field, and 221.4 million cubic metres on the Norwegian Continental Shelf. Total output was 222.4 million cubic metres higher than in 2013 (16.8 million cubic metres).

The higher output was in large part attributable to the production assets on the Norwegian Continental Shelf purchased as part of the Heimdal portfolio.

In 2014, the annual crude oil and natural gas output reached more than 500 thousand tonnes of oil equivalent.



# Operations in 2014

Development of upstream operations has been a priority under the LOTOS Group's Strategy for 2011–2015. Our activities in this area are focused on increasing production from own fields and improving the security of oil and gas supplies by ensuring direct access to new hydrocarbon deposits (acquisition of own resources under exploration licences and establishment of cooperation with partners that have access to oil and gas deposits). The following steps were taken in pursuance of this strategic goal in 2014:

#### In Poland:

#### Production from the B3 field

Production of crude oil and associated gas from the B3 field continued. Pursuant to the Ministry of Environment's decision of May 23rd 2014, the term of the licence for crude oil and natural gas production from the B3 field was extended to 32 years starting from the licence issue date, i.e. until July 29th 2026.

#### · Development of the B8 field

Development work on the B8 field was continued in line with the schedule. Financing was secured by executing project finance agreements between B8 Spółka z ograniczoną odpowiedzialnością Baltic S.K.A. (B8 SPV), Polskie Inwestycje Rozwojowe S.A., Bank Gospodarstwa Krajowego, and Bank Pekao S.A. The Minister of the Environment issued a decision to transfer the licence for production of crude oil and associated natural gas from the B8 field located in the Polish exclusive economic zone of the Baltic Sea from LOTOS Petrobaltic to B8 SPV. A share capital increase through a share issue was registered at the target company, B8. The newly issued shares were fully acquired by LOTOS Petrobaltic and paid for in the form of cash and in-kind contribution, including the right to use geological data of the B8 field, assets produced by LOTOS Petrobaltic for the development of the B8 field, and the 'Petrobaltic' drilling rig.

#### · Development of the B4 and B6 gas fields

Preparatory work on the B4/B6 gas fields was continued in partnership with CalEnergy Resources Poland. The process of selection of the development concept was completed: production wells are to be drilled using the 'LOTOS Petrobaltic' platform. Work was underway on the front-end engineering design of the onshore and offshore installations and on securing onshore transmission capacities.

#### . Seismic surveys in the Baltic Sea

Intensive exploration and appraisal work was performed in the Polish exclusive economic zone of the Baltic Sea. In 2014, geological work was conducted in all areas covered by LOTOS Petrobaltic's licences for exploration or exploration and appraisal of crude oil and natural gas. In the Gotlandia and Gaz Południe licence areas geological work was conducted consisting in drilling two wells: the exploration well B27-1 and the appraisal well B21-2. The exploration well proved dry whereas the appraisal well confirmed the presence of gas and condensate in the B21 accumulation on the main tank level – Cambrian sandstones as well as indicated the oil potential on the additional, carbonate tank level. In the remaining five licence areas, design and analytical work was underway. The terms of the Leba licence were amended and an annex to the working interest agreement was signed. The amendment extended the licence term until December 14th 2016 and changed the scope of geological work. With respect to the Gaz Południe licence, on December 12th 2014 its terms were amended and working interest under the licence was approved. Under the amendment, the licence term was extended until June 14th 2016. The activities we are undertaking are aimed at exploring the oil potential in the licence areas and acquiring detailed data on the geological structure of potential prospects to mitigate the exploration risk before making a decision to drill exploration or appraisal wells. In September 2014, we filed an application with the Ministry of the Environment for an onshore oil and gas exploration and appraisal licence covering the Miynary area, together with the related plan of geological operations.

#### Cooperation with PGNiG

As part of expanding operations under onshore licences, a joint operations agreement was executed with Polskie Górnictwo Naftowe i Gazownictwo S.A. concerning the Górowo-lławeckie licence in north-eastern Poland. The cooperation involves the acquisition of a total of 200.4 km of 2D seismic data. Results of the work done are expected to be known in mid 2015. On the basis of those results, a decision will be made whether to proceed with any further work in the Górowo-lławeckie licence area. The objective of the project is to discover potential oil accumulations in Cambrian formations. Cooperation in this licence area is a continuation of the activities initiated under the agreement on cooperation in exploration activities of April 2013.

The cooperation with Polskie Górnictwo Naftowe i Gazownictwo also takes place in the Kamień Pomorski licence in north-western Poland. In 2014, the cooperation consisted in executing e.g. a 3D seismic survey of the total area covering 110 km2. Results of the survey will be assessed in the mid-2015. On the basis of those results, a decision will be taken whether to drill an exploration well in this licence. The objective of the project is to discover potential oil accumulations in the main dolomite formations and potential natural gas accumulations in the red sandstone (Rotliegend) sediments. The basis for all work in the Kamień Pomorski licence is the agreement on joint operations concluded between PGNiG and LOTOS Petrobaltic in 2013.

#### In Norway:

#### • Production from the Heimdal field

Production of gas and condensate from the Heimdal fields (Alta, Vale, and Skirne) continued. Following an overhaul of the Heimdal rig finished in June 2014, the rig's life was extended until 2034, as confirmed by a relevant certificate issued by the Petroleum Safety Authority Norway.

### YME project

Under the YME project, LOTOS Petrobaltic is analysing the possible scenarios of recovering the invested capital. In particular, it is considering an option involving redevelopment of the field.

#### New licence

The company applied for new exploration licences in the APA 2014 licensing round, and won an interest in licence 797, the operator of which is LOTOS Norge.

### In Lithuania:

#### Exploration and production

AB LOTOS Geonafta and UAB Genciu Nafta produced crude oil from the Girkaliai, Kretinga, Nausodis and Genciu onshore fields.

UAB Manifoldas produced oil from Auksoras, Liziai, Veziaciai and Ablinga onshore fields, while UAB Minijos Nafta recovered oil from Vilkyciai, Pietu Siupariai, Degliai, Pociai, Sakuciai, Agluonei and Siupariai onshore fields.

In 2014, the AB LOTOS Geonafta Group focused its geological work on appraisal of the oil potential of the Klaipeda block (owned by UAB Manifoldas). Two exploration and appraisal wells and two production wells were drilled. As one of the exploratory wells proved dry, the project was removed from the list of prospects. Production was launched from the remaining wells.

# Objectives for 2015

The principal strategic goal for the exploration and production segment is to increase the production potential to 24 thousand boe (barrel of oil equivalent) daily (or 1.2m tonnes of crude oil annually) in 2015. The LOTOS Group's plans provide for continuous expansion of operations in the Baltic Sea, the Norwegian Continental Shelf and onshore areas in Poland and Lithuania.

We plan to undertake the following key initiatives as part of our strategy:

#### **Poland**

- Continued production from the B3 field on the Baltic Sea using the PG-1 rig.
- Continued work on the development of the B8 oil field located in the Polish exclusive economic zone of the Baltic Sea with a view to launching commercial production.
- Exploration and appraisal work to assess the Baltic Sea's full production potential.
- Further work to develop the B4/B6 gas fields with a view to launching commercial production.
- Further cooperation with PGNIG to participate in the exploration for and appraisal of conventional and unconventional oil and gas resources under onshore licences. The decision whether or not to drill an exploration well will depend on the results obtained.

### **Norway**

- Development of and production from the fields forming part of the Heimdal portfolio.
- Further steps to recover capital invested in the YME project.
- Evaluation of further asset purchase opportunities in the Norwegian Continental Shelf.

#### Lithuania

- To fully develop our onshore licence areas, a production drilling programme will be implemented.
- Evaluation of possible licence acquisitions in Lithuania.

# Development prospects until 2020

Our key focus until 2020 will be to increase the production potential to approximately 100 thousand boe (barrel of oil equivalent) per day, or 5 million tonnes of oil per year, and to secure approximately 330 million boe of proved recoverable reserves.

In 2016–2020, the development focus will be primarily on Poland, where we plan to appraise the full production potential of the Baltic Sea assets. Concurrently, we intend to intensify our onshore activity. On international markets, we plan to build a sustainable asset portfolio and gradually boost organic growth. We are also considering intensifying production from production fields in Poland and Lithuania using the Enhanced Oil Recovery (EOR) technologies.

The development of our exploration and production segment in 2016–2020 in Poland will involve:

- Continued oil production from the B3 and B8 fields on the Baltic Sea.
- Launch of gas production from the B4 and B6 fields on the Baltic Sea.
- Full appraisal of the hydrocarbon potential of the Baltic Sea assets: completion of the seismic survey programme and drilling of exploration and appraisal wells on promising plays.
- Preparation and execution of projects to develop the Baltic Sea areas with confirmed resources.
- Production from onshore fields, expansion of onshore operations through faster development of oil and gas discoveries.
- Assessment of the possibility to intensify production from the production fields in Poland and Lithuania using EOR technologies.

Key areas of focus of international expansion plans for 2016–2020 are to:

- Carry out projects to develop formations with confirmed resources.
- Acquire production assets and undeveloped assets with confirmed resources which can be brought on stream by 2020.
- Continue and increase production activities in Lithuania, e.g. by developing new prospects with confirmed resources.
- Explore development opportunities in new geographical areas.

### RELATED CONTENT:

# Exploration and production segment

In the Exploration and Production segment, we identify exploration risks, technical and production risks, risks related to exploration and production projects and financial risk.

Go to the page  $\,$  »-http://raportroczny.lotos.pl/en/risk-and-opportunities/exploration-and-production-segment>-

# Glossary of industry terms

Go to the page  $\,$  »-<a href="http://raportroczny.lotos.pl/en/useful-information/glossary-of-industry-terms">http://raportroczny.lotos.pl/en/useful-information/glossary-of-industry-terms</a>

### Awards and distinctions

According to the Chapter of the ninth edition of 'The Best Annual Report' contest, the 2013 Integrated Annual Report of Grupa LOTOS exemplifies a publication based on which investment decisions can be made at a relatively minimal risk.

Go to the page  $\,$  > <a href="http://raportroczny.lotos.pl/en/the-organization-and-its-report/awards-and-distinctions-">http://raportroczny.lotos.pl/en/the-organization-and-its-report/awards-and-distinctions-</a>



Results and prospects > Segment performance > Processing operations

# **Processing operations**

#### STATEMENT

In 2014, Grupa LOTOS continued work to optimise the use of its refining assets. In the refining business, the key challenge is to adjust operations to the current levels of demand and margins prevailing on the market, while keeping operating expenses in check.

#### Marek Sokołowski

Vice-President of the Management Board, Chief Operation Officer, Grupa LOTOS



Given that cost of energy represents the largest item in the refinery's total operating costs, it required a particularly close analysis.

As natural gas prices did not reflect the rapid declines in the price of raw materials and refining products seen in the second half of 2014, active steps were taken in that period to minimise the consumption of natural gas for power generation and hydrogen production purposes. Although gas could not be abandoned completely for contractual reasons, the flexibility in using contracted capacities was fully utilised.

The Company also took steps to further optimise operations of its key refining units. They included higher utilisation of the new crude oil distillation facility, which offers much better performance in terms of energy efficiency than the old crude oil distillation unit. In 2014, a test run was performed, which officially confirmed that the new facility was able to process 585 tonnes of crude oil per hour, without any negative impact on product quality or mechanical integrity. This means that approximately 114% of the nominal processing capacity was reached. As a consequence, by making maximum use of the new oil distillation facility, energy consumption per tonne of crude oil processed by LOTOS was successfully reduced.

To fully leverage the benefits offered by the successful completion of the 10+ Programme, the LOTOS Group planned a number of investment projects. Currently, it is in the final stages of preparation for the construction of a delayed coking unit (DCU) at the Gdańsk refinery, which will directly enhance processing efficiency by discontinuing production of unprofitable heavy fuel oil. Following the project's completion, the annual output of high-margin products will grow by 900 thousand tonnes, and Grupa LOTOS will start manufacturing a new product, coking coal, in annual quantities of approximately 400 thousand tonnes. The DCU is planned to be brought on stream in H1 2018. The Company estimates that the launch of the DCU will add over 2 USD/bbl to its refining margin thanks to increased depth of crude processing and the resultant improved yield structure as well as synergies between the DCU unit and the upgraded and extended refinery.

An important project completed in 2014 was the construction of the Oil Unloading Railway Terminal. In December 2014, the terminal was successfully tested and received final acceptance, which will enable the Grupa LOTOS refinery to process crude transported by rail. The first batch of Polish oil, supplied by PGNiG, was delivered in the same month.

By the end of 2016, Grupa LOTOS also intends to complete a Hydrogen Recovery Unit (HRU). The HRU is designed to increase the output of hydrogen required to intensify the operation of hydro-conversion units, further expanding the refining margin.

In 2014, Grupa LOTOS' total capital expenditure in the processing segment, including on the EFRA Project, was PLN 80.25m.

We also completed investigatory work on the Additional Stage of the Feasibility Study for the petrochemical complex. Analyses were carried out to optimise the Project's configuration and product and feedstock slates, which improved its profitability. The positive results of the study were approved by the Steering Committee in December 2014. The project is profitable and has high NPV and IRR, making it attractive to investors and the banking sector.

The difficult situation on the oil market, a slump in petrochemical product prices in 2014, and price changes resulting from the

shale revolution in the US, mean that the project partners need to first verify their strategic objectives and plans, and adjust them to market conditions.

Given the project's capex and the possibilities of obtaining the required financing by the project partners, it may be necessary to seek additional partners.

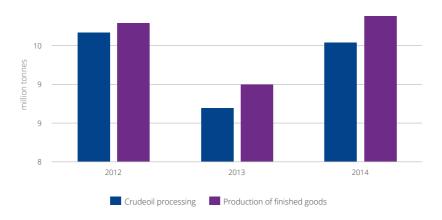
In 2015, Grupa LOTOS will continue to work on a concept for the application of naphtha in the manufacturing of high-margin products.

The LOTOS Group's processing segment comprises the operations of the Gdańsk refinery – our largest production plant, and the subsidiaries involved in production or support functions: LOTOS Infrastruktura with its subsidiary RCEkoenergia Sp. z o.o., LOTOS Serwis, LOTOS Lab, LOTOS Straż, and LOTOS Ochrona.

# Operations in 2014

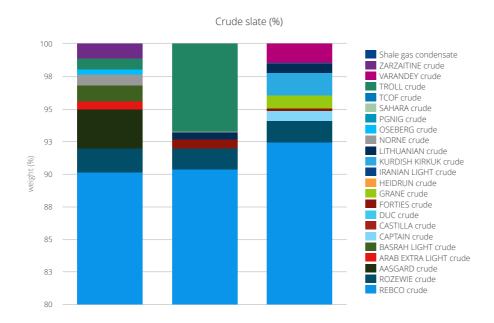
2014 was yet another record year for the Grupa LOTOS refinery in Gdańsk, which processed 9.55 million tonnes of crude oil. The refinery's capacity utilisation rate thus increased to 94.2%, which was largely an effect of high refining margins seen in the second half of the year.

Crude oil processing and production of finished goods at Grupa LOTOS refinery



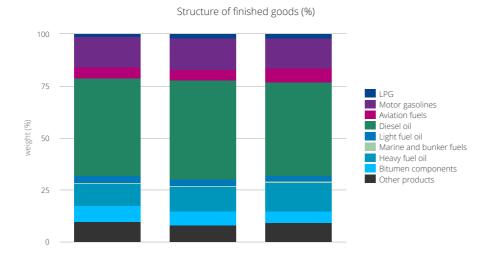
As in previous years, the main type of crude processed was Russian REBCO, whose share in the total volume was close to 92.5% and was higher than in previous years. The increase was largely attributable to the Urals/Brent differential remaining at favourable levels for the most part of 2014.

Crude oil imported by sea, including over 220 thousand tonnes supplied by LOTOS Petrobaltic, accounted for the balance of the crude feed. The choice of crudes for processing was motivated by the production optimisation process, aimed at taking advantage of opportunities for increasing the refinery's processing margins.



The structure of finished goods is driven by pricing levels on the market and demand for individual products. Production of aviation fuel, a product whose prices were particularly favourable in 2014, increased visibly relative to previous years, while less bitumen was manufactured due

to declining domestic demand. As a result, the refinery had to sell most of its heavy fuel oil stocks.



# Research and development

In terms of research and development, the LOTOS Group concentrates primarily on projects geared towards improving its refinery's efficiency and developing technologies for manufacturing special products, which will ensure higher margins on the processing of crude oil, upgrade of existing products and development of innovative products. We also carry out innovative projects involving implementation of advanced techniques for controlling technological units and conduct research related to the development of the upstream segment.

In the past year, research and development activities of Grupa LOTOS were focused on the development of the production technology for Group II oil bases. In 2014, a number of laboratory research projects were carried out to optimise the production technology for the type 350N oil. A research project was also launched to obtain high-purity organic solvents based on crude oil processing distillates. The above research projects will be continued in 2015.

#### STATEMENT

The LOTOS Group runs research and development projects in several key areas, including development and optimisation of refining products and processes, hydrocarbons exploration and production technologies, construction materials technologies (in particular road surface technologies), and solutions for mitigating environmental impact.





In 2014, in Grupa LOTOS research focused on developing niche product technologies which – given their advanced applications – can generate higher margins than mass products. In particular, steps were taken to develop technologies for manufacturing low-sulfur Group II oil bases and high-purity organic solvents.

Especially one new group of products is noteworthy in the LOTOS Group – Warm Mix Asphalts, or WMAs, used in road surface construction. WMAs are manufactured and laid down at lower temperatures, which represents a vital advantage producing measurable financial and environmental benefits. In addition, these asphalts can be successfully applied in adverse climates.

Search for and implementation of new technological solutions and product innovations benefit greatly from cooperation with research and development institutions. Grupa LOTOS has cooperated with key academic centres and industry organizations for many years.

2014 also marked the beginning of projects carried out in large consortia between partners representing science and industry.

Grupa LOTOS executed a partnership agreement for the construction of a hydrogen generation and storage unit using renewable energy sources (RES), which was qualified to receive co-financing from the National Centre for Research and Development. We also have ambitious plans to secure funding under the new EU Financial Framework for 2015-2020. LOTOS Group companies are active members of consortia developing the regional and national Smart Specialisation network. As a result of our efforts, on April 9th 2015 the Local Government of the Gdańsk Province recommended that 'Eco-efficient technologies in production, transmission, distribution and consumption of energy and fuels' be one of the region's four specialisations. In my opinion, this decision represents a vital step towards transformation of our ideas into innovative solutions for the energy segment, and is a great achievement for both the Company and its local partners.

#### **Best practice**

In 2014, Grupa LOTOS and a number of other parties entered into an agreement on the HESTOR project. The project was submitted by a research and industry consortium to the GEKON (Generator of Ecological Concepts) programme and was qualified to receive cofinancing from the National Centre for Research and Development. The consortium includes Grupa LOTOS and GAZ SYSTEM as industry partners as well as AGH University of Science and Technology of Kraków, Ośrodek Badawczo-Rozwojowy Górnictwa Surowców Chemicznych CHEMKOP, the Silesian University of Technology, and the Warsaw University of Technology as research partners. The purpose of the HESTOR project is to assess the viability of storing hydrogen generated using renewable energy sources (RES) in salt caverns and its further use for power-generation or industrial process purposes. An important task will be to perform an economic viability analysis of the project.

The project provides for the production of hydrogen through electrolysis of water with the use of surplus electricity generated by wind farms and solar power plants (RES). Hydrogen produced in that way and stored in salt caverns would be used (thereby enhancing energy efficiency) in:

- Refinery technological processes reducing the need to produce hydrogen from natural gas, and streamlining and optimising the hydrogen and natural gas management processes;
- Power generation as a fuel for gas turbines during electricity peak demand times.

As regards road bitumen production technologies, research work was focused on finding new applications for innovative bitumen products and confirming their usefulness in making durable and environmentally friendly bitumen surfaces. In particular, research work covered the following products and their planned applications:

- Rubber-modified bitumens recommended for low-noise and durable bitumen surfaces;
- Highly-modified bitumens specialised products dedicated to surfaces with very high fatigue-resistance requirements and very high traffic loads and to the so-called 'long-life' surfaces;
- WMA bitumens products with a very wide scope of applications, including the construction of hot-rolled road surfaces, construction of hot-rolled road surfaces in adverse climate conditions (longer construction work season), construction of road surfaces using bitumen granulate from recycled bitumen surfaces.

In 2014, development work was also carried out on oil products manufactured by LOTOS Oil. The most important lubricant-related R&D activities included:

- Development of production technologies for new motor oils for cars (application for approvals implementation in the first quarter of 2015),
- Extension of 72 approvals for lubricants,
- Obtaining of 5 approvals for new oils.

#### RELATED CONTENT:

## Operational (refining) segment

In the operational (refining) sector, we identify operational risks related to the refinery and environmental risks, including risks related to carbon emission caps.

Go to the page  $\,$  »-http://raportroczny.lotos.pl/en/risk-and-opportunities/operational-refining-segment>

## Safe workplace

In accordance with our strategy, safety at work and health protection, with respect to both our own employees and the employees of our cooperating partners, are priorities for the LOTOS Group. In 2014, we achieved a 46% decrease in the accident rate compared to 2013.

Go to the page "  $\sim$  http://raportroczny.lotos.pl/en/results-and-prospects/sustainable-development/safe-workplace>

#### Environment

We seek to reduce the environmental risk of our operations and continually minimise our environmental impact. We support initiatives designed to enhance energy sector security in a socially and environmentally responsible manner.

Go to the page » <a href="http://raportroczny.lotos.pl/en/business-strategy-and-model/environment">http://raportroczny.lotos.pl/en/business-strategy-and-model/environment</a>

## Glossary of industry terms

Go to the page  $\,$  » <a href="http://raportroczny.lotos.pl/en/useful-information/glossary-of-industry-terms">http://raportroczny.lotos.pl/en/useful-information/glossary-of-industry-terms</a>



Results and prospects > Segment performance > Marketing operations

# **Marketing operations**

#### STATEMENT

2014 was another consecutive year in which our share in the fuel market exceeded the strategic target of 30%. We are a key fuel supplier for all international service station chains operating in Poland.

Maciej Szozda,
Vice-President of the Management Board, Chief Commercial Officer, Grupa LOTOS



We have maintained our position in the B2B channel and consistently expanded our share in the retail market. With a restructured B2B customer portfolio and more efficient and intensified non-fuel sales at our service stations, we were able to deliver higher profit margins, both in wholesale and in retail.

The dynamic expansion of our retail chain brought us closer to reaching the strategic target of a 10% market share in 2015. Last year saw completion of the process of phasing out the patronage (DODO) fuel distribution system, replacing it with a more efficient franchise-based model of cooperation with dealers. At the end of 2014, 441 service stations, including 17 motorway service areas (MSA), operated under LOTOS and LOTOS Optima brands.

In 2014, the LOTOS Group maintained the leading position in sales of technologically advanced bitumens despite prevalent stagnation on the road infrastructure market. Our offering was expanded to include cutting-edge bitumen technologies – paving-grade Warm Mix Asphalts (WMA) and highly-modified bitumens. Testament to the quality of our products is the participation of LOTOS Asfalt in Poland's most important investment projects involving construction of motorways and airports. As a pioneer of innovation and responsible partner, the LOTOS Group has been strengthening its competitive position on the road construction market.

We also maintained the leading position on the Polish market for lubricating oils. LOTOS Oil concentrated mainly on improving sales margins through such activities as the restructuring of its product portfolio and distribution channels. In 2014, the LOTOS brand was recognised in the oil product category and awarded the 'Consumer Laurel – Leader of the Decade' title.

In the aviation fuel segment, our market share rose to 26%, up 10pp year on year, in recognition of which we were awarded 'Wings of Success' in the 'Most significant event on the ground handling services market' category by the Warsaw Chopin Airport.

In logistics, the completion and commissioning of the new fuel depot in Poznań, Poland's most advanced facility of this kind, was a particular success. The project is an important element of our consistent efforts to offer competitive customer service quality and strengthen our position in the Poznań Province, which is one of the most important markets for the LOTOS Group in Poland.

We also completed a project to fully automate our road tanker filling operations. It involved the application of homogeneous solutions, resulting in the standardisation of work and improved product release safety.

In 2014, LOTOS Kolej maintained the second position among Polish rail carriers in terms of tonne-kilometres (the company transported over 10.6m tonnes of cargo). It was yet another year in which the share of the haulage services performed by the company for customers outside the LOTOS Group increased. External customers accounted for over 50% of the company's transport volumes.

Despite unfavourable market conditions, 2014 was yet another good year for the marketing segment, bringing us closer to reaching our strategic objectives for 2015.

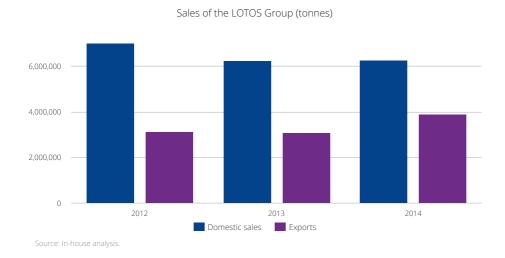
The LOTOS Group's marketing activities in 2014 were carried out by Grupa LOTOS and its subsidiaries: LOTOS Paliwa, LOTOS Oil, LOTOS Asfalt, and LOTOS-Air BP Polska. Grupa LOTOS conducted its marketing business domestically (sales to foreign companies) and through export sales, by sea and by land, while its subsidiaries' production and sales were targeted at the fuel, lubrication oil and bitumen industries.

In 2014, we also provided logistics services through Grupa LOTOS (management of storage capacities) and its subsidiaries: LOTOS Terminale, LOTOS Infrastruktura (management of storage depots and media), and LOTOS Kolej (primary logistics).

# Operations in 2014

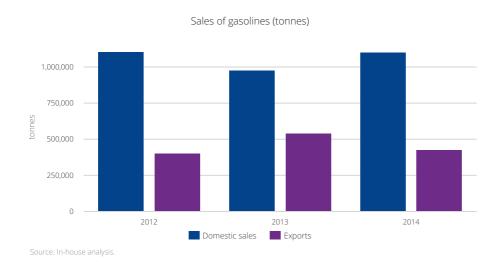
In 2014, the LOTOS Group's share in the fuel market (gasoline, diesel oil, light fuel oil) was 33.1%, and in the retail market – 9%.

The LOTOS Group sold 10.17 million tonnes of products, up 8.9% year on year. The increase in sales was driven chiefly by higher exports, up 26.2%, as domestic sales increased only slightly, by +0.4%. Export sales grew across all product groups, except for bitumens. The year-on year growth in exports was driven by the continued high level of refining margins in 2014, which was conducive to maximising production, and the base effect – in 2013 exports were strongly affected by a maintenance shutdown. The slight increase recorded on the domestic market was directly attributable to higher sales of gasoline and aviation fuel. In 2014, the grey market continued to expand, which translated into another year of declining registered demand for diesel oil.



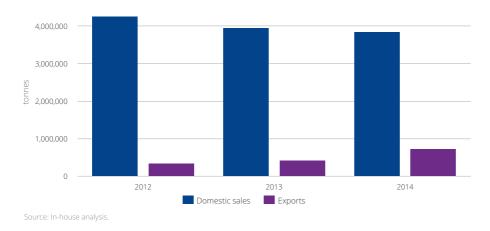
# Sales of motor fuels

In 2014, the LOTOS Group sold 1.5 million tonnes of gasolines, up 0.5% year on year. The gasoline sales structure changed relative to 2013, with sales volumes increasing significantly on the domestic market (up 13%). This was driven by higher demand from international companies and PKN Orlen (due to Orlen's maintenance shutdown in 2014) and the LOTOS Group's policy of dynamic retail chain expansion. Export sales of gasolines fell 22% relative to 2013 as a result of optimised production process and the Company's decision to focus on the domestic market as the more profitable distribution channel.



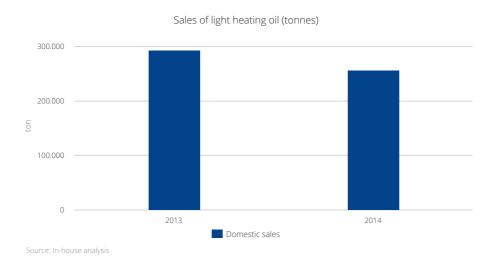
In 2014, total sales of diesel oil increased 4.6% year on year. Export sales grew substantially, by 73%, with the key contributing factors being optimisation decisions and high refining margins, driving increased production of middle distillates. To note, the increase was also attributable to the base effect, as in 2013 the Gdańsk refinery underwent a maintenance shutdown and consequently less diesel oil was produced for export. On the domestic market, the LOTOS Group's sales of diesel oil dropped 2.6% year on year, which followed from continued expansion of the grey market, leading to weaker registered demand.

### Sales of diesel oil (tonnes)



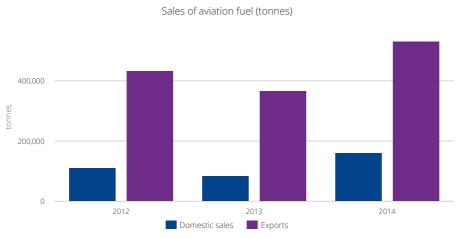
# Sales of light fuel oil

A slide in domestic demand for light fuel oil in favour of alternative heating fuels caused our 2014 sales of the product to shrink 12.5% year on year, to 256 thousand tonnes.



# Sales of aviation fuel

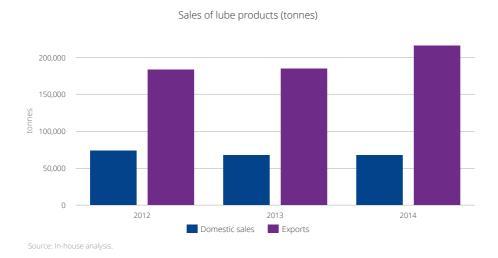
In 2014, the LOTOS Group recorded a 54% increase in aviation fuel sales, with higher volumes sold both domestically and internationally. In Poland, sales grew nearly twofold, by 92%, chiefly due to the consistently pursued expansion on the domestic airport market in the 'into plane' segment. In the same period, export sales were up 45%, driven by optimisation decisions concerning production volumes in excess of the domestic demand. As with other products, higher export sales were also attributable to the base effect.



Source: In-house analysis

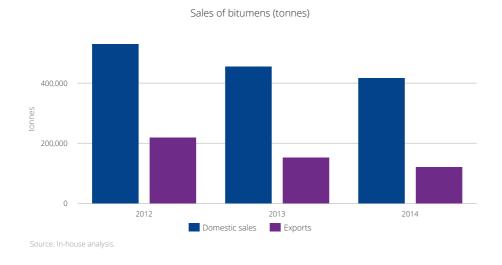
# Sales of lube products

In 2014, the LOTOS Group sold 284 thousand tonnes of lube products, up 12% year on year. The increase was fuelled by export sales, which grew 16% on the back of favourable contracts with international trading companies. The main foreign markets for our lubricating oils were EU countries, as well as countries in Central Asia, the Middle East, and Africa. Sales on the Polish market declined slightly, by 0.8%, and were carried out chiefly through wholesale and direct sales.



# Sales of bitumens

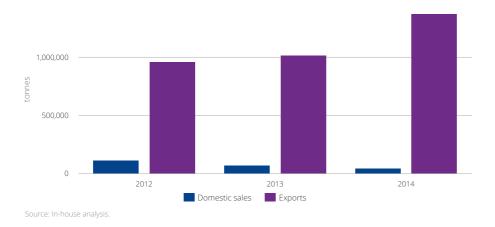
In 2014, total sales of bitumens dropped 11% year on year, with the decline visible both in domestic sales (-8%) and in exports (-20%). The decrease was related to another consecutive year of stagnation on the road infrastructure market, which in turn followed from the fact that investments provided for in the new EU financial framework are currently at the bidding or design stage. Similarly to previous years, in 2014 road bitumen had the largest share in total bitumen sales (75%). The LOTOS Group also offered modified and industrial bitumens. Only road bitumens were exported, chiefly to European countries, including Germany, Lithuania, Switzerland and the United Kingdom.



# Sales of heavy fuel oil

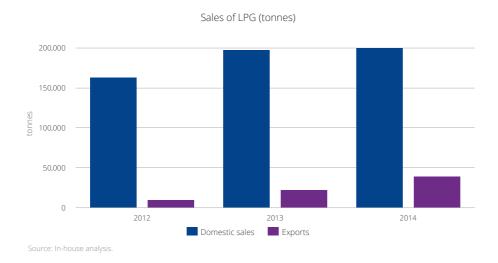
2014 saw a 31% increase in sales of heavy fuel oil, which – next to diesel oil and gasolines – is a key product sold by the LOTOS Group. The increase was attributable to 35.3% higher export sales, driven by the optimisation process, types of processed crude, and overall higher year on year processing output, as well as the base effect. Exports included chiefly sales to international trading companies.

In Poland, heavy fuel oil was sold primarily to power sector companies.



## Sales of LPG

In 2014, for another year running, Grupa LOTOS recorded an increase in LPG sales, which went up by 8%, with sales figures growing both in Poland (+1.2%) and on foreign markets (+71%). High exports were attributable to the optimisation process, the base effect, and the structure of processed crudes. In 2014, the key export markets for the product included Germany and Serbia.



# Logistics

The LOTOS Group consistently adapts its logistics operations to the requirements of its marketing operations and builds an efficient distribution system that meets expectations of its customers, but also helps reduce costs. The purpose of those measures is to build a logistics chain that would function optimally in the constantly changing external and internal environments.

The biggest logistics challenge faced by the LOTOS Group in 2014 was the launch of the fuel depot in Poznań after the completion of upgrade work, and the introduction of self-service fuel collection at all fuel depots of Grupa LOTOS.

The structure of mandatory stocks was optimised to ensure minimum cost of their maintenance, taking into account revenue from the provision of stock ticket service based on the Company's crude oil production capabilities.

In 2014, with a view to improving its logistics assets' efficiency, the LOTOS Group continued consolidation of its fuel terminals. In 2014, construction work was completed on the comprehensive upgrade of Grupa LOTOS Poznań fuel depot, transferred in Q2 2015 to LOTOS Terminale together with the management, operation and distribution activities.

Consolidation of assets in this area is scheduled to conclude in 2016, after the Jaslo fuel depots have been transferred to LOTOS Terminale.

In 2014, work was completed on fully automating road tanker filling operations. The project involved application of homogeneous solutions at LOTOS Group companies, which enabled them to achieve work standardisation and to implement uniform interfaces for the exchange and reporting of data and processes relating to the release of products at its fuel terminals. The project also included implementation of an electronic system for training drivers in self-service road tanker filling. Furthermore, work safety was enhanced at the Gdańsk Fuel Terminal through implementation of a system for reporting times spent by drivers in specified zones of the terminal.

In the secondary logistics area, trilateral agreements were signed with LOTOS Paliwa and carriers, providing for the delivery of fuels to customers all over the country. Currently, LOTOS-Air BP is responsible for the arrangement of supplies of the JET A-1 aviation fuel.

A comprehensive LPG delivery system was developed in 2015 as part of preparations for retail and semi-wholesale sales of LPG by Grupa LOTOS.

Efforts were being made to secure financing for the project involving construction of a petroleum product handling terminal on the Martwa Wisla. When completed, the terminal will handle exports and imports of feedstock components and product loads with unit volumes of up to 5,000 tonnes from Grupa LOTOS own wharf.

# Railway transport

Rail transport of products from the refinery in Gdańsk is a mainstay of the LOTOS Group's production security. Comprehensive services in the area of rail logistics are provided by LOTOS Kolej, a company specialising in such services.

In 2014, LOTOS Kolej provided the following railway services:

- Efficient and safe rail transport all over the country,
- Transport in entire drafts of cars or separate cars,
- Management of railway sidings for the LOTOS Group,
- Maintenance of rail infrastructure,
- Maintenance of rolling stock,
- Eco-friendly cleaning of rail tank cars.

Thanks to its well-developed freight forwarding operations, LOTOS Kolej also ships products by rail abroad.

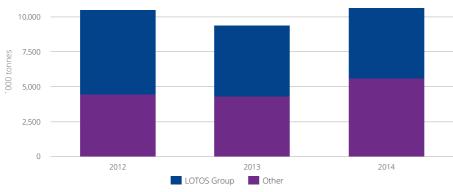
LOTOS Kolej is constantly enhancing its portfolio of transport services, introducing innovative and unique technological solutions supporting and optimising rail logistics. Transport management, including all loading and unloading operations, is controlled by the Rail Logistics System. All LOTOS Kolej's locomotives are fitted with mobile IT systems making it possible to transmit operational data and train documents from any place within the PKP network, which is a pioneer solution in Poland. Trains are monitored in real time using GPS equipment in conjunction with the Operational Work Recording System of PKP Polskie Linie Kolejowe. These solutions enable customers to continuously track their shippings. In 2014, LOTOS Kolej enhanced the functionality of the Rail Logistics System in the customer service area by offering the customers online access to their trade data, including submitted requests for proposal, proposals, orders, balance of receivables, etc. Apart from making additional functions available to the customers, the modernised IT solution also streamlined the work of sales force where it relates to the drafting and approval of documents, which significantly shortened the time required to prepare business proposals.

In terms of using state-of-the-art locomotives, LOTOS Kolej is among top leaders of the domestic market of rail services. In 2014, the company added new six-axle electric E6ACT Dragon locomotives supplied by Newag Gliwice to its fleet. The main advantage of those locomotives, namely their very high tractive force enabling them to pull heavy cargo drafts (up to 4,000 tonnes), is material to increasing the efficiency of the company's transport services. The company also arranged for upgrading some of its shunters. The new locomotives streamlined the execution of contracted shunting and transport services, and contributed to the reduction of fuel cost.

In 2014, LOTOS Kolej increased its market share from 7.76% to 8.87% year-on-year (in terms of tonne-kilometres, based on the Railway Transport Authority's data), thus maintaining the second position among rail cargo carriers. The company also increased its share in the intermodal transport segment (from 14.83% in 2013 to 19.17% at the end of 2014, in terms of tonne-kilometres).

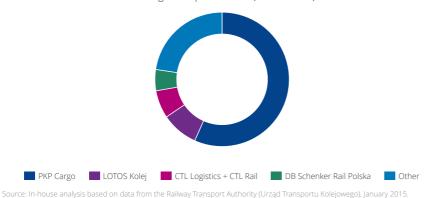
In 2014, the company transported over 10.6m tonnes of cargo. Its performance was significantly driven up by increased cooperation with third-party customers in the area of both domestic and international transport. Another important development was the conclusion of a two-year transport services agreement with PCC Intermodal, valued at PLN 54.4m.

### Transport services performed by LOTOS Kolej (`000 tonnes)



Source: In-house analysis.

# Interest LOTOS Kolej on the domestic market of rail cargo transport in 2014 (`000 tonnes)



In December 2014, the business model of cooperation between Grupa LOTOS and LOTOS Kolej was changed. Grupa LOTOS obtained a safety certificate for the user of a railway siding in Gdańsk Olszynka. Consequently, LOTOS Kolej discontinued railway siding services at this siding and currently provides operator services. LOTOS Kolej's scope of responsibilities includes maintaining traffic at the siding, shunting trains for loading

and unloading, and preparing shipment for transport.

Similar steps are planned to be taken at the LOTOS Group's other railway sidings.

# Sea transport

Freight transport by sea is a vital element of the LOTOS Group's logistics chain. The Company enjoys considerable advantages thanks to lower transport costs resulting from the direct access to product pipelines linking the Gdańsk refinery to the liquid fuel handling facilities at Port Północny. Maritime transport is the Company's main mode of exporting petroleum products and also accounts for a significant portion of deliveries of raw materials and components. 2014 was yet another record year for Grupa LOTOS both in terms of the volume of cargo handled at sea ports and the number of tankers handled at the ports, which for the first time in the Company's history exceeded 370.

The Liquid Fuel Handling Terminal owned by Naftoport is able to handle tankers with a maximum draught of 15 metres and a capacity to load up to 150,000 tonnes of crude oil or petroleum products. This allows Grupa LOTOS to export surplus products and sell them mainly on the markets of Scandinavia, northern and western Europe and the Baltic states. The direct connection to the port also facilitates import deliveries of additional feedstock, including semi-finished products for further deep processing at the Gdańsk refinery, and fuel components. The coastal location allows the Company to respond quickly and flexibly to changing market conditions. Apart from the Naftoport fuel depot, Grupa LOTOS also uses the Maritime Bulk Terminal in Gdynia and the Siarkopol terminal in Gdańsk to handle smaller cargoes.

Grupa LOTOS enjoys the advantage of having a refinery at a short distance from a cargo handling terminal, which allows it to diversify its supply sources and facilitates the shipping of crude oil from the Company's own fields under the Baltic Sea and in Lithuania, and – in the future – crude oil produced from under the North Sea.

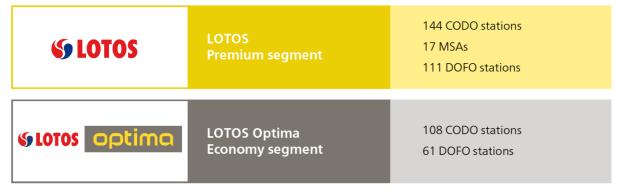
The Company is consistent in its efforts to assume the responsibility for transport in sea freight shipment operations, seeking to control the transport process along as much of the supply chain as possible, from the affreightment of ships to the formal handling of sea transport. This ensures greater control and helps streamline the planning of cargo handling at sea ports, thus allowing the Company to reduce the frequency of ship detention and optimise the related costs.

# LOTOS service stations

In 2014, work continued on expanding the LOTOS chain by adding new company owned (CODO) and franchise operated (DOFO) stations. In both cases, the concept of LOTOS Optima budget stations was also dynamically developed. In line with decisions taken in previous years, the operation of patronage (DODO) retail stations was discontinued completely in 2014.

In 2014, the LOTOS service station chain was the third largest in Poland, after Orlen's and BP's.

### Number of LOTOS and LOTOS Optima service stations at the end of 2014



The expansion of the LOTOS chain and increased efficiency of sales strengthened the LOTOS Group's presence on the retail market, pushing its share up to 9% at the end of 2014 (8.5% in 2013). The current rate of growth in retail sales will enable LOTOS to pursue its strategic goal of achieving a 10% share in the market by the end of 2015.

In 2014, efforts were focused on standardisation of the chain and promotion of a uniform image of the LOTOS brand. Last year the company also completed the long-running process of phasing out the patronage (DODO) fuel distribution system, replacing it with a more efficient franchise-based model of cooperation with dealers.

Efficiency-oriented initiatives were accompanied by expansion of the service station chain based on the LOTOS Optima brand, with 18 new stations added in 2014. The premium segment was also developed, especially with respect to non-fuel services, including catering services and the Navigator loyalty programme.

Other achievements in the service station chain segment in 2014 included:

- Standardisation of the chain and station image;
- Improvement of customer service quality;
- Consistent development of non-fuel services, including the Cafe Punkt concept;
- Implementation of initiatives designed to promote sales at service stations, including introduction of an offering for motorcycle riders (Motorcycle Rider Card Navigator) and large families (discounts on fuels and non-fuel services for holders of the Large Family Card);
- Implementation of the 'LOTOS for the Driver' ('LOTOS dla kierowcy') mobile application.

#### **RELATED CONTENT:**

#### Marketing segment

In the marketing segment, we identify the risk of crude supply interruptions or reduced crude supply, the risk of changes in margins on product sale and the risk of decline in domestic demand.

Go to the page "  $\sim$  http://raportroczny.lotos.pl/en/risk-and-opportunities/marketing-segment>

#### **Brand**

Our strategic goal is to build lasting customer relationships by focusing on understanding customers' needs and ensuring expected product quality and safety. Our ambition is to create a brand that is dynamic and competent, friendly and trustworthy for our customers.

Go to the page » <a href="http://raportroczny.lotos.pl/en/business-strategy-and-model/brand">http://raportroczny.lotos.pl/en/business-strategy-and-model/brand</a>

#### Awards and distinctions

According to the Chapter of the ninth edition of 'The Best Annual Report' contest, the 2013 Integrated Annual Report of Grupa LOTOS exemplifies a publication based on which investment decisions can be made at a relatively minimal risk.

Go to the page > <a href="http://raportroczny.lotos.pl/en/the-organization-and-its-report/awards-and-distinctions">http://raportroczny.lotos.pl/en/the-organization-and-its-report/awards-and-distinctions</a>



Results and prospects > Segment performance > Stock exchange

# Stock exchange

Grupa LOTOS shares have been listed on the Warsaw Stock Exchange since June 9th 2005. In 2005, 78,700,000 ordinary Series A shares with a par value of PLN 1 per share and 35,000,000 ordinary Series B shares with a par value of PLN 1 per share were introduced to public trading under the Issue Prospectus.

Following the issue of Series B shares, on June 28th 2005, an increase in the Company's share capital to PLN 113,700,000 was registered.

The issue price was set at PLN 29. After trading had started, the market price rose to PLN 32, i.e. by 10.34%.

Grupa LOTOS raised proceeds of PLN 1,015,000,000 through the public offering. These were applied towards the acquisition of shares in Rafineria Czechowice (80.04% ownership interest), Rafineria Jasło S.A. (80.01%), Rafineria Nafty Glimar S.A. (91.54%) and Petrobaltic S.A. (69%).

On July 17th 2009, another increase in Grupa LOTOS' share capital was registered after the issue of 16,173,362 ordinary Series C shares covered by a non-cash contribution in the form of shares in LOTOS Petrobaltic, LOTOS Jaslo and LOTOS Czechowice.

In 2014, Grupa LOTOS issued 55,000,000 Series D ordinary bearer shares in a public offering. The issue price of offered shares was set at PLN 18.10 per share. The issue proceeds will be applied towards co-financing of the EFRA Project (i.e. construction of a delayed coking unit at the Gdańsk refinery) and towards the development of the B4 and B6 gas fields in the Baltic Sea.

The total number of Company shares as at December 31st 2014 is 129,873,362.

On January 9th 2015, Grupa LOTOS' share capital was increased from PLN 129,873,362 to PLN 184,873,362, effected through the issue of 55,000,000 ordinary shares.





# Grupa LOTOS share price performance vs. index performance

2014 was a successful year for investors trading on stock markets in the U.S. and South Asia. Key stock exchange indices in the U.S. climbed by over 10%, with S&P 500 and Nasdaq up by 11.4% and 13.4%, respectively. These high rates of return were driven by positive signals from the American economy. However, the highest rates of return in 2014 were brought by equities listed on the Chinese Shanghai Stock Exchange, where the Shanghai Composite Index rose by 52.9%, also on the back of positive information from the Chinese market.

At the same time, global capital shifted away from emerging markets, whose sluggish economic growth, growing political risk, and weaker local currencies discouraged investments (China being the sole exception). Given the geographical location of Poland in the vicinity of Russia and Ukraine and lower liquidity of the stock exchange market, the year saw only slight movements in the WSE indices.

The index of all companies listed on the Main Market, WIG, gained 0.3%, and the annual change in WIG-20 was negative at -3.5%. The lowest rate of return was delivered by the WIG250 small-cap index, which was down 16.8%.

Looking at stock performance by sector, the best-performing WIG-ENERGIA power sector index gained 23.5%, with the WIG-PALIWA fuels sector index up 5.2%.

The RESPECT corporate social responsibility index increased by over 4.4% during 2014.

The price of Grupa LOTOS shares followed general market trends in H1 2014, but later fell sharply when the Board announced plans to issue new

Series D shares. Throughout the year Grupa LOTOS shares traded within the PLN 24.05–40.96 range, and closed the year at PLN 25.50.

In 2014, the average number of LOTOS shares changing hands in a trading session was 203,839, down 11% year on year. The total value of trading in the stock was in excess of PLN 1.6bn, representing 0.7% of total WSE trading, with an average of 851 trades per session.

The Company's market capitalisation as at the end of 2014 was just over PLN 3.3bn.

### **Grupa LOTOS shares**

	2009	2010	2011	2012	2013	2014
Free float shares (million shares)	129.87	129.87	129.87	129.87	129.87	129.87
Price of Grupa LOTOS shares (PLN)						
Low	7.21	25.05	22.26	21.30	32.97	24.05
High	32.80	37.85	49.50	43.78	45.45	40.96
Closing price	31.80	36.35	23.30	41.20	35.45	25.50
Rate of return at end of period (%)	166.11	14.31	-35.9	76.82	-13.96	-28.07
	2009	2010	2011	2012	2013	2014
Trade in Grupa LOTOS shares						
Trading value (PLN m)	3,642.56	3,684.33	3,299.07	2,013.15	2,211.43	1,588.52
Share in trading volume (%)	1.11	0.88	1.31	1.07	1.00	0.77
Average trading volume per session	381,938	234,464	377,048	282,163	229,877	203,839
Average number of trades per session	945	699	967	810	877	851
	2009	2010	2011	2012	2013	2014
Company valuation						
Market capitalisation at end of period (PLN m)	4,130.80	4,720.80	3,026.00	5,351.00	4,603.89	3,311.69
Book value (PLN m)	6,846.20	7,513.50	7,782.40	9,066.40	9,189.60	8,258.50
EV (PLN m)	9,513.72	10,679.70	10,232.00	11,642.30	10,319.79	9,627.39
Valuation ratios						
Earnings per share (PLN)	7.44	5.23	5.03	7.11	0.30	-
P/E (x)	4.27	6.95	4.66	5.80	118.00	-
P/BV (x)	0.60	0.63	0.38	0.59	0.50	0.40

Source: In-house analysis based on WSE and Company data.

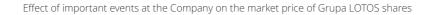
 $<sup>^*\, {\</sup>sf EV}\, ({\sf Enterprise}\, {\sf Value}) - {\sf market}\, {\sf capitalisation}\, {\sf plus}\, {\sf debt}, {\sf non-controlling}\, {\sf interests}, {\sf and}\, {\sf preferred}\, {\sf shares}, {\sf minus}\, {\sf cash}\, {\sf and}\, {\sf cash}\, {\sf equivalents}.$ 

<sup>\*</sup> P/E – Price/Earnings.

<sup>\*</sup> P/BV – Price/Book Value.

<sup>\*</sup> EV/EBITDA – Enterprise Value/EBITDA.







## Grupa LOTOS share price performance vs. index performance in 2014

\* Rebased (100 = closing price at December 30th 2013)



# Dividend policy

Dividend distributions under the 2011–2015 business strategy depend on the optimisation of the financing structure of the LOTOS Group. Grupa LOTOS' financial strategy provides for distribution of up to 30% of net profit as dividend.

The Grupa LOTOS Board proposed to fully cover the 2013 net loss of PLN 14,774,128.10 from the Company's statutory reserve funds.

Taking into consideration the Board's proposal, on June 30th 2014, the General Meeting resolved to fully cover Grupa LOTOS' 2013 net loss of PLN 14,774,128.10 from the Company's statutory reserve funds.

#### Dividend and dividend yield (PLN)

Financial year	Dividend	Dividend per share	Share price at year end	Dividend yield
2005	0.0	0.0	44.2	-
2006	40,932,000.0	0.4	49.3	0.7
2007	0.0	0.0	44.5	-
2008	0.0	0.0	12.0	-
2009	0.0	0.0	31.8	-
2010	0.0	0.0	36.4	-
2011	0.0	0.0	23.3	-
2012	0.0	0.0	41.2	-
2013	0.0	0.0	35.5	-

Source: In-house analysis based on Company data.

#### Historical dividend per share

Financial year	Dividend per share	% of net profit	Dividend record date	Dividend payment date
2005	0.0	0.0	-	-
2006	0.4	10.1	Jun 11 2007	not later than Jul 31 2007
2007	0.0	0.0	-	-
2008	0.0	0.0	-	-
2009	0.0	0.0	-	-
2010	0.0	0.0	-	-
2011	0.0	0.0	-	-
2012	0.0	0.0	-	-
2013	0.0	0.0	-	-

Source: In-house analysis based on Company data.

# Brokers' recommendations on Grupa LOTOS shares

Recommendations on Grupa LOTOS shares are issued by 16 investment houses (including brokerage houses and investment banks):

Based in Poland	Based abroad
Citi	Deutsche Bank
DM mBanku	Erste Bank
DM BZ WBK	Raiffeisen Centrobank
DM BOŚ	Societe Generale
DM PKO BP	Wood & Co.
DM BDM	
DI Investors	
Espirito Santo Investment Bank	
ING Securities	
Ipopema Securities	

<sup>\*</sup> Dividend yield – dividend per share to price per share.

<sup>\*</sup> Dividend record date – the date on which the list of shareholders entitled to receive dividend for a given financial year is determined.

 $<sup>^{*}</sup>$  Dividend payment date – the date on which dividend is paid to the Company's shareholders.

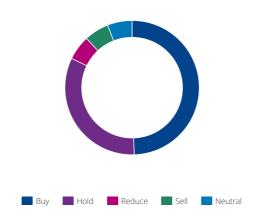
To the Company's knowledge, brokers issued 18 recommendations on the Company shares in 2014:

- 9 BUY recommendations
- 6 HOLD recommendations
- 1 REDUCE recommendation
- 1 SELL recommendation
- 1 NEUTRAL recommendation.

In addition, two brokers initiated coverage of Grupa LOTOS.

- \* BUY total expected rate of return will exceed 15% in 12 months
- $^{*}$  HOLD total expected rate of return will be between -5% and +5% in 12 months
- \* REDUCE total expected rate of return will be between -5% and -15% in 12 months
- \* SELL total expected rate of return will be more than -15% in 12 months

Structure of broker recommendations on Grupa LOTOS shares in 2014



The target price of Grupa LOTOS shares in brokers' research reports fluctuated from PLN 25.80 to PLN 54.07, compared with PLN 29.50 to PLN 56.30 in 2013. The average target price in 2014 was PLN 37.90 (2013: PLN 37.70).

 $Grupa\ LOTOS\ shares\ traded\ within\ the\ range\ from\ PLN\ 24.05\ to\ PLN\ 40.96.$  The\ year-end\ closing\ price\ in\ 2014\ was\ PLN\ 25.50.



# \* Simple moving average - arithmetic mean price target on the recommendation for 12 months (excluding renovation of recommendations older than 6 months).

# Grupa LOTOS in the RESPECT Index

On November 19th 2009, the Warsaw Stock Exchange launched the first Central and Eastern European index of socially responsible companies – the RESPECT Index (Responsibility, Ecology, Sustainability, Participation, Environment, Community, Transparency). The index was designed to promote responsible management among listed companies and investors, encouraging the development of a socially responsible investment market in Poland.

Grupa LOTOS has been continuously included in the index since its inception, and each of the values included in the 'RESPECT' name is reflected in the Company's everyday business practices.

The RESPECT Index is composed of WSE-listed companies which meet the compliance criteria in the area of corporate governance, information policy and investor communication. This is consistent with global trends, which assume that transparent reporting of environmental, social and corporate governance data positively affects a company's valuation.

As of the beginning of 2014, the rules governing admission to the RESPECT Index and the frequency of surveys have changed. At present, the verification process covers three areas – environmental, social and governance, and the index is updated once a year. The RESPECT Index constituents are chosen from among the largest companies listed in the WIG30, mWIG40 and sWIG80 indices, but in its new form, the Index is also open to foreign companies.

The Company's responsible approach to business and policies based on ethical values allow Grupa LOTOS to gain the trust of its neighbours, customers, trading partners and shareholders. For our stakeholders, continued presence in the prestigious RESPECT Index is proof that Grupa LOTOS operates in compliance with the highest standards and minimises investment risk.

#### Areas reviewed in the RESPECT Index qualification process:

Environmental:	Social:	Governance:		
<ul> <li>Environmental management</li> <li>Environmental impact mitigation</li> <li>Biodiversity</li> <li>Environmental aspects of products and services</li> </ul>	<ul> <li>OHS</li> <li>HR management</li> <li>Supplier relations</li> <li>Dialogue with stakeholders</li> <li>CSR reporting</li> </ul>	<ul> <li>Strategic management</li> <li>Code of conduct</li> <li>Risk management and misconduct risk management</li> <li>Internal audit and control system</li> <li>Customer relations</li> </ul>		

In 2014, Grupa LOTOS underwent an external review of compliance with the index's criteria. Since December 18th 2014, we have been included in the 8th RESPECT Index, which is composed of a record-breaking number of 24 companies.

#### RELATED CONTENT:

# Ethics and corporate governance

The key objectives of Corporate Governance at Grupa LOTOS are to guarantee the transparency of its operations as a listed company, build trust in its relations with stakeholders, ensure openness and consistent building of shareholder value. In our activities in this area, we are guided by the system of values defined in the LOTOS Group's Code of Ethics and in the Code of Best Practice for WSE Listed Companies.

Go to the page  $\,$  > <a href="http://raportroczny.lotos.pl/en/ethics-and-corporate-governance-">http://raportroczny.lotos.pl/en/ethics-and-corporate-governance-</a>

### Shareholding structure

The State Treasury holds ordinary bearer shares in Grupa LOTOS representing 53.19% of its share capital and the same proportion of voting rights at its GM whereas 8.6% of Grupa LOTOS share capital belongs to ING OFE. In 2014, the remaining 38.21% of the share capital was free float.

#### Key objectives

We achieve our business objectives with due regard to corporate social responsibility and sustainable development by the best possible use of the organization's resources and capabilities to generate economic and social value for the benefit of the Company and its

Go to the page " <http://raportroczny.lotos.pl/en/business-strategy-and-model/key-objectives>



Results and prospects > Sustainable development

# Sustainable development

#### Responsible employer

Our training policy is based around longterm, consistently implemented development plans. In 2014, we celebrated the tenth anniversary of the LOTOS Academy, our comprehensive employee training and development project, which is highly valued in the world of science and business.

Go to the page » <a href="http://raportroczny.lotos.pl/en/results-and-prospects/sustainable-development/responsible-employer">http://raportroczny.lotos.pl/en/results-and-prospects/sustainable-development/responsible-employer</a>

#### Safe workplace

In accordance with our strategy, safety at work and health protection, with respect to both our own employees and the employees of our cooperating partners, are priorities for the LOTOS Group. In 2014, we achieved a 46% decrease in the accident rate compared to 2013.

Go to the page » <a href="http://raportroczny.lotos.pl/en/results-and-prospects/sustainable-development/safe-workplace">http://raportroczny.lotos.pl/en/results-and-prospects/sustainable-development/safe-workplace></a>

#### **Environmental impact**

Our carbon emissions were reduced to levels seen only at the best European refineries. Grupa LOTOS refinery's advanced environmental solutions have curbed our environmental impacts while delivering notable financial benefits, in the form of lower fees for the use of the environment, resulting from our commitment to reducing the amount of emitted pollutants.

Go to the page » <a href="http://raportroczny.lotos.pl/en/results-and-prospects/sustainable-development/environmental-impact">http://raportroczny.lotos.pl/en/results-and-prospects/sustainable-development/environmental-impact</a>

#### Social impact

2014 was outstanding in terms of the number of CSR programmes and campaigns as well as activities undertaken by the LOTOS Group under the cross-sectoral cooperation model. It was also a period of initiatives aimed to establish a responsible supply chain.

Go to the page » <a href="http://raportroczny.lotos.pl/en/results-and-prospects/sustainable-development/social-impact">http://raportroczny.lotos.pl/en/results-and-prospects/sustainable-development/social-impact></a>

#### **Energy security**

An example of best practice which combines building our international relations with supporting initiatives aimed to improve the energy security in Europe was the publication of the 'Completing Europe - From the North-South Corridor to Energy, Transportation and Telecommunications Union' report in 2014.

Go to the page » <a href="http://raportroczny.lotos.pl/en/results-and-prospects/sustainable-development/energy-security">http://raportroczny.lotos.pl/en/results-and-prospects/sustainable-development/energy-security></a>



Results and prospects > Sustainable development > Responsible employer

# Responsible employer

Ø Data has been verified → See full text of the Independent Assurance Report

In line with the key objectives of our corporate social responsibility strategy for 2014, we continued to secure highly qualified employees in a number required to successfully implement the LOTOS Group's business strategy, and worked on improving our organizational culture based on adopted values.

#### STATEMENT

Enhancing our corporate culture based on adopted values is one of the main objectives of our CSR strategy for 2012-2015. To a large extent, its implementation relies on the conclusions and opinions of our staff, for instance those gathered during the 2013-2014 employee engagement and satisfaction survey performed at the LOTOS Group, which was a valuable source of information.

Iwona Stankiewicz-Dąbek
HR Processes Team Manager, Grupa LOTOS



The aim of the survey, carried out using Aon Hewitt's methodology, was to learn about the employees' opinions and attitudes and to monitor their satisfaction and engagement to create a work environment that would facilitate the achievement of business objectives.

The survey results allowed us to see our strengths and weaknesses and to prepare Improvement Plans for all LOTOS Group companies with a view to raising staff efficiency in the long run. The survey and the Improvement Plans are conscious efforts to create an organization based on modern management practices and owing its competitive edge to the ability to optimally harness and channel its employees' commitment. The Plans are being implemented in accordance with the rules worked out together with the employees and management staff.

As the scores for employee engagement achieved in the survey were high (65% on average), i.e. typical of the group of best employers, our current actions are focused on improving communication in teams and executing action points related to e.g. enhancing processes or perfecting management skills.

Steps taken in 2014 to meet the stated objectives:

HR Portal – For the first time, in Grupa LOTOS we conducted an employment planning process using solely electronic applications submitted through the newly launched self-service portal for employees and managers (SAP HCM). The The system allows applicants to follow the progress of their applications, while providing HR staff with easy access to all documents and ability to monitor staff requisitions. The HR Portal will also feature tools for i.a. employee assessment combined with training session planning, currently under construction.

Website www.kariera.lotos.pl – With prospective employees in mind, we improved our professional website, www.kariera.lotos.pl, presenting Grupa LOTOS as a prospective employer and informing candidates about the recruitment process, internship and work placement opportunities, cooperation with universities and schools, as well as ways of applying for jobs or internships. To meet the needs of our target audience, we introduced state-of-the-art and friendly forms of communication with candidates such as a modern video presentation preparing them for filing their job applications, or a film entitled 'LOTOS – Dynamic people – PROCESS OPERATOR' familiarising candidates with the most commonly offered post at the Company.

Social media – To establish the Company's image as a sought-after employer, we have created a professional account on LinkedIn, a business-oriented social networking site. In addition to image promotion, the website is used to inform candidates of specialist recruitment processes,

supporting our search for employees with the expertise required to meet our business objectives. Furthermore, to enhance our positive image as a future employer among university students from Gdańsk, Sopot and Gdynia, who will enter the labour market within the next few years, we have partnered with a student organization AIESEC, e.g. by participating in the Aim.Act.Achieve conference. A LOTOS ambassador was appointed from among the students and a Facebook fan page 'Start with LOTOS' was launched to promote the Company and liaise with the student community.

**E-recruitment** – To ensure that our employees possess the required skills, we consistently raise our recruitment standards. In 2014, we continued to develop the e-recruitment system first deployed in 2012, which has increased the impartiality and efficiency of recruitment processes across the LOTOS Group. We also prepared a Recruitment and Selection Standards Handbook for the heads of organizational units looking to hire new employees, developed a Hiring Roadmap and implemented the Code of Best Recruitment Practice related to our participation in the Coalition for Friendly Recruitment. Thanks to these efforts, Grupa LOTOS received a Friendly Recruitment Zone certificate.

Good Start for Beginners – honing our induction programme. Following a name contest among employees, our training programme for new employees was renamed 'Good Start for Beginners' and launched with a fresher formula and new visual identity. We also continued to take steps to fill undesirable vacancies as soon as possible and accelerate employee induction, and modified the induction training curriculum to include issues related to corporate social responsibility and our Code of Ethics. In addition, an Induction Programme for new hires was implemented at further companies, i.e. LOTOS Paliwa, LOTOS-Air BP and LOTOS Ochrona.

The Good Start for Beginners programme was also an example of successful involvement of staff members aged over 50, who were given an opportunity to share their experience and expertise as mentors of newly hired employees or lecturers at internal training sessions. Initiatives designed to make our senior staff more active are an element of our corporate social responsibility strategy. We seek to promote a knowledge sharing culture, drawing on the expertise of employees aged over 50 and involving them in the professional advancement of other staff. The strategic indicator showing the utilisation of the potential of such employees was 4.6% in 2014, having risen from 4% in 2012.

Improving HR policies – To retain the most valuable talent, we perform systematic reviews of terminations and eliminate those attrition factors which are within our control. As part of our efforts to improve the incentive scheme, in 2014 we mapped all jobs and positions within Grupa LOTOS. Individual positions were assigned to universal pay grades, which in the future will enable a comparison of salaries and wages offered by Grupa LOTOS with those earned elsewhere in Poland, thanks to the largest domestic pay database maintained by Hay Group, one of the world's top HR consultancies.

**Professional development** – Grupa LOTOS continued to focus on systematic development of staff's specialist knowledge. The staff were given opportunities to gain or expand their expertise and job qualifications based on the 2014 Employee Training Plan, prepared with reference to the objectives and targets agreed during the latest periodic employee evaluation, taking into account the findings of the recent employee satisfaction and engagement survey. Costs of specialist training and postgraduate education of employees were fully financed by Grupa LOTOS. We also covered 50% of costs of employees' studies at higher education institutions, taken up to complement their education, and 50% of costs of foreign language courses, if the command of a given language was recommended in a given position. On average, there were 3.5 days (28 hours) of training per employee annually, with training costs totalling about PLN 1,600 per person and a ratio of training expenditure to employee pay at 1.7%.

As a socially responsible business, we attach great importance to the protection of human rights, which is why human rights issues are often addressed during training sessions for newly hired employees and periodic health and safety drills. In 2014, Grupa LOTOS provided 473 hours of lectures on human rights protection policies and procedures applicable to its operations, which were attended by 15.5% of all employees. In total, the LOTOS Group provided 1,964 hours of such courses, covering 18.5% of all employees (excluding LOTOS Petrobaltic subsidiaries). At LOTOS Ochrona, the LOTOS Group company responsible for security services, the courses on human rights were attended by 85% of all staff in 2014.

#### Average annual number of training hours per person, by Grupa LOTOS employment category

Employment category	2012	2013	2014
Senior management	41.9	43	44 ⊗
Lower management	42.8	43.7	48 ⊘
Back-office staff	25.8	25.4	30 ⊘
Production staff	17.7	12.1	19.3 🕢

# Average annual number of training hours in Grupa LOTOS, by sex

Sex	Year	Number of employees	Number of training hours	Average number of training hours
Women	2012	417	11,096	26.6
Men	2012	932	21,936	23.5
Women	2013	416	12,039	28.9
Men	2013	929	17,811	19.2
Women	2014	420	12,084	28.8 ⊘
Men	2014	930	25,300	27.2 ⊘

**LOTOS Academy** – an in-house training and development programme designed to improve the various competencies of our employees, identify and develop talent across the organization, disseminate expert knowledge and foster increased involvement and job satisfaction. Under the LOTOS Academy training schedule, i.a. staff's interpersonal, communication, negotiation, management, IT and language were being developed.

- The training and skill raising activities carried out under the LOTOS Academy project were focused on individual development plans of participants of the LOTOS Group Succession Programme. The preparation of Successors guarantees that the LOTOS Group's business strategy will be successfully delivered by ensuring continuity of management in key positions, clearly defining promotion paths and reducing the risk of choosing the wrong candidates for promotion. In 2014, we coordinated the selection of forms and methods of Successors' development in line with the awarded development vouchers. In addition, the Successors' individual development plans were being monitored and revised. Tutors were supported in coaching their Successors, and the staff bulletin presented participants of the Succession Programme, their approach to personal development and to subordinates, motivation, passions and commitment thus promoting good role models and professional advancement among the LOTOS Group employees.
- In 2014, we launched the 2nd edition of the **Master Programme**. Its purpose is to establish uniform methods of selecting, preparing and training candidates for the position of supervisors at production plants. We carried out workshop sessions with production unit heads and supervisors to determine a set of desirable qualifications for the position of a supervisor, based on which the heads selected candidates to participate in an assessment performed by the Development Centre, marking the first, selective stage of the Programme. The currently implemented 2nd, fine-tuned edition of the MASTER Programme:
  - · makes it possible to assess employees' potential and prepares those with the greatest potential for the position of a supervisor,
  - contributes to development and enhancement of standards of recruiting and training of future supervisors,
  - is a perfect instrument fostering employee motivation,
  - promotes integration of participants working in different production units.
- We coordinated the 2nd edition of the LOTOS Kolej Managers Academy programme. The programme helps the company's management identify the potential of its employees, provides them with an incentive to develop the competences essential from the employer's point of view, contributes to increasing employees' productivity and helps to better prepare them for assuming key positions with the company.
- At LOTOS Ochrona, the Manager as Team Leader programme was implemented, aimed at developing soft skills in the management of a
  diversified team, teaching effective management techniques to overcome the problems of group work, including any difficulties related to
  motivation, enforcement, and establishment or maintenance of the leader's authority.

#### **Best practice**

Our training policy is based around long-term, consistently implemented development plans. In 2014, we celebrated the tenth anniversary of the LOTOS Academy, a comprehensive employee training and development project, whose goal is to create a partnership-based team while building a modern, efficient and competitive organization. The LOTOS Academy's goal is to improve the staff's competences in various fields, to identify and develop talent, to disseminate expert knowledge and to foster a culture conducive to increasing the staff's satisfaction and involvement.

This initiative is highly valued in the world of science and business. The LOTOS Academy's key feature is its availability to all employees of the LOTOS Group who express an interest in the programme (*Training Schedule*). Moreover, staff development is a continuous and consistent process, linked with the Periodic Employee Evaluation System, career paths, development programmes for individual professions and succession plans. Also, our long-term programmes are flexible, allowing us to respond to changes in the Company's business environment and to meet new requirements for staff qualifications.

Our training and development programmes are consulted with renowned authorities, members of the LOTOS Academy Scientific Council, including Prof. Jerzy Hausner, Prof. Witold Orłowski, Prof. Janusz Rachoń, Dr. Mirosław Gronicki, Prof. Wojciech Rybowski, Dr. Jan Szomburg, and Prof. Edmund Wittbrodt.

To celebrate the tenth anniversary of the LOTOS Academy, in 2014 the Board of Grupa LOTOS, the LOTOS Academy Scientific Council and the LOTOS Group's management staff were presented a summary of staff training and development activities in the period. The anniversary was an opportunity to present changes in the staff training and development process and the role of human resources within the organization. The event participants attended a lecture of Prof. dr hab. Jerzy Hausner, member of the LOTOS Academy Scientific Council, entitled 'Factors affecting the value of a company'.

Periodic Employee Evaluation – In 2014, we implemented a new, uniform Periodic Employee Evaluation System for most of the LOTOS Group companies. The system covers: evaluation of key competences and those related to management and specialist positions, evaluation of progress and setting of professional and development objectives, training schedule and final evaluation. The new Periodic Employee Evaluation System is an internally developed element of the SAP HCM programme, which facilitates monitoring of the evaluation process and provides for advanced reporting and analysis of results. Thanks to modern IT solutions, electronic document circulation was introduced for the purposes of the Periodic Employee Evaluation and employees were granted access to an electronic evaluation sheet on the HR portal. In 2014, the evaluation schedule was aligned across the LOTOS Group, with the process now scheduled for the third quarter and is closely linked with planning training. In connection with the introduction of the new model, we provided training to 4,000 employees, who were either subject to the evaluation or were the evaluators. In addition, handbooks were distributed to participants of the evaluation process and an instructional video was shown to assist them in performing the evaluation. Periodic evaluation at the LOTOS Group is performed with respect to all employees working under employment contracts whose length of service in a given organizational unit at the time of the evaluation is at least six months. Persons performing the evaluation must likewise have at least six months' experience in a given position.

#### Employees covered by the Periodic Employee Evaluation System in 2014 (%)

Grupa LOTOS	
Women	27.71* ⊘
Men	64.92 ⊘
Total	92.63 ⊘
LOTOS Group **	

Women 21.94 ⊗

Men	69.95 ⊘
Total	91.89 ⊘

<sup>\*</sup> The reason for the significantly lower percentage of evaluated women compared with men is the employment structure at the Company and a large number of maternity leaves in the reporting period.

#### Employees actually evaluated vs. covered by the Periodic Employee Evaluation System in 2014 (%)

Grupa LOTOS	
Women	96.65 ⊘
Men	98.10 ⊘
LOTOS Group	
Women	97.81 ⊘
Men	97.77 ⊗

The new Periodic Employee Evaluation System was audited to eliminate any irregularities resulting from its incorrect design or inadequate preparation of the evaluators or evaluated employees. The results of the audit will also identify possible areas for improvement in the future. Also, an opinion survey on the system was conducted among the management staff, which will help to further improve the Periodic Employee Evaluation System to meet the needs of our business.

Continuity of employment and measures to facilitate retiring – the LOTOS Group provides adequate conditions for effective development and practical application of the knowledge and skills required of all employees throughout their employment. All employees, irrespective of their age and time of planned retirement, are offered opportunities to take part in training designed to help them acquire and enhance their knowledge and professional qualifications, and develop general skill sets. The base monthly salary of employees who decide to retire within two years prior to their acquisition of pension rights can be raised by 8.5% under a relevant amendment to employment contracts. Moreover, retiring employees are entitled to a one-off cash severance payment, in an amount depending on their length of service. This cash payment may range from an amount equal to an employee's monthly pay when their length of service is up to 15 years, to 500% of the base pay amount if the employee has worked for 35 years. Former employees of the LOTOS Group are associated within the Senior Employees and Pensioners Club, which has been active for 30 years, funded by the Board of Grupa LOTOS. Twice a year, the Club's board organizes trips around Poland and to other regions of Europe for its physically active members, giving them an opportunity to visit new places while promoting a healthy lifestyle. Former employees are also provided with medical care and social benefits.

The EFRA Staff – in 2014, we began to prepare the EFRA Staff Programme. Its purpose will be to acquire properly qualified employees to complete the objectives of the EFRA (Effective Refining) operational excellence project, implemented as part of Grupa LOTOS's wider Effective and Rising Programme. The programme is scheduled for 2015–2017. In connection with the planned extension of our refinery in Gdańsk, it is expected that new employees will be hired from the external labour market and some employees will be transferred within the LOTOS Group to support the preparation and implementation of the project and ensure the refinery's continuous operation.

**Development of the B8 field** – in 2014, LOTOS Petrobaltic started recruiting employees for the new production centre in order to build in good time their competence, enable them to acquire adequate training, experience and required mining supervision. An additional element of the staff's competence building is training they are offered on operating new installations. Thanks to the close cooperation with suppliers of equipment and services in the upstream sector, the company's employees can regularly visit the suppliers' premises where they can make themselves familiar with latest equipment and new technologies. Apart from that, in 2014 staff were hired for performing work on the newly-purchased 'LOTOS Petrobaltic' platform during the time when three platforms are operated simultaneously as well as efforts were started to build up the staff necessary to work on the 'Petrobaltic' platform after its conversion is finished as a crucial element of implementing the strategic project in the upstream area which is the development of the B8 field.

LOTOS service stations – LOTOS service stations are an element of the LOTOS Group's corporate social responsibility strategy. Members of their personnel are LOTOS ambassadors in relations with the outside world, even though they are not LOTOS employees. In order to exert a positive influence on the employment practices, incentives and value-based work ethics at LOTOS service stations, in 2014 we executed a plan of initiatives to support their processes of recruitment, provision of incentives and fostering of a proper work culture. We developed profiles for a sales assistant and station manager, which – combined with the adopted standards for job interviews and training for area managers – facilitates the process of recruitment and selection of individuals working for a service station. The www.lotos.pl <a href="https://www.lotos.pl">https://www.lotos.pl</a> website provides clear information on how to apply for work at our service stations. We provided training to area managers, management staff and sales assistants on professional customer service. In 2015, we plan to provide e-learning courses to service station staff.

 $<sup>^{\</sup>star\star}$  Excluding LOTOS Kolej, where the new evaluation model is to be implemented in 2016.

#### **Best practice**

In 2014, we carried out a programme entitled 'One Day at a Service Station', under which each employee of LOTOS Paliwa worked at a service station for one day, participating in customer service, encouraging customers to buy products, replenishing stocks, and assisting in the operation of fuel dispensers, which stressed the importance of work performed at a service station. The nature of work performed by employees of the LOTOS Group's subsidiary responsible for the LOTOS service stations is very diverse – their duties include management of the LOTOS service station chain and customer service (retail sale and wholesale, fleet programme management, development of uniform customer service standards, etc.). People who do not work directly at a service station do not have enough insight into the challenges of customer service and the key purpose of the company's business. Meanwhile, the service stations are an important part of the LOTOS image in its relations with the general public. A good practice is to improve employees' qualifications and create opportunities for them to better understand the nature of the company's core business. Employees participate in the programme to gain new experience, get a fuller picture of the company's business and better understand the relations between different functions within the organization and how they influence the service stations.

In 2014, 216 employees took part in the 'One Day at a Service Station' programme. In a survey carried out among its participants, as much as 85% of them admitted it had improved their knowledge on the operation of service stations and work of station personnel. Also, more than a half of the employees supported the idea of repeating the programme in future years.

Volunteering – In 2014, we expanded our programme of volunteer work through one-off initiatives. Under the 'Chronimy NATURE, na Wyspie Sobieszewskiej' ('Protect the Wildlife of the Sobieszewo Island') project, we organized a clean-up of the Mewia Łacha reserve carried out by volunteers from among the LOTOS Group's employees. More than 50 employees and their families cleaned the area from rubbish thrown out by the sea and left on the shore by tourists. The initiative covered renovation of certain facilities, including the viewing tower and information boards along the educational trail. 2,400 litres of rubbish were collected and fencing was set up around protected areas which are habitats of sandwich tern (Sterna Sandvicensis) and common ringed plover (Charadrius hiaticula). We also continued the 'Nakrecony LOTOS' ('LOTOS Collects Screw Caps') initiative, which reached beyond the LOTOS Group's premises. Plastic screw caps are now collected at 20 venues, including schools, pre-schools, cultural centres and stores, and full bags of them are delivered to Grupa LOTOS in Gdańsk. In 2014, we managed to collect 7,500 tonnes of caps, and proceeds from sale of the plastic were transferred to the account of our female employee's grandson suffering from incurable muscular dystrophy.

# Working environment

The LOTOS Group ensures that all its employees, whether working on an open-ended or fixed-term basis, full time or part time, are offered the same package of fringe benefits guaranteed by the Collective Bargaining Agreement for Grupa LOTOS employees and by the Rules of Participation in the Company Social Benefits Fund. The Collective Bargaining Agreement covers 95.6% of the Grupa LOTOS employees. The remaining employees are part of the Company's top management, whose terms of employment and remuneration are agreed individually with the Company's Board, in consideration of the applicable labour laws. All companies of the LOTOS Group have their own Collective Bargaining Agreements or Remuneration Policies identical with the relevant provisions of the Collective Bargaining Agreements, with the percentage of staff covered by these documents ranging between 99.5% and 99.9%.

Owing to the fact that Grupa LOTOS has in place a Collective Bargaining Agreement, the employment and payroll rules and the contents of individual employment contracts are set out in an act based on a consensus reached more than ten years ago by the employer and employees. An advantage of that framework is the ability to adjust the agreement to the changing environment. Among other things, the Collective Bargaining Agreement prescribes a procedure for changing the remuneration amounts. It was agreed that every year a possible pay raise would be determined by mutual agreement, but the unions agreed to negotiate any such pay raise taking into account the employer's capabilities in a given period. This provision ensures a high degree of social security and confidence, which are key elements of collective labour law. In 2014, after a series of consultations, in view of the macroeconomic situation the parties agreed not to change the remuneration amounts.

As part of the dialogue at Grupa LOTOS, an important practice is to hold monthly meetings with the Employee Council, which ensures that a notice period of at least 30 days is given for any information that needs to be consulted, as is the case with trade unions.

Under the Collective Bargaining Agreement, as part of the health plan financed by the employer, every employee can take advantage of additional medical care provided by private healthcare institutions, and of dental care. All parental leaves for mothers and fathers and additional parental leaves are granted in accordance with legal regulations.

## Parental leaves at Grupa LOTOS

	Number of employ	ees who took parental leave	Number of employees wh work after	no returned to parental leave	Number of employees whose employment was terminated within twelve months after return to work	
Year	Women	Men	Women	Men	Women	Men
2012	19	2	14	2	-	-
2013	22	0	17	0	0	0
2014	26	2	18	2	0	0

We offer other social support in the form of loans, allowances, and partial financing of holidays for employees and their children. In addition, Grupa LOTOS offers gym and sports club membership cards under the Benefit Programme and the Multikarnet OK scheme. The large variety of sports and leisure activities available under these schemes allow our employees to choose those they like best, thus improving their physical fitness and mental wellbeing.

We try to offer attractive base salaries, but we also need to take into account the conditions on the Polish labour market and internal factors involved in our operations. In 2014, the ratio of average base salary of men to that of women at Grupa LOTOS was 128%, compared with 130%

# Ratio of the base and actual salary of women to men by position held [as at December 31st 2014]

Employment category	Ratio of base salary of men to base salary of women [%]	Ratio of average /actual salary of men to average salary of women [%]
Grupa LOTOS		
Senior management	75	94
Lower management	83	129
Back-office staff	120	143
Production staff	65	163
LOTOS Asfalt		
Senior management	60	96
Lower management	78	149
Back-office staff	88	146
Production staff	63	122
LOTOS Kolej		
Senior management	100	105
Lower management	100	109
Back-office staff	59	131
Production staff	100	154
LOTOS Oil		
Lower management	100	102
Back-office staff	111	123
Production staff	89	152
LOTOS-Air BP		
Senior management	88	67
Lower management	80	83
Back-office staff	119	127
LOTOS Paliwa		
Senior management	108	138
Lower management	83	95
Back-office staff	100	134
LOTOS Petrobaltic		
Senior management	106	156
Lower management	131	162
Back-office staff	133	145
Production staff	70	121
LOTOS Geonafta		
Senior management	91	145
Lower management	58	81
Back-office staff	214	126
Production staff	36	96
LOTOS Norge		
Lower management	90	140
Back-office staff	137	117
Energobaltic		· · ·

We provide our employees with an opportunity to join pension plans. Currently, 13 LOTOS Group companies can take advantage of unit-linked group life insurance, which is fully funded by the employer. Participation in the scheme is voluntary and available to all staff members employed under employment contracts. The Pillar 3 retirement savings scheme is an essential aspect of responsible planning for one's financial future. Should any employee wish to increase their savings, they can also make private contributions to the fund.

As at the end of 2014, 80.2% of the LOTOS Group employees were covered by the unit-linked group life insurance, with the number reaching 88.2% in Grupa LOTOS.

# Premiums paid under unit-linked insurance policies (Pillar 3 of the Polish pension system) in PLN '000

	2012	2013	2014
Grupa LOTOS	3,519	3,587	3,591
LOTOS Group	11,182	11,261	15,018

# Useful information

#### Newly hired employees in 2014

Grupa LOTOS	LOTOS Asfalt	LOTOS Kolej	LOTOS Oil	LOTOS-Air BP	LOTOS Paliwa	LOTOS Petrobaltic with its subsidiaries LOTOS Geonafta, LOTOS Norge, and Energobaltic
68	10	74	11	11	25	181

#### Employees hired and dismissed, and staff turnover rate in 2014

		Grupa LOTOS LOTOS Asfalt		LOTOS Kolej LOTOS Oil		LOTOS-Air BP			LOTOS Paliwa			
	number	turnover rate [%]	number	turnover rate [%]	number	turnover rate [%]	number	turnover rate [%]	number	turnover rate [%]	number	turnover rate [%]
Sex												
Women	45	3.33	4	1.92	10	1.14	5	1.57	4	8	29	10.66
Men	84	6.22	11	5.29	100	11.44	16	5.03	15	30	22	8.09
Age												
Below 30	39	2.89	0	0	20	2.28	8	2.52	7	14	8	2.94
30 to 50	65	4.81	0	0	66	7.55	9	2.83	12	24	34	12.5
Over 50	25	1.85	0	0	24	2.75	4	1.26	0	0	9	3.31
Total	129	9.55	0	0	110	12.58	21	6.61	19	38	51	18.75

## Employees hired and dismissed, and staff turnover rate in 2014 at the LOTOS Petrobaltic Group

		LOTOS Petrobaltic*		LOTOS Geonafta		LOTOS Norge		Energobaltic
	number	turnover rate [%]	number	turnover rate [%]	number	turnover rate [%]	number	turnover rate [%]
Sex								
Women	31	7.2	5	5.4	0	0	0	0
Men	195	45.1	9	9.72	1	4.5	2	6.06
Age								
Below 30	77	17.8	4	4.32	0	0	1	3.03
30 to 50	98	22.7	9	9.72	0	0	0	0
Over 50	51	11.8	1	1.08	1	4.5	1	3.03
Total	226	52.3	14	14	1	4	2	6.06

<sup>\*</sup> Due to the specific nature of LOTOS Petrobaltic's business activity (work performed in a continuous system on drilling rigs), external back-up staff must be hired every year as temporary replacement of rig operators. It often happens that one person is hired more than once under the same or different terms of employment. As a result, the company reports high staff turnover rates.

#### The composition of management staff, by sex and age [as at December 31st 2014]

Employee age	Employment category	Percentage of total workforce	Percentageof total workforce in the age category	Percentage of total women	Percentage of total women in the age category	Percentage of total men	Percentage of total men in the age category
Grupa LOTOS							
Below 30	Lower management	0.07 🕢	0.70 🕢	0.00 🕢	0.00 🕢	0.11 🕢	0.97 🕢
Relow 30	Back-office						

	staff	4.59 🕢	43.36 🕢	9.52 🕢	100.00 🕢	2.37 🕢	21.36 🕢
Below 30	Production staff	5.93 🕢	55.94 🕢	0.00 🕢	0.00 🕢	8.60 🔗	77.67 🚫
Below 30	TOTAL	10.59 🕢	100.00 🕢	9.52 🕢	100.00 🕢	11.08 🕢	100.00 🕢
30 to 50	Board	0.15 🕢	0.24 🕢	0.00 🕢	0.00 🕢	0.22 🕢	0.35 🕢
30 to 50	Senior management	1.78 🕢	2.88 🕢	0.95 🕢	1.50 🕢	2.15 🕢	3.53 🕢
30 to 50	Lower management	4.96 🕢	8.04 🕢	6.19 🕢	9.77 🕢	4.41 🕢	7.23 🕢
30 to 50	Back-office staff	30.75 🕢	49.82 🕢	56.19 🕢	88.72 🕢	19.25 🔗	31.57 🕢
30 to 50	Production staff	24.07 🕢	39.02 🕢	0.00 🕢	0.00 🕢	34.94 🕢	57.32 🤡
30 to 50	TOTAL	61.71 🕢	100.00 🕢	63.33 🕢	100.00 🕢	60.97 🕢	100.00 🕢
Over 50	Board	0.22 🕢	0.80 🕢	0.00 🕢	0.00 🕢	0.32 🕢	1.15 🕢
Over 50	Senior management	1.33 🕢	4.81 🕢	0.71 🕢	2.63 🕢	1.61 🕢	5.77 🤡
Over 50	Lower management	3.19 🕢	11.50 🕢	3.10 🕢	11.40 🕢	3.23 🕢	11.54 🤡
Over 50	Back-office staff	12.74 🕢	45.99 🕢	23.10 🕢	85.09 🔗	8.06 🕢	28.85 ⊘
Over 50	Production staff	10.22 🕢	36.90 🕢	0.24 🔗	0.88 🕢	14.73 🕢	52.69 🕢
Over 50	TOTAL	27.70 🕢	100.00 🔗	27.15 🕢	100.00 🕢	27.95 🕢	100.00 🕢

Employee age	Employment category	Percentage of total workforce	Percentage of total workforce in the age category	Percentage of total women	Percentage of total women in the age category	Percentage of total men	Percentage of total men in the age category
LOTOS Asfalt							
Below 30	Lower management	0.48 🕢	5.88 🕢	2.17 🕢	20.00 🕢	0.00 🕢	0.00 🕢
Below 30	Back-office staff	4.81 🕢	58.82 🕢	8.70 🕢	80.00 🕢	3.70 🕢	50.00 🕢
Below 30	Production staff	2.88 🕢	35.29 🕢	0.00 🕢	0.00 🕢	3.70 🕢	50.00 🕢
Below 30	TOTAL	8.17 🕢	100.00 🕢	10.87 🔗	100.00 🕢	7.40 🕢	100.00 🔗
30 to 50	Senior management	3.85 🕢	4.94 🕢	2.17 🕢	2.63 🕢	4.32 🕢	5.65 ⊘
30 to 50	Lower management	7.21 🕢	9.26 🕢	4.35 🕢	5.26 ⊘	8.02 🕢	10.48 🕢
30 to 50	Back-office staff	29.81 🕢	38.27 🕢	73.92 🕢	89.47 🕢	17.28 🕢	22.58 🕢
30 to 50	Production staff	37.02 🕢	47.53 🕢	2.17 🚫	2.63 🕢	46.93 🕢	61.29 🕢
30 to 50	TOTAL	77.89 🕢	100.00 🕢	82.61 🕢	100.00 🔗	76.55 🕢	100.00 🔗
Over 50	Management Board	0.48 🔗	3.45 🕢	0.00 🕢	0.00 🔗	0.62 🕢	3.85 ⊘
Over 50	Senior management	1.44 🔗	10.34 🕢	0.00 🕢	0.00 🔗	1.85 🕢	11.54 🕢
Over 50	Lower management	0.96 🔗	6.90 🕢	0.00 🕢	0.00 🕢	1.23 🔗	7.69 🕢
Over 50	Back-office staff	2.88 🕢	20.69 🕢	6.52 🕢	100 ❷	1.85 🕢	11.54 🕢
Over 50	Production staff	8.18 🕢	58.62 ⊘	0.00	0.00 🕢	10.50 🔗	65.38 🕢
Over 50	TOTAL	13.94 🔗	100 🕢	6.52 🔗	100.00 🕢	16.05 🤡	100.00 🔗

Employee age	Employment category	Percentage of total workforce	Percentage of total workforce in the age category	Percentage of total women	Percentage of total women in the age category	Percentage of total men	Percentage of total men in the age category
LOTOS Kolej							
Below 30	Lower management	0.23 🕢	2.08 🕢	1.15 🕢	3.85 ⊘	0.13 🕢	1.43 🕢
Below 30	Back-office staff	1.83 🕢	16.67 🔗	9.20 🕢	30.77 🕢	1.02 🕢	11.43 🕢
Below 30	Production staff	8.92 🔗	81.25 🕢	19.54 🧭	65.38 🕢	7.74 🕢	87.14 🕢
Below 30	TOTAL	10.9 🕢	100.00 🕢	29.98 🕢	100.00 🕢	8.89 🕢	100.00 🕢
30 to 50	Senior management	0.11 🕢	0.20 🕢	1.15 🕢	2.13 🕢	0.00 🕢	0.00 🕢
30 to 50	Lower management	2.40 🕢	4.19 🕢	8.05 🤡	14.89 🕢	1.78 🕢	3.08 🕢
30 to 50	Back-office staff	4.81 🕢	8.38 🕢	17.24 🕢	31.91 🕢	3.43 🧭	5.95 🕢
30 to 50	Production staff	50.00 🕢	87.23 🕢	27.57 🤡	51.06 ⊘	52.48 🕢	90.97 🕢
30 to 50	TOTAL	57.32 🕢	100.00 🕢	54.01 🕢	100 🕢	57.69 🕢	100.00 🕢

Over 50	Management Board	0.11 🕢	0.36 🕢	0.00 🕢	0.00 🕢	0.13 🕢	0.38 🕢
Over 50	Senior management	0.69 🕢	2.17 🕢	1.15 🕢	7.14 🕢	0.64 🕢	1.90 🕢
Over 50	Lower management	1.26 🕢	3.97 🕢	1.15 🕢	7.14 🕢	1.27 🕢	3.80 🕢
Over 50	Back-office staff	3.43 🕢	10.83 🕢	6.90 🕢	42.86 🕢	3.05 🕢	9.13 🕢
Over 50	Production staff	26.21 🕢	82.67 🕢	6.90 🕢	42.86 🕢	28.34 🕢	84.79 🕢
Over 50	TOTAL	31.70 🔗	100.00 🕢	16.10 🕢	100.00 🕢	33.42 🕢	100.00 🕢

Employee age	Employment category	Percentage of total workforce	Percentage of total workforce in the age category	Percentage of total women	Percentage of total women in the age category	Percentage of total men	Percentage of total men in the age category
LOTOS Oil							
Below 30	Back-office staff	4.40 🕢	50.00 ⊘	6.52 🕢	100.00 🕢	3.54 🕢	36.36 ⊘
Below 30	Production staff	4.40 🔗	50.00 🕢	0.00 🕢	0.00 🕢	6.19 🕢	63.34 🕢
Below 30	TOTAL	8.80 🕢	100.00 🕢	6.52 🕢	100.00 🕢	9.73 🕢	100.00 🕢
30 to 50	Management Board	0.31 🕢	0.48 🕢	0.00 🕢	0.00 🕢	0.44 🔗	0.71 🕢
30 to 50	Senior management	1.26 🕢	1.92 🕢	0.00 🕢	0.00 🕢	1.77 🤡	2.84 🕢
30 to 50	Lower management	5.66 🕢	8.65 🕢	5.43 🕢	7.46 🕢	5.75 🕢	9.22 🕢
30 to 50	Back-office staff	35.54 🕢	54.33 ⊘	53.27 🤡	73.13 🕢	28.32 🕢	45.39 🕢
30 to 50	Production staff	22.64 🔗	34.62 🕢	14.13 🕢	19.40 🕢	26.11 🕢	41.84 🕢
30 to 50	TOTAL	65.41 🕢	100 🤡	72.83 🕢	100 🤡	62.39 🕢	100 🕢
Over 50	Senior management	0.63 🔗	2.44 🕢	0.00 🕢	0.00 🕢	0.88 🕢	3.17 🕢
Over 50	Lower management	2.52 🕢	9.76 ⊘	1.09 🕢	5.26 ⊘	3.10 🕢	11.11 🕢
Over 50	Back-office staff	5.66 🕢	21.95 🕢	11.95 🕢	57.89 🕢	3.10 🔗	11.11 🕢
Over 50	Production staff	16.98 🔗	65.85 ⊘	7.61 🕢	36.84 ⊘	20.80 🔗	74.60 🕢
Over 50	TOTAL	25.79 🕢	100.00 🤡	20.65 🕢	100.00 🕢	27.88 🕢	100.00 🕢

Employee age	Employment category	Percentage of total workforce	Percentage of total workforce in the age category	Percentage of total women	Percentage of total women in the age category	Percentage of total men	Percentage of total men in the age category
LOTOS Paliwa							
Below 30	Back-office staff	11.30 🕢	100.00 🔗	17.99 🕢	100.00 🕢	3.76 🕢	100.00 🔗
Below 30	TOTAL	11.30 🕢	100.00 🕢	17.99 🕢	100.00 🕢	3.76 🕢	100.00 🕢
30 to 50	Senior management	2.57 🕢	3.30 🕢	1.44 🤡	1.89 🕢	3.76 🕢	4.72 🔗
30 to 50	Lower management	8.09 🕢	10.38 🕢	4.32 🕢	5.66 ⊘	12.03 🕢	15.09 🕢
30 to 50	Back-office staff	67.28 🕢	86.32 🕢	70.50 🕢	92.45 🕢	63.91 🕢	80.19 🔗
30 to 50	TOTAL	77.94 🕢	100.00 🕢	76.26 🕢	100.00 🕢	79.70 🔗	100.00 🕢
Over 50	Management Board	0.00 🕢	3.33 🕢	0.00 🕢	0.00 🕢	0.75 🕢	4.55 ⊘
Over 50	Senior management	1.47 🕢	13.33 🕢	1.44 🕢	25.00 🕢	1.5 🕢	9.09 🔗
Over 50	Lower management	1.1 🕢	10.00 🔗	0.00 🕢	0.00 🕢	2.26 🕢	13.64 🕢
Over 50	Back-office staff	8.09 🕢	73.33 🕢	4.32 🕢	75.00 🕢	12.03 🕢	72.73 🕢
Over 50	TOTAL	11.30 🕢	100.00 🕢	5.76 🕢	100.00 🤡	16.54 🕢	100.00 🕢

Employee age	Employment category	Percentage of total workforce	Percentage of total workforce in the age category	Percentage of total women	Percentage of total women in the age category	Percentage of total men	Percentage of total men in the age category
LOTOS Petrobal	tic						
Below 30	Lower management	0.46 🕢	3.45 ⊘	1.25 🧭	5.00 🕢	0.00 🕢	2.63 🕢
Below 30	Back-office staff	8.10 🕢	60.34 🔗	21.25 🤡	85.00 🕢	5.11 🕢	47.37 ⊘
Below 30	Production staff	4.86 🕢	36.21 🚫	2.50 🕢	10.00 🕢	5.40 🕢	50.00 🕢
Below 30	TOTAL	13.43 🕢	100.00 🕢	25.00 🕢	100.00 🕢	10.80 🕢	100.00 🔗
30 to 50	Management Board	0.00 🔗	0.69 🕢	0.00 🕢	0.00 🐼	0.57 🔗	0.84 🕢

30 to 50	Senior management	4.17 🕢	6.19 🕢	8.75 🕢	13.21 🕢	3.13 🕢	4.62 🕢
30 to 50	Lower management	6.48 🕢	9.62 🕢	1.25 🕢	1.89 🕢	7.67 🔗	11.34 🚫
30 to 50	Back-office staff	25.00 🕢	37.11 ⊘	56.25 ⊘	84.91 🕢	17.90 🔗	26.47 🕢
30 to 50	Production staff	31.25 🕢	46.39 🕢	0.00 🕢	0.00 🕢	38.35 🕢	56.72 🕢
30 to 50	TOTAL	67.36 🕢	100.00 🕢	66.25 🕢	100.00 🕢	67.61 🕢	100.00 🕢
Over 50	Management Board	0.23 🕢	1.20 🤡	0.00 🕢	0.00 🕢	0.28 🕢	1.32 🕢
Over 50	Senior management	1.85 🕢	9.64 🤡	2.50 🕢	28.57 🕢	1.70 🕢	7.89 🕢
Over 50	Lower management	1.16 🕢	6.02 🕢	0.00 🕢	0.00 🕢	1.42 🕢	6.58 🕢
Over 50	Back-office staff	5.09 🕢	26.51 🕢	6.25 🕢	71.43 🕢	4.83 🔗	22.37 🚫
Over 50	Production staff	10.88 🕢	56.63 ⊘	0.00 🕢	0.00 🕢	13.35 🕢	61.84 🕢
Over 50	TOTAL	19.21 🕢	100.00 🕢	8.75 🕢	100.00 🕢	21.59 🕢	100.00 🕢

The LOTOS Group employs its senior management staff according to the profile and requirements of each position. Management positions are filled only with candidates meeting the relevant criteria to the largest extent. Senior management positions are often offered to persons selected in an internal recruitment process.

95.2% of senior management staff employed in the Company's key business locations were recruited from the local markets. Pomerania is also the local recruitment market for LOTOS Kolej, where 100% of the senior staff are local residents.

The companies' key locations are locations where the number of employees represents a significant percentage of the total workforce, with provinces being basic local markets.

In 2014, LOTOS Asfalt and LOTOS Oil ran their business in three locations: in Southern Poland in Jaslo (LOTOS Asfalt) and in Czechowice as well as in Northern Poland in Gdańsk. At LOTOS Asfalt, 100% of the staff have been recruited from the local communities of Jaslo and Czechowice and 82% from Gdańsk. At LOTOS Oil in Czechowice and in Gdańsk, the indicator is 100% for all locations. Given the nature of LOTOS Paliwa's operations, its management staff across Poland are recruited on an as-needed basis. At LOTOS Petrobaltic, 62% of the senior management staff have been sourced from Gdańsk, where the company is registered. At LOTOS Geonafta, 82% of senior officers have been recruited from the company's area of operation, whereas at LOTOS Norge most employees come from Norway, a market with substantial experience in oil and gas exploration and production.

#### Ratio of minimum base pay at Grupa LOTOS to minimum national pay

	Minimum base pay (PLN)	Minimum pay in Poland (PLN)	Ratio (%)
Dec 31 2014	2,500	1,680	149
Dec 31 2013	2,715	1,600	170
Dec 31 2012	2,500	1,500	167

### Ratio of minimum base pay at LOTOS Kolej to minimum national pay

	Minimum base pay (PLN)	Minimum pay in Poland (PLN)	Ratio (%)
Dec 31 2014	1,760	1,680	105
Dec 31 2013	2,700	1,600	169
Dec 31 2012	2,657	1,500	177

#### Ratio of minimum base pay at LOTOS Asfalt to minimum national pay

	Minimum base pay (PLN)	Minimum pay in Poland (PLN)	Ratio (%)
Dec 31 2014 Gdańsk	2,800	1,680	167
Dec 31 2014 Czechowice-Dziedzice	2,960	1,680	176
Dec 31 2014 Jasło	2,650	1,680	158
Dec 31 2013 Gdańsk	3,160	1,600	198
Dec 31 2013 Czechowice-Dziedzice	2,960	1,600	185
Dec 31 2013 Jasło	2,400	1,600	150
Dec 31 2012 Gdańsk	2,800	1,500	187
Dec 31 2012 Czechowice-Dziedzice	2,500	1,500	167

Dec 31 2012 Jasło	1,976	1,500	132
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# Ratio of minimum base pay at LOTOS Oil to minimum national pay

	Minimum base pay (PLN)	Minimum pay in Poland (PLN)	Ratio (%)
Dec 31 2014 Gdańsk	2,600	1,680	155
Dec 31 2014 Czechowice-Dziedzice	2,652	1,680	158
Dec 31 2013 Gdańsk	2,700	1,600	169
Dec 31 2013 Czechowice-Dziedzice	2,652	1,600	166
Dec 31 2012 Gdańsk	2,760	1,500	184
Dec 31 2012 Czechowice-Dziedzice	2,491	1,500	166
Dec 31 2012 Jasło* (operations in this location started in May 2013)	2,413	1,500	161

# Ratio of minimum base pay at LOTOS-Air BP to minimum national pay

	Minimum base pay (PLN)	Minimum pay in Poland Minimum base pay (PLN) (PLN) Rat		
Dec 31 2014	2,700	1,680	161	

### Ratio of minimum base pay at LOTOS Paliwa to minimum national pay

	Minimum base pay (PLN)	Minimum pay in Poland (PLN)	Ratio (%)
Dec 31 2014	2,760	1,680	164
Dec 31 2013	2,760	1,600	172.5
Dec 31 2012	2,760	1,500	184

# Ratio of minimum base pay at LOTOS Petrobaltic to minimum national pay

	Minimum base pay (PLN)	Minimum pay in Poland (PLN)	Ratio (%)
Dec 31 2014	3,000	1,680	179
Dec 31 2013	3,064	1,600	192
Dec 31 2012	3,000	1,500	200

# Ratio of minimum base pay at LOTOS Geonafta to minimum national pay in Lithuania

	Minimum base pay (LTL)	Minimum pay in Lithuania (LTL)	Ratio (%)
Dec 31 2014	1,036	1,035	100
Dec 31 2013	1,000	1,000	100
Dec 31 2012	910	850	107

### Ratio of minimum base pay at Energobaltic to minimum national pay

	Minimum base pay (PLN)	Minimum pay in Poland (PLN)	Ratio (%)
Dec 31 2014	3,800	1,680	227
Dec 31 2013	3,585	1,600	243
Dec 31 2012	3,465	1,500	231

The indicator does not apply to LOTOS Norge. Under Norwegian law, there is no minimum pay.

#### RELATED CONTENT:

# **Employees**

Our objective is to ensure the availability of highly qualified staff required for successful implementation of the LOTOS Group's business strategy and enhancement of the corporate culture based on adopted values. It is our priority to raise awareness and commitment among our employees and contractors to improving their work safety.

Go to the page  $\,$  » <a href="http://raportroczny.lotos.pl/en/business-strategy-and-model/employees">http://raportroczny.lotos.pl/en/business-strategy-and-model/employees</a>

# Management segment

In the management segment, we identify political, legal, reputation and social risks as well as the risk of misconduct.

Go to the page "  $\sim$  http://raportroczny.lotos.pl/en/risk-and-opportunities/management-segment-

#### **Ethics**

The LOTOS Group's Code of Ethics, which was put in place over two years ago, is the cornerstone of the organization's comprehensive Ethical Conduct Programme, designed to make business ethics the highest standard in the management of our organization.

Go to the page  $\,$  > <a href="http://raportroczny.lotos.pl/en/ethics-and-corporate-qovernance/ethics-">http://raportroczny.lotos.pl/en/ethics-and-corporate-qovernance/ethics-</a>



Results and prospects > Sustainable development > Safe workplace

# Safe workplace

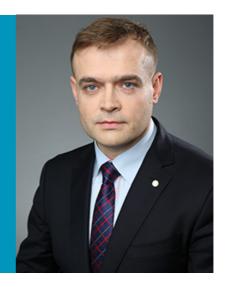
Ø Data has been verified → See full text of the Independent Assurance Report

#### STATEMENT

Safety and health protection are among the LOTOS Group's priorities. Our key principle states that 'no job is too important or urgent that it cannot be done safely'.

#### Jarosław Jóźwiak

Occupational Safety and Health Office Head, Grupa LOTOS, CSR Strategy Leader in the Improvement of Health and Safety area



We consistently introduce new technical and organizational solutions with the purpose of raising the staff's awareness and commitment, and to guarantee safe working conditions to all those staying and working at our organization.

All actions we take are in compliance with Polish law, but we also monitor EU regulations as well as international standards and guidelines. In designing and implementing different OSH solutions, we apply the knowledge and experience of our employees – it is them who submit ideas for improving safety and health in their workplaces and suggest actions the employer should take to maintain a high level of safety. We also keep track of what is going on in the refining industry globally – we analyse hazardous incidents, accidents and failures, taking immediate measures to prevent similar situations at our organization. We draw on the health and safety experience of other companies and advisors to implement modern technologies and solutions improving occupational safety. We also learn from our own experience, analysing all hazardous incidents recorded on the premises of the LOTOS Group.

We have been building a strong occupational safety culture for years. We should keep in mind that an enterprise with a high safety culture is characterised by communication based on knowledge, experience, mutual trust and personal responsibility of all employees for everyday matters of safety. In our actions, we place emphasis on education, employee commitment and stimulating the involvement of management, who are obliged to guarantee safe working conditions to employees and motivate them to participate in building a positive work culture. By working closely with contractors and undertaking a number of safety initiatives, the LOTOS Group improves, both directly and indirectly, the standards of safe work also for its contractors and their subcontractors.

We trust our employees, but all the same we follow the principle of zero tolerance for ignoring rules and failing to observe requirements related to occupational safety. Having learnt the lesson from tragic industrial incidents, accidents and failures recorded all around the world, we try not to repeat them. The health and life of our employees, contractors and guests is our paramount concern, but we are aware that the work safety culture we have been arduously developing for years could be easily compromised.

In accordance with our business and CSR strategies, safety at work and health protection are priorities for the LOTOS Group, with respect to both our own employees and the employees of our cooperating partners. Particular attention is given to efforts aiming to maintain high safety standards, minimise risks and reduce accident rates.

Every year, goals and targets are set for the LOTOS Group companies aimed at improving safety at work, adopting uniform standards across the LOTOS Group, and sharing expertise and experience between the OSH specialists. Our CSR strategy in the health and safety area is based on the achievement of a key goal, which is to raise the awareness of and commitment to safety improvement among management staff and employees of all levels as well as subcontractors.

Achievement of this goal is measured by the number of completed occupational safety and health protection projects, the number of

educational actions promoting safe working conditions and the LTIF rate. We advance this goal through a set of operational objectives which include:

- implementation of projects to improve safety at work and protect health,
- increasing employees' influence on the safety and ergonomics of their working environment,
- · lowering the accident rate,
- building a safety-at-work culture at the LOTOS Group, based on the management's increased involvement in promotion of relevant attitudes.

One of the main indicators of the key goal is the achievement of a required LTIF rate, which measures the number of accidents at work per million hours worked. In 2014, the LOTOS Group recorded the LTIF rate of 2.3, against 4.4 in the previous year. 21 accidents were reported, with medical leave taken in 19 cases. This means an about 46% decrease in the accident rate compared with 2013.

Last year, no severe or group accidents treated as accidents at work or confirmed occupational diseases were recorded at the organization. There was, however, one fatal accident of an employee of LOTOS Kolej, which was a result of improper securing of rail cars during shunting work. The company analysed the circumstances of the accident and strengthened supervision over the work of shunting and traction teams.

In addition, four employees of contractors performing tasks for Grupa LOTOS were involved in accidents.

Most accidents occurred when employees were moving around production units, on publicly available roads and in office buildings. Accidents in this category represented 38% of all such events. They were mostly stumbles and slips resulting in ankle or knee injuries. An additional analysis undertaken to identify the causes of accidents revealed that nearly 59% of them were directly attributable to human error, while technical and organizational factors accounted for 29% and 12% of the total, respectively.

#### Accidents at work

Grupa LOTOS	2012	2013	2014
Number of employees 1/	1,323	1,344	1,343 🔗
Accidents at work, including:	13 2/	12	3 ❷
Fatal	0	0	0 🔗
Women	2	1	0 🔗
Men	11	11	3 ❷
Post-accident absenteeism (calendar days) $^{3/}$ , including:	253	302	102 ❷
Women	28	11	0 🔗
Men	225	291	102 ❷
Occupational diseases	None	None	None <b>⊘</b>
Lost Time Injury Frequency (LTIF) $^{4/}$ (per 1 million hours worked)	4.3	4.5	0.9 🕢
Lost Day Rate (LDR) 5/ (per 200,000 hours worked)	0.9	0.9	0.2
The LOTOS Group 6/	2012	2013	2014
Number of employees 1/	4,795	4,773	4,788 ❷
Accidents at work, including:	34	397/	21 8/ 🔗
Fatal	0	0	1 ⊘
Women	5	7	2 🤡
Men			
	29	32	19 <sup>9/</sup> 🕢
Post-accident absenteeism (calendar days) 4/, including:	29 1,651 <sup>10/</sup>	1,238	19 <sup>9</sup> / <b>⊘</b> 784 <b>⊘</b>
including:	1,651 10/	1,238	784 ⊗
including: Women	1,651 <sup>10</sup> /	1,238	784 <b>⊘</b>
including: Women Men	1,651 <sup>107</sup> 196 1,455	1,238 174 1,064	784 ⊘ 79 ⊘ 705 ⊘

<sup>1/</sup> Average number of employees at companies reporting OSH metrics.

<sup>&</sup>lt;sup>2/</sup> Including 1 accident treated as an accident at work.

- 3/ Lost days are counted from the day when medical leave is taken.
- 4/ LTIF number of occurrences resulting in inability to work x106/number of hours worked
- $^{5/}$  LDR number of occurrences resulting in inability to work x2\*10 $^{5/}$ number of hours worked.
- 6/ Companies reporting OSH metrics in 2014: Grupa LOTOS, LOTOS Asfalt, LOTOS Kolej, LOTOS Lab, LOTOS Oil, LOTOS Serwis, LOTOS Straż, LOTOS Ochrona, LOTOS Paliwa, LOTOS Infrastruktura, LOTOS Terminale, RCEkoenergia, LOTOS Biopaliwa, LOTOS Petrobaltic. In 2012–2013, LOTOS Tank (currently LOTOS-Air BP) was also taken into account, but due to ownership changes it has been excluded from the list.
- 7/ In 2013, the LOTOS Group recorded 39 accidents at work (including 5 accidents treated as accidents at work), with medical leave taken in 36 cases.
- 8/ In 2014, the LOTOS Group recorded 21 accidents at work, with medical leave taken in 19 cases.
- 9/ Including one fatal accident at LOTOS Kolej in Gdańsk.
- 10/ Including 380 days of absence due to accidents which occurred in 2011.

A downtrend in the LTIF rate within the LOTOS Group proves we have been taking appropriate prevention measures. It should be noted that a considerable part of our staff perform particularly hazardous work in such places as workshops, active production units, offshore rigs, chemical laboratories or railway tracks. We therefore treat occupational safety as our priority, especially by implementing solutions which go beyond the legal requirements and draw on the world's best practices in OSH.

In 2014, we pursued our objectives through:

- checks of workplace safety standards at the LOTOS Group companies operating in Poland,
- information and education campaigns promoting workplace safety,
- development of uniform standards on making contractors and guests aware of risks at our companies,
- implementation of the OSH Portal of the LOTOS Group, an electronic tool for monitoring accidents at work and hazardous situations recorded at the organization,
- educational materials concerning accidents at work,
- internal training sessions for the LOTOS Group management to remind them of their OSH responsibilities and duties,
- selection of the safest company and the safest production plant of the LOTOS Group the titles were awarded to LOTOS Biopaliwa and the Railcars Loading Complex, respectively.

We place emphasis on prevention and education, by means of training, awareness and preventive initiatives designed to minimise the consequences of diseases which may affect our staff.

Every year, Grupa LOTOS monitors the health of its employees, while also providing them with preventive medical care in line with applicable laws. In 2014, no occupational diseases were reported or suspected at the Company.

In 2014, we undertook additional preventive healthcare initiatives for employees of the LOTOS Group, by organizing:

- the 5th Day for Safety and Health at Work, which involved a preventive campaign focusing on anti-cancer tests. Interested employees were able to undergo tests and consult medical professionals. Workshops for women and men, 'Mysteries and myths of cancer' and 'Cervical cancer prevention and breast self-examination' were also organized;
- training courses on the correct use of automatic AED defibrillators located in publicly available areas on the premises of Grupa LOTOS in Gdańsk;
- practical training for employees of the production area as part of the First-Aid Rescue Team. The course was held in training rooms and at production units. Thanks to regular exercises, employees are prepared to provide aid to their colleagues when accidents occur;
- fire training involving fire-extinguishing equipment (fire extinguishers, mobile trolley units) and first-aid provision for employees participating in periodic OSH training courses irrespective of their position and type of work;
- training on correct response to industrial failures, including evacuation exercises, which makes employees aware of how to leave an endangered area safely and quickly;
- **education events** concerning issues such as diabetes prevention, healthy lifestyle, first aid, physical activity and exercises, office ergonomics, organization of work in the working environment, safe use of chemical substances and noise protection:
- health-related publications, brochures and posters concerning cancer prevention;
- identification of threats and assessment of occupational risks in the working environment, i.e. thorough examination and assessment of threats that might occur at work. This systematic assessment allows to continuously monitor whether threat mitigation measures applied at a specific work station are adequate:
- employees are made aware of chemical hazards every time a new chemical substance is introduced in the workplace. Our constantly updated electronic record contains safety data sheets and information on the products and chemicals of Grupa LOTOS, and those purchased to support the Company's operations. This solution enables almost immediate retrieval of information on chemicals (their chemical properties, required protection measures, methods of use or storage) to employees who come into contact with such substances in the course of performing their duties. Apart from safety data sheets and product information, the record includes details concerning the classification of individual substances. By looking at the list of safety data sheets, it is possible to easily identify substances causing specific threats;
- using appropriate collective and individual protection measures in working environments which may negatively impact an employee's
  health. Each employee is equipped with protective clothing and personal protection equipment.

### **Best practice**

Concerned about the safety of its employees, in 2014 LOTOS Paliwa organized a second-degree Safe Driving course for the employees whose duties involve frequent business travels as part of the working relationships with representatives of the LOTOS service station chain. The course was attended by 110 persons.

The purpose of the specially designed course was to ensure a higher level of safety to persons who not only must be excellent drivers, but sometimes must perform their business duties while driving. The programme included a refresher course on the key rules of safe driving, correct turning techniques, emergency braking, lane changing in demanding road conditions and recovering from a skid. It ended with a performance test to check the participants' knowledge.

The second-grade Safe Driving course was a follow-up to the first-grade Safe Driving course organized in 2013. Both courses were conducted by the Driving School of Michał Kościuszko, a racing driver.

The participants' driving safety has improved thanks to the course. Since the beginning of 2014, no road accidents involving the LOTOS Paliwa's employees have been recorded. In the evaluation questionnaires, the course participants rated the training very highly both with respect to the content and to its organization.

As part of improving our OSH activities, we launch a number of initiatives in partnership with external stakeholders. Such initiatives include:

- cooperation with research institutions, e.g. through a project of learning from actual events occurring at the refineries of Statoil Norway and Grupa LOTOS;
- cooperation with a view to improving occupational safety in the oil and gas industry, in accordance with the declaration signed at the General Labour Inspectorate in 2011 by Grupa LOTOS and other sector companies, The declaration includes a statement of cooperation with the aim to continuously improve and maintain a high level of safety at work in the oil and gas industry. Its signing marked the beginning of partnership between the sector's major companies: Grupa LOTOS, PKN Orlen, PGNiG, PERN and OLPP;
- joint, regular exercises involving response to crisis situations (industrial failures) and evacuation, performed together with external units of the National Fire Service or the Police,
- sharing OSH experience with representatives of other external companies,
- participation in external conferences in the role of speakers promoting a culture of occupational safety and sharing their experience.

At Grupa LOTOS, there is an **Occupational Safety and Health Committee (OSH Committee)**, serving as an advisory and consultative body to the employer. It is composed of employer representatives, an occupational physician and workforce representatives selected by trade unions active at the Company.

The Committee reviews working conditions, evaluates the status of occupational safety and advises on measures to be taken by the employer to prevent accidents at work and occupational diseases.

In 2014, the OSH Committee was involved in a review of the working conditions at the Railcars Loading Complex and at the Hydrogen and Sulfur Production Complex of Grupa LOTOS. It also discussed other matters including:

- occupational risk scorecards for individual positions,
- the content of procedures and instructions, e.g. on running OSH training courses, reporting and investigating accidents, use of scaffolding, etc.

# Improvement plans

We are consistent in setting ourselves new goals and tasks to make LOTOS a leader of safe work not only in the chemical and refining industries, but also among all Polish employers. Our short-term plans include:

- implementation of the Lockout-Tagout safety system for certain types of work at all the Company's production plants,
- implementation of a risk assessment methodology for hazardous situations registered at the LOTOS Group,
- implementation of a workstation self-check system based on thematic checklists,
- development of an electronic tool for monitoring the work safety system (the OSH Portal of the LOTOS Group),
- revision of OSH and fire safety requirements and standards for contractors,
- consultations within the OSH Committee aimed at reviewing working conditions, periodic assessment of occupational safety and health status, giving opinions on measures undertaken by the employer to prevent accidents at work and occupational diseases, making proposals to improve working conditions and cooperating with the employer in fulfilling its safety and health obligations,
- running regular training courses for employees on the correct use of automatic AED defibrillators,
- modification of the programme of exercises teaching employees how to respond to accidents at work, chemical hazard alerts and evacuation, and conduct of emergency drills using simulated threats,
- implementation of a methodology for calculating accident costs taking into account technical, organizational and human causes, in all companies of the LOTOS Group.

#### RELATED CONTENT:

# Operational (refining) segment

In the operational (refining) sector, we identify operational risks related to the refinery and environmental risks, including risks related to carbon emission caps.

Go to the page "  $\sim$  http://raportroczny.lotos.pl/en/risk-and-opportunities/operational-refining-segment>

# **Employees**

Our objective is to ensure the availability of highly qualified staff required for successful implementation of the LOTOS Group's business strategy and enhancement of the corporate culture based on adopted values. It is our priority to raise awareness and commitment among our employees and contractors to improving their work safety.

Go to the page  $\,$  »-http://raportroczny.lotos.pl/en/business-strategy-and-model/employees>



Results and prospects > Sustainable development > Environmental impact

# **Environmental impact**

#### Ø Data has been verified → See full text of the Independent Assurance Report

The business activity of the LOTOS Group involves significant environmental impacts, through emissions of pollutants into the air, generation of waste, use of water and discharge of effluent to waterways or into the ground. The scale and nature of our environmental impacts are regulated under the environmental protection laws. In connection with their activities, companies of the LOTOS Group hold a number of permits, including integrated permits, which regulate the operational and environmental aspects of the LOTOS Group installations.

We have taken a strategic approach to minimising our environmental impacts, which is why the Grupa LOTOS refinery, our major plant, is now one of the most environmentally friendly refineries in the territory of the European Union, Switzerland and Norway. The switchover to natural gas as the key fuel for the Grupa LOTOS refinery in 2012, accompanied by other investments reducing energy consumption, such as the construction of a flare gas recovery unit and installation of new furnaces in the gasoline and lubricating oil units, reduced the sulfur and dust emissions from the CHP plant down to almost zero and brought the carbon emissions to levels seen only at the best European refineries. The refinery's advanced environmental solutions have curbed our environmental impacts while delivering notable financial benefits, in the form of lower fees for the use of the environment, resulting from our commitment to reducing the amount of emitted pollutants.

Gas emissions are the most critical source of environmental nuisance caused by our plants, both for their immediate environment and areas located further away. Therefore, we are increasingly concerned to ensure that the processes involving greenhouse gas emissions are based on the best available technologies and practices reducing the amount of emissions.

2014 was another demanding period for the EU Emissions Trading Scheme (EU ETS) and its participants. The European Commission commenced legislative work to introduce a permanent mechanism balancing the demand for and supply of emission allowances, which would result in structural changes of the EU ETS. The discussions and negotiations related to the proposed reform of the EU ETS commenced in autumn 2014 and are continued in 2015. A temporary solution consisting in postponing the auctioning of a part of CO<sub>2</sub> allowances to stimulate an increase in their price (back-loading) was agreed in February 2014. The first auction with allowance volumes reduced as part of the back-loading mechanism was held in March last year. The back-loading and the European Commission's legislative work on the proposed reform led to an increase in the prices of EUA in 2014. What it means to the EU ETS participants is that if they do not take steps and make investments to reduce the amount of emissions from their installations, they will have to incur the costs of offsetting the emissions with a higher price of CO<sub>2</sub> allowances. (See more <a href="http://raportroczny.lotos.pl/en/risk-and-opportunities/management-segment#legal-risks">http://raportroczny.lotos.pl/en/risk-and-opportunities/management-segment#legal-risks</a>)

As in previous years, the only greenhouse gas generated by Grupa LOTOS was carbon dioxide emitted in the process of burning fuel in furnaces and boilers, steam cracking of light hydrocarbons in hydrogen plants and burning of hydrocarbons in flare stacks.

The emission amounts are assessed on the basis of measurements of burnt fuels, feedstocks or flared hydrocarbons, and the corresponding emission rates calculated on the basis of laboratory analyses or reference values.

The emissions reported by Grupa LOTOS for 2014 are significantly higher than those for 2013, which is attributable to a month-long maintenance shutdown in the first half of 2013.

Type of CO<sub>2</sub> emissions in Grupa LOTOS [thousand tonnes per year]

Type of emission	2012	2013	2014
Direct	1,979	1,689	1,820 €
Indirect	400	373	411 ⊘
Total	2,379	2,062	2,231 ⊘

The only source of indirect emissions in Grupa LOTOS is the purchase and use of electricity.

Greenhouse gases emitted by the LOTOS Petrobaltic offshore rigs are produced in the process of burning diesel oil and other fuels in power systems, steam boilers and crane engines. All gas produced on the 'Petrobaltic' rig is burned in flare stacks, which are designed to minimise the emissions of harmful substances. All of its  $CO_2$  emissions come from the combustion of natural gas and fuel oil in the generation of electricity and heat. Natural gas extracted from under the Baltic Sea bed does not contain any chemical compounds or substances the combustion of which could produce emissions of any greenhouse gases other than  $CO_2$ . The methane which is a component of fuel gas is burnt up and is not emitted into the atmosphere. Other products of gas separation do not contain greenhouse gases and do not produce emissions of any gases other than  $CO_2$  when used by end users.

Emissions of gases produced in the course of exploration and production operations are not regulated under the Polish or international law, and so are not monitored.

CO <sub>2</sub> emissions in 2014 [tonnes]	Amount
LOTOS Petrobaltic - excluding offshore activities*	1,076 ⊘
Energobaltic (CHP plant in Władysławowo)	12,747 ⊘

2014 was one more year in which we did not use any ozone-depleting substances. The only substance with such properties is Halon 1302 in the fixed fire extinguishing system on the LOTOS Petrobaltic rig. There, Halon is kept in sealed bottles and was not released in 2014. Its import and use have been authorised under a licence granted by the European Commission. Use of this type of Halon is permitted in installations such as the one on the LOTOS Petrobaltic rig until 2020.

In 2014, we did not offer for sale any products which, when put to use, would produce or emit any ozone-depleting compounds, neither do we offer such products now.

2014 saw a continued effort to maximise the switchover from heavy fuel oil to fuel gas and natural gas in our refinery and the CHP plant in Gdańsk. Natural gas was still used as feedstock in the production of hydrogen. Further reduction of CO<sub>2</sub> emissions from Grupa LOTOS installations was made possible as a result of upgrading the fourth, and thus the last, boiler at the CHP plant. All the CHP plant boilers are now finally adapted to burning natural gas.

As a result of these investments, the emission intensity of our installations, expressed in kg  $CO_2/CWT$ , dropped to 30.0 from 30.4 in 2013. It is worth noting here that in 2014 we came even closer to the European benchmark of 29.5 kg  $CO_2/CWT$ , attained by only 10% of Europe's least emission-intensive refineries. (See more <a href="https://raportroczny.lotos.pl/en/business-strategy-and-model/environment">https://raportroczny.lotos.pl/en/business-strategy-and-model/environment</a>)

Under the integrated permit, Grupa LOTOS is required to monitor its emissions of sulfur dioxide ( $SO_2$ ), nitrogen oxides ( $NO_x$ ), and particulate matter (PM). The permit specifies the maximum permissible emissions separately for the CHP plant and the refinery in Gdańsk.

In compliance with the legal requirements applicable to this type of installations, the CHP plant features a continuous measurement system, for ongoing monitoring of pollutant concentration in exhaust gases to estimate the amount of emissions into the air.

The legal requirements applicable to the refinery are less strict. There, emissions are measured from each process emitter twice a year, during the heating and non-heating season, by a specialist company.

Despite the maintenance shutdown in 2013, 2014 saw a drop in sulfur dioxide emissions. It was possible thanks to the fact that in July 2014 we ceased burning heavy fuel oil at the CHP plant, while its use in the refinery was reduced to a minimum. Natural gas became the main fuel for the CHP plant, and fuel gas – for the refinery.

#### Pollutant emissions in Grupa LOTOS [tonnes per year]:

Substance	2012 E <sub>s</sub>	2012 E <sub>d</sub>	2013 E <sub>s</sub>	2013 E <sub>d</sub>	2014 E <sub>s</sub>	2014 E <sub>d</sub>
SO <sub>2</sub>	3,370	6,342	548	5,169	313 ⊘	5,169
NO <sub>x</sub>	1,308	2,501	843	2,264	927 📀	2,264
PM	264	461	91	366	96 ⊘	366

Es - actual level of emissions from Grupa LOTOS installations

Pollutants emitted from the LOTOS Petrobaltic Group installations are produced in the process of burning fuels.

#### Pollutant emissions in the LOTOS Petrobaltic Group\* [tonnes per year]

Substance	2012	2013	2014
LOTOS Petrobaltic			
SO <sub>2</sub>	0.007**	4.53	527.47 ⊘
NO <sub>x</sub>	0.30**	26.88	2,458.70 ⊘
Dust	-	2.88	452.16 ⊘
LOTOS Geonafta			
SO <sub>2</sub>	0.40	0.46	0.39 ⊘
NO <sub>x</sub>	4.00	2.95	2.50 ⊘
VOC (volatile organic compounds)	100.00	69.54	68.84 ⊘
Dust	3.00	0.29	0.24 ⊗
Energobaltic			
$SO_2$	0.10	0.004	0.013 📀
NO <sub>x</sub>	11.90	11.23	12.20 ⊘
Dust	0.20	0.005	0.11 ⊗

<sup>\*</sup> LOTOS Norge did not conduct any operational activities.

 $E_{\text{d}}$  - permissible level of emissions

<sup>\*\*</sup> Emissions excluding offshore activities.

In 2014, members of the local community who watch the flare stacks of our refinery in Gdańsk could see a regular flame at the top only occasionally. A series of minor investment projects and enhancements implemented during the maintenance shutdown, combined with the launch of a flare gas recovery unit in 2013, allowed us to significantly decrease the amount of flare gas.

#### Amount of discharge - amount of flare gas in Grupa LOTOS [thousand cubic metres per year]

Source	2012	2013	2014
Flare stack 3500	19,388	16,363	5,594 ⊘
Flare stack 3550	3,603	5,499	4,069 ⊘
Total	22,991	21,862	9,663 ⊘

In July 2014, we carried out optimisation work in the refinery's Hydrocracking Unit, which resulted in shutting down one of its three process furnaces. It has enabled us to use process heat in the hydrocracking process rather than energy generated by burning fuels. On the basis of available process data, we estimate that fuel consumption at this installation has dropped by ca. 10%.

Thanks to some new measurement points placed throughout the refinery, corrective measures were taken in spots with high consumption of workshop air. As a result, the refinery's requirement for this medium dropped by ca. 50% (900 Nm³/h) within a short period of time. We also managed to permanently reduce the amount of active electric power consumed by the compressors by 126 KW.

In 2014, we developed and implemented energy efficiency guidelines for the planning of all investment activities. The document entitled 'Energy criteria applicable to projects, repair works and procurement of products and services at Grupa LOTOS' was incorporated into the Integrated Management System.

#### Direct energy consumption of Grupa LOTOS in 2014, by primary energy source [GJ]

Item	Direct, purchased energy	Direct, produced energy	Direct, soldenergy	Direct, totalenergy consumption
Natural gas	9,606,628 ⊘			9,606,628 ⊘
Fuel gas		10,761,377 ⊘	141,164 ⊘	10,620,213 ⊘
Residual gas		3,527,961 ⊗		3,527,961 ⊘
HSFO+Bleed fuel oil		0 ❷		0 ⊘
LSFO	0 🤡	885,398 ⊘		885,398 ⊘
Light fuel gas (HON)		2,931 ⊘		2,931 ⊘
Electricity			0 ❷	0 ⊗
Heat			106,290* ⊘	- 106,290 ⊘
Total	9,606,628 ⊘	15,177,667 ⊘	247,454 ⊘	24,536,841 ⊘

<sup>\* - 106,290</sup> GJ represents primary energy consumed to produce sold heat (usable forms of energy) in the amount of 89,103 GJ.

Indirect energy consumption of Grupa LOTOS, by primary energy source - energy purchased from the National Power			
Grid [GJ]	2012	2013	2014
	4,407,590	4,036,944	4,342,487
		MWh	491,666 ⊘
Electricity purchased		GJ	1,769,998 🔗
Primary energy used for production of purchased electricity (indirect)		GJ	4,342,487 🔗

Gas separated from the formation fluid on the production platform is pumped via a gas pipeline to the Energobaltic gas power station, where it is converted into energy.

The main source of energy used on drilling platforms is diesel oil, delivered by supply vessels. Production platforms also use natural gas, extracted together with oil. On drilling platforms, energy is generated by a system of engines and generators running on diesel oil, which meets the legal requirement of less than 1% sulfur content, applicable since January 2015.

The generated energy is distributed across the platform by means of power equipment. On the Baltic Beta platform, energy is additionally generated by gas turbines running on gas separated from the formation fluid, composed chiefly of crude oil. The energy turbine powers the entire Baltic Beta platform and the PG-1 wellhead platform, while the other turbine drives a pump injecting water into the reservoir. LOTOS Petrobaltic's offshore units were powered by fuel containing 0.1% of sulfur as early as in 2014. In LOTOS Geonafta, energy on the rigs is produced by a diesel generator.

#### Direct energy consumption of LOTOS Petrobaltic in 2014, by primary energy source [GJ]

Item	Direct – purchased energy	Direct – produced energy	Direct – sold energy	Direct – total energy consumption
Natural gas	5,023 €	941,873 🤡	663,615 ⊘	283,281 ⊘
Diesel oil	153 €	0 📀	0 📀	153 ⊘
Total	5,176 ⊘	941,873 ⊘	663,615 ⊘	283,434 📀

#### Direct energy consumption of LOTOS Geonafta in 2014, by primary energy source [GJ]

Item	Direct – purchased energy	Direct – produced energy	Direct – sold energy	Direct – total energy consumption
Natural gas	2,559 ⊘	0 🕢	0 🕢	2,559 ⊘
Fuel gas	0 🛇	17,606 ⊘	0 🔗	17,606 ⊘
Diesel oil	20,987 ⊘	0 🕢	0 🛇	20,987 ⊘
Total	23,546 ⊘	17,606 ⊘	0 🛇	41,152 ⊘

In Energobaltic, gas is used to generate heat in heating boilers. Natural fuel gas is obtained in the process of separation of waste natural gas.

This fuel is used for co-generation of heat and electricity, as well as for heat generation in boilers. The medium which carries the heat transferred, for a payment, to end users of the municipal heating network in Władysławowo, is hot water.

#### Direct energy consumption of Energobaltic in 2014, by primary energy source (GJ)

Item	Direct - purchased energy	Direct - produced energy	Direct - sold energy	Direct - total energy consumption
Natural gas type E (GZ 50)	10,353	0 🛇	0 🕢	10,353 ⊗
Natural fuel gas (dry)	0 🕢	297 538 €	0 📀	297,538 🕢
Light fuel oil	357 ⊘	0 ⊘	0 📀	357 ⊘
Electricity	0 🕢	62,215 ⊘	59,582 ⊗	2,633 🕢
Heat	0 📀	131,888 ⊘	103,055 ⊘	28,833 ⊘
Total	10,710 ⊘	491,641 ⊗	162,637 ⊘	339,714 ⊘

#### Indirect energy consumption of the LOTOS Petrobaltic Group, by primary energy source [GJ]

	2012	2013	2014
OTOS Petrobaltic			
nergy purchased for the land base's operations	6,398	5,948	6,085 ⊘
OTOS Geonafta			
nergy purchased for administrative purposes	4,465	1,256	1,224 ⊘
nergy for production purposes	12,071	11,826	13,493 🤡
otal	16,536	13,082	14,717 🤣
nergobaltic			
lectricity purchased	25,776	26,539	29,165 ⊘
nergobaltic		·	

# Materials used

The main raw materials used in exploration and production drilling include drilling mud components and cement used to bind casing to the drilled rock. LOTOS Petrobaltic does not use oil-based muds for drilling, and relies only on water-based muds.

The main raw materials used in the production process also include chemical substances added to the formation and produced water pumping system and materials used as filter inserts. Formation water is saturated brine, mostly chlorine, sodium and calcium brine.

In order to protect the Baltic Sea, LOTOS Petrobaltic re-injects produced water back into the field. This solution does not interfere with the marine environment or with the field formation. The Baltic Sea is particularly sensitive, which is why operations on the Baltic Sea are governed by rigorous regulations. Consequently, the parameters of water around the platforms have to be continually monitored to ensure that they meet the relevant environmental requirements.

## Raw materials and consumables used by the LOTOS Petrobaltic Group, by weight and volume

Injected and formation water	<b>2012</b> [tonnes]	<b>2013</b> [tonnes]	<b>2014</b> [tonnes]
Biocides	8.90	10.17	5.57 ⊘
Coagulants	2.11	1.69	2.60 ⊘
De-emulsifiers	6.55	8.84	5.23 ⊘
Other	2.35	15.16	48.41 ⊘
Total	19.91	35.90	61.81 ⊘
Drilling mud			
Bentonite	4.66	19.3	3.50 ⊘
Salts (drilling mud and packer fluid)	54.39	78.8	55.00 ⊘
Hydroxides	3.09	2.9	2.60 ⊘
Other (for maintaining appropriate properties - viscosity, filtration, etc.)	18.17	22.8	34.39 ⊘
Total	80.31	123.80	95.49 ⊘
Cement slurry			
Cement	217.45	430.6	224.16 🤡
Processing agents	1.84	14.4	29.97 ⊘
Total	219.29	445.0	254.13 ⊘
Total use	319.51	604.7	411.43 🕢
Substances used in the transport of gas from platform through pipeline to Władysławowo			
Methanol	5.66	8.08	9.18 ⊘
LOTOS Geonafta			
Substances used in the drilling process	<b>2012</b> [tonnes]	<b>2013</b> [tonnes]	<b>2014</b> [tonnes]
Acid inhibitors	3.83	6.95	3.66 ⊘
Drilling mud additives	60.03	111.40	136.34 🕢
Polymers	30.56	48.31	57.65 ⊘
Blockers	54.95	29.25	48.80 ⊘
Lubricants	2.03	1.40	1.20 ⊘
Cement	62.02	162.42	200.12 🕢
Extraction additives	25.21	111.40	- 🕢
Total	238.63	471.13	447.77 ⊗
Substances used in the production process			
Corrosion inhibitors	0.88	2.16	1.71 ⊘
De-emulsifiers	23.42	29.28	25.11 ⊘
Oxidants	0.60	0.20	0.20 🕢
Total	24.90	31.65	27.02 ⊘
Total use	263.53	502.78	474.78 🔗
Energobaltic			
Stage I - Gas Compressor Station	2012	2013	2014
		9,790,352	10,884,082 ⊘
Input material: waste gas [Nm³]	10,350,433		
	10,350,433	10,200	11,600 ⊘
[Nm³] Indirect production material: methanol		10,200	11,600 ⊘

Input material: natural gas condensate	1,550.5	1,613.51	1,719 ⊘
Obtained natural fuel gas (dry) as a fuel for heat and electricity generation [Nm³]	5,572,326	5,250,374	5,950,766 📀

## Raw materials and consumables used by Grupa LOTOS, by weight and volume [tonnes]

Raw materials	2012	2013	2014
Crude oil	9,673,647	8,702,622	9,545,307 ⊗
Raw materials and components	833,610	834,114	909,379 ⊘
Enhancing additives	2,091	1,994	1,980 🕢

# Water consumption

The refinery in Gdańsk draws process water into a retention tank with a capacity of 350,000 m<sup>3</sup>, constructed in the Motlawa oxbow lake. Underground water is sourced from Cretaceous and Quaternary formations. Cretaceous water is an important source of water for human use. Because of its quality, Quaternary water is used solely for industrial purposes and not classified as a material source of water.

The economic use of water resources is based on relevant water use and integrated permits. Analyses of the environmental impact of our water abstraction confirm that it does not affect any protected sites or areas of great environmental value, and that the amount of water abstracted is substantially below permitted volumes.

### Total freshwater abstracted by Grupa LOTOS, by source [m³/year]

Source	2012	2013	2014
Underground water	189,217	162,511	156,161 ⊘
Surface water	3,532,113	3,574,791	3,454,532 ⊘
Total	3,721,330	3,737,302	3,610,693 🔗

#### Grupa LOTOS processes consuming large quantities of water

	2012	2013	2014
CHP plant - utilities production	2,936,080	2,778,592	3,053,329 €
Refinery – circulatory cooling water	1,503,995	1,418,925	1,444,183 ⊗

None of the companies of the LOTOS Petrobaltic Group are depleting water resources through excessive abstraction.

In the production process, formation fluid is withdrawn from the reservoir, and subsequently separated into crude oil, natural gas and formation water. Before the water injection system was installed on the Baltic Beta platform, formation water had been purified of oil components to a level below 15 ppm (parts per million) and discharged into the sea. At the same time, an appropriate amount of sea water was pumped into the reservoir to maintain pressure. At present, in line with the environmental requirements set forth in the Baltic Sea Action Plan, we do not discharge oily formation water into the sea, but pump it back into the reservoir in place of sea water. Since the volume of formation water does not suffice to maintain reservoir pressure, we continue to use sea water, too.

# Total freshwater abstracted by LOTOS Petrobaltic, by source

		Amount of water abstracted [m <sup>3</sup> ]		
Source	2012	2013	2014	
Freshwater – own intake	19,988	27,645	32,631 ⊘	
Freshwater – municipal water supply	1,392	2,467	4,127 ⊘	
Seawater	311,972	303,121	411,188 €	
Formation water	75,712	94,366	166,752 ⊗	
Total	409,064	427,599	614,814 ⊘	

#### Total freshwater abstracted by LOTOS Geonafta, by source

		Am	ount of water abstracted [m³]
Source	2012	2013	2014
Freshwater	2,553	3,012	3,335 €
Water for process purposes	1,146	1,855	2,968

Total	3,699	4,867	6,303

#### Total freshwater abstracted by Energobaltic, by source

		Am	ount of water abstracted [m³]
Source	2012	2013	2014
Water from municipal network	5,538	4,853	4,755 €

Our goal is to continue to reduce the amount of water abstracted from the environment, for instance by increasing the consumption of recycled water. In 2014, the share of water recycled by Grupa LOTOS under its water and wastewater management system was high, as in previous years.

#### Volume of water recycled in Grupa LOTOS [m³]

	2012	2013	2014
Industrial water produced from treated wastewater	1,254,556	1,368,844	1,374,123
Pure condensate volume	2,207,217	2,237,300	2,412,540

#### Total volume of water recycled in Grupa LOTOS

	Unit	2012	2013	2014
Total volume of recycled water	m³	3,461,773	3,606,144	3,786,663
Percentage of recycled water	%	48.2	49.1	51.2

Treated wastewater from Grupa LOTOS is discharged to the Martwa Wisła river (process wastewater, oil-containing water and sanitary waste) and Rozwójka river (drainage water and rainwater). The Martwa Wisła waters in the refinery area are classified as internal seawaters, whereas the Rozwójka river is an element of the Żuławy Gdańskie hydrological improvement system and a tributary of the Martwa Wisła.

In 2014, there were no changes in the environmental classification of our receiving waters. Neither of them is protected or has high biodiversity value in the discharge area. Moreover, the long-term monitoring has confirmed that wastewater discharged by Grupa LOTOS has no material impact on them. Additionally, the operation of the refinery does not seem to negatively affect any of the habitats located in the vicinity of its discharge areas. On the contrary, a sort of natural balance has been achieved.

The separate treatment lines allow us to redirect almost the entire volume of treated oily rainwater to produce industrial water, which is fed back to the plant and reused. Only excess volumes of treated oily rainwater are discharged, together with technical and sanitary wastewater, to the receiving body.

For years, Grupa LOTOS has maintained a high quality of treated wastewater, with most indicators below 50% of the maximum levels defined in our permit.

### Total volume of wastewater from Grupa LOTOS, by quality and destination [m³]

	2012	2013	2014
Rozwójka	4,305,910	4,220,723	3,684,925 ⊘
Martwa Wisła	1,293,596	1,273,851	1,198,759 ⊘
Total	5,599,506	5,494,574	4,883,684 ⊘

## Treated wastewater discharged by Grupa LOTOS into the Martwa Wisła river

Indicator	Unit	2012 W <sub>r</sub>	2013 W <sub>r</sub>	2014 W <sub>r</sub>	2012-2014 W <sub>d</sub>
рН	-	7.79	7.56	7.49	6.50-9.00
Biological Oxygen Demand	mg O <sub>2</sub> /dm <sup>3</sup>	2.56	2.99	3.68	25.00
COD	mg O <sub>2</sub> /dm <sup>3</sup>	30.20	44.10	60.0	125.00
Total suspended solids	mg/dm³	6.38	7.89	6.61	35.00
Volatile phenols	mg/dm³	<0.005*	<0.005*	<0.005*	0.10
Petroleum ether extractables	mg/dm³	0.74	0.73	1.64	50.00
Petroleum hydrocarbons	mg/dm³	1.93	0.23	0.08	5.00
Total Nitrogen	mg/dm³	2.40	4.30	5.10	30.00
Total Phosphorus	mg/dm³	1.03	0.57	0.69	3.00
Sulfides	mg/dm³	0.006	0.009	0.008	0.200

Nickel	mg/dm³	0.0102	0.0175	0.0033	0.5000
Vanadium	mg/dm³	0.0289	0.0191	0.0037	2.000
Aluminium	mg/dm³	0.0624	0.0690	0.0588	3.000

#### Treated wastewater discharged by Grupa LOTOS into the Rozwójka river

Indicator	Unit	2012 W <sub>r</sub>	2013 W <sub>r</sub>	2014 W <sub>r</sub>	2012-2014 W <sub>d</sub>
Total suspended solids	mg/dm³	10.71	9.50	7.12	35.00
Petroleum hydrocarbons	mg/dm³	2.15	0.74	0.20	5.00

Wr- actual average annual level

W<sub>d</sub> - permissible average annual level

On LOTOS Petrobaltic rigs, only treated wastewater and cooling water is discharged into the sea, with the condition of sea water around the platform monitored on a daily basis. Similarly, no wastewater produced by LOTOS Geonafta in its drilling operations is discharged directly into natural bodies of water. All process wastewater and greywater/blackwater is stored and subsequently transported to a wastewater treatment plant.

#### Volume of wastewater from the LOTOS Petrobaltic Group, by destination [m³]

	2012	2013	2014
LOTOS Petrobaltic			
Greywater/blackwater	7,365	7,546	13,497 🤡
LOTOS Geonafta			
Greywater/blackwater	2,553	3,012	2,842 🔗
Energobaltic			
Greywater/blackwater	1,231	617	958 🤡

All formation water produced by LOTOS Petrobaltic in the oil extraction process is pumped back into the reservoir, whereas in LOTOS Geonafta formation water is stored on the rig and then transferred for disposal.

# Volume and disposal method of formation water and water produced in the oil extraction process [m³]

	2012	2013	2014
LOTOS Petrobaltic			
Water injected back into the reservoir	47,227	94,366	165,634 ⊘
LOTOS Geonafta			
Formation water	180	246,333	255,081 ⊘

# Waste management

Grupa LOTOS complies with all national and EU regulations and decisions, making every effort to manage its waste in an environmentally safe manner.

In 2014, there was an increase in the amount of hazardous waste generated by the Company, and a decrease in non-hazardous waste volumes. The ongoing efforts to increase the depth of oil conversion and regular cleaning of tanks at the wastewater treatment plant have resulted in higher amounts of hazardous waste generated. The year-on-year difference in non-hazardous waste volumes was attributable to the completion of maintenance work at the refinery.

# Waste generated by Grupa LOTOS - quantity [tonnes/year]

Waste generated by Grupa LOTOS	2012	2013	2014
Waste stored at the end of the previous year	2,195	1,777	1,409 📀
Hazardous waste generated	6,784	6,478	8,282 📀
Non-hazardous waste generated	5,574	6,659	5,886 ⊘
Total waste generated	12,358	13,137	14,168 🕢
Volumes permitted by the integrated permit	89,627	89,627	89,627

<sup>\*</sup> result below the quantification limit in the analytical method used in a given year

Waste generated by contractors	4,154	3,170	1,512 ⊘
g	.,	-,	1,0 1 = 0

#### Waste management methods applied by Grupa LOTOS - quantity [tonnes/year]

Waste management method	2012	2013	2014
Waste recycled	12,749	13,504	14,342 ⊘
Waste treated or disposed of	28	0	0.14 ⊘
Incineration	27	0	0 🛇
Landfilling	1	0	0.14 ⊗
Waste stored on site at the end of the year	1,777	1,410	1,235 ⊘
Hazardous	1,503	1,376	1,224 ⊗
Non-hazardous	274	34	11 ⊗

The only hazardous waste sent abroad by Grupa LOTOS are spent catalysts. In 2014, the share of hazardous waste shipped internationally remained relatively unchanged. Spent catalysts were transferred to a specialist company for recycling.

Type of hazardous waste generated by Grupa LOTOS [tonnes]	2012	2013	2014
Hazardous waste transported from external sources (from outside the LOTOS Group) to the refinery	0	0	0 ❷
Hazardous waste transported from the refinery to external sources in Poland	7,258	6,352	8,159 €
Hazardous waste transported from the refinery to external sources abroad	0	253	275 ⊘
Total hazardous waste transported	7,258	6,605	8,433 🕢
Share of hazardous waste shipped internationally	0	3.8	3.3 ⊘

In 2014, there were no leaks with a material environmental impact at any of the LOTOS Group companies. 🤡

Drill cuttings (small pieces of rock fragmented by the advancing drill bit) are the main waste product of the drilling process. Once carried to the surface, they are directed to the drilling mud treatment system. Drill cuttings do not contain any of the substances listed in Annex 1 to the Helsinki Convention. Drill cuttings with drilling mud from primary and secondary treatment are discharged to the seabed after being separated and washed, whereas drill cuttings from tertiary treatment are carried ashore and transferred to a waste management company. Each batch of disposed drill cuttings is tested for toxic content. Drilling mud, on the other hand, is recycled so it can be reused in the drilling process. When drilling mud is not suitable for recycling, it is also taken ashore and transferred to a waste management company.

LOTOS Petrobaltic platforms generate drilling waste and other waste, of which the latter is transported ashore to an authorised handler.

#### Waste generated by LOTOS Petrobaltic - quantity [tonnes/year]

Generated waste*	2012	2013	2014
Hazardous waste generated	11	38	189 ⊘
Non-hazardous waste generated	451	644	984 ⊘
Total waste generated	462	682	1,173 🕢

<sup>\*</sup> without municipal waste

# Waste generated by LOTOS Geonafta - quantity [tonnes/year]

Generated waste	2012	2013	2014
Hazardous waste generated	5	22	41 ⊘
Non-hazardous waste generated	9.6	3,966	55 ⊘
Total waste generated	14.6	3,988	96 ⊗

## Waste generated by Energobaltic - quantity [tonnes/year]

Generated waste	2012	2013	2014
Waste stored at the end of the previous year	-	0.07	0.146 ⊘

Hazardous waste generated	0.2	0.42	0.277 ⊘
Non-hazardous waste generated	0.1	0.808	0.178 🕢
Total waste generated	0.3	1.30	0.455 ⊘

#### Waste management methods [tonnes/year]

LOTOS Petrobaltic	2013	2014
Waste recycled	141	89.932
Landfilling	541	20.42
Waste stored on site at the end of the year	0	0
LOTOS Geonafta	2013	2014
Waste treated or disposed of	3,988	4,288
Landfilling	0	0
Waste stored on site at the end of the year	0	0
Energobaltic	2013	2014
Waste treated or disposed of	0.65	0
Waste recycled	0.40	0
Landfilling	0.25	0.231
Waste stored on site at the end of the year, including:	0.146	0.370
- hazardous waste	0.101	0.242
- non-hazardous waste	0.045	0.128

All muds used in the drilling process are water-based – we do not use oil-based muds on the Baltic Sea. All drilling muds circulate within a closed system. Also, the drilling process generates drill cuttings, i.e. small pieces of drilled rock, containing 5%-10% of drilling mud. The amount of drill cuttings depends on the depth and diameter of a well.

The drilling muds were tested for their impact on the marine environment (a study entitled 'Determination of the potential impact of drilling mud on the marine environment of the Baltic Sea' prepared at the Gdańsk University of Technology) and considered environmentally non-toxic.

They do not contain any of the substances listed in Annex 1 to the Helsinki Convention. Drill cuttings from primary and secondary treatment are discharged to the seabed after being separated from the drill mud and washed, whereas drill cuttings from tertiary treatment are carried ashore and transported to the municipal landfill. Each batch of disposed drill cuttings is tested for toxic content. In extraordinary circumstances related to technical or technological issues, small amounts of drilling muds may be released into the sea. However, they are non-toxic and have no material impact on the natural environment. Drilling muds and drill cuttings were managed by a third party.

#### Total weight of waste [tonnes]

LOTOS Petrobaltic	2012	2013	2014
Drill cuttings:			
transferred as waste	-	94	170 ⊘
discharged to the sea	-	1,054	1,507
Total	68	1,148	1,677
Drilling mud:			
in circulation	-	1,141	2,127
transferred as waste	-	340	410 ⊘
recycled to be reused	-	144	447
Total	237	1,625	2,984
LOTOS Geonafta	2012	2013	2014
Drill cuttings	669	1,601	1,934 ⊘
Drilling mud and process water	1,561	2,322	2,259 €
Total	2,230	3,924	4,193 ⊘

In accordance with applicable regulations, the LOTOS Group companies have engaged recycling contractors for recovery and recycling of packaging introduced to the domestic market. The aggregate recovery rates for packaging waste were in line with the statutory requirements.

# Sustainable transport

We seek to mitigate the environmental impact of transport services provided by or for the LOTOS Group.

Initiatives taken to minimise the environmental impact of road transport of fuel products, irrespective of the legal requirements in place, included:

- · developing safety requirements for delivery sites,
- defining safe loading, unloading and transport procedures for fuels and performing regular inspections to ensure they are complied with,
- · setting emergency response rules,
- checking third-party vehicles for compliance with technical requirements,
- supervising selection and training of staff responsible for transport of products.

Road and rail transport of fuel products are strictly governed by the Polish and international regulations on transport of dangerous materials (ADR and RID), designed to reduce the negative environmental impact of transport.

All bitumen and heavy fuel oil transport is coordinated by LOTOS Asfalt. In 2014, road tankers carried nearly 445 thousand tonnes of products, covering more than 5 million loaded kilometres and consuming approximately 2 million litres of fuel.

To limit exhaust emissions, the company's products are first transported to distribution centres by rail, and only then dispatched to customers in road tankers. Products in LOTOS Asfalt depots are reloaded in modern handling terminals, where harmful vapour emissions are minimised. Loading stations for road tankers are air-tight, which minimises atmospheric emissions of harmful gases, such as hydrogen sulfide. In addition, the air-tightening of connections between the loading station and tankers has substantially improved workplace safety for loading staff. The volume of loaded product is precisely measured using mass flowmeters, which ensure that the regulatory maximum total weight of a vehicle has not been exceeded. Such measures help reduce road wear from overloaded vehicles. LOTOS Asfalt hires specialist transport companies to deliver bitumens to its customers, with every contractor meeting the highest environmental and service quality standards. Such third-party transport companies operate modern fleets compliant with EU requirements, which ensure safe, competitively-priced and environmentally-friendly delivery.

LOTOS Asfalt vehicles are systematically replaced with new Euro 6-compliant truck tractors, which consume less fuel and produce substantially less harmful emissions. Vehicles used for international road transport have certificates confirming compliance with noise emission standards.

Innovative solutions and top-quality insulation materials effectively prevent temperature loss in transported bitumen. Consequently, customers do not have to reheat it before use, which substantially reduces energy consumption and environmental pollution.

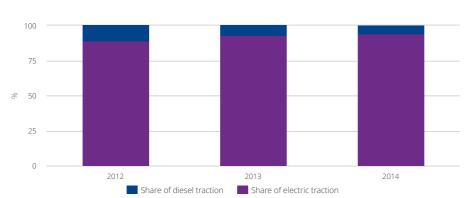
In 2014, the total weight of bitumens shipped by sea was in excess of 21.5 thousand tonnes. Because of the economies of scale, sea transport helps reduce harmful emissions and fuel consumption per product unit.

LOTOS Oil, which is also a marketing company, does not have its own fleet, relying solely on selected transport companies. During the selection process, the company pays special attention to certificates confirming compliance with a number of regulations, including environmental protection standards, as well as vehicle fleet quality. At present, most transport companies operate Euro 6-compliant trucks, which means that vehicles used to transport oil products meet the most stringent EU standards of exhaust emissions.

Transport of liquid fuels sold by LOTOS Paliwa is also outsourced to specialist companies. Out of the total volume of fuels sold in 2014, 213 thousand  $m^3$  (5%) was transported by rail and 1,190 thousand  $m^3$  (28%) by road tankers, with the balance collected from storage depots by customers using their own means of transport.

In 2014, no fuel spills were reported in road or rail transport.

LOTOS Kolej, which provides rail transport services to the LOTOS Group and other customers, keeps increasing the share of electric traction transport and gradually replacing diesel locomotives in an effort to protect the environment. At the end of 2014, LOTOS Kolej operated more than 100 locomotives, of which 60% were electric engines.



Share of electric and diesel traction services performed by LOTOS Kolej  $\,$ 

Source: In-house analysis.

Due to traction issues, a portion of transport and shunting work is still carried out using diesel locomotives. In 2014, the volume of fuel used by diesel locomotives fell to 4,229 thousand litres, down 13% year on year. The volume of traction electricity used by electric locomotives operated by the company totalled 85,925 MWh.

# Mitigation of environmental impact

All Grupa LOTOS fuel products meet the quality requirements prescribed by law, and in some environmentally relevant respects they even exceed the legally required standards. Consequently, the environmental impact of our fuels is well below regulatory limits.

Key products of Grupa LOTOS, which include both gasolines and diesel oils manufactured by the refinery in Gdańsk, have a sulfur content substantially below the legal threshold. The average annual sulfur content in motor gasolines and diesel oils is 3.3 ppm and 6.2 ppm, respectively, considerably below the required maximum of 10 ppm. This results in substantially lower sulfur dioxide emissions.

#### Substances hazardous to human health and the environment in Grupa LOTOS fuels

Substance	Unit	2012 - volume	2012 - volume (average)	2013 - volume	2013 - volume (average)	2014 - volume	2014 - volume (average)
Benzene (in gasolines)	% V/V	0.5 - 1.0	0.8	0.4 - 1.0	0.9	0.5 - 1.0 🕢	0.8 🕢
Sulfur (in gasolines)	mg/kg	1.0 - 9.9	3.9	0.1 - 7.9	3.3	0.1 - 8.7 🤡	3.3 ❷
Sulfur (in diesel oil)	mg/kg	1.4 - 9.5	5.5	2.0 - 10.0	5.5	2.7 - 9.9 🕢	6.2 ⊘

Another long used method of mitigating the environmental impact of fuels is the use of biocomponents, which can be considered a renewable energy source, and therefore limit the impact of fuel combustion on the environment.

Given the requirements of the Act on Biocomponents and Liquid Biofuels, the Grupa LOTOS refinery's fuel products contain biocomponents: ethanol and ethyl tert-butyl ether are used in gasoline production, whereas fatty acid methyl esters are added to diesel oils. According to the current quality requirements for liquid fuels, the permitted ethanol and ethyl tert-butyl ether content in gasoline is 5% and 15%, respectively. Similarly, the volume of fatty acid methyl esters in diesel oils must not exceed 7%.

The total required content of biocomponents in motor fuels is set by the state. In 2013, the Council of Ministers issued a Regulation on National Indicative Targets (NIT) until 2018, whereby the NIT for 2013–2016 was set at 7.10%, which means that biocomponents must account for 7.10% of the energy content of fuels marketed in Poland.

In 2014, Grupa LOTOS was allowed to meet a lower NIT of 6.035%, having fulfilled the statutory requirement whereby at least 70% of the total biocomponent volume used for liquid fuel and biofuel production has to be supplied by producers listed in the register of the Agricultural Market Agency.

For more detailed information on the properties and composition of our fuel products, see the product descriptions and Data Sheets available on the Company's website at www.lotos.pl <a href="http://www.lotos.pl">http://www.lotos.pl</a> (See more <a href="http://www.lotos.pl/126/dla\_biznesu/reach">http://www.lotos.pl</a>)

Data Sheets are also provided at a customer's request on LOTOS service stations

#### **Bitumens**

LOTOS Asfalt is taking steps to eliminate the release of hydrocarbons related to production, storage and transport of bitumens, which produce olfactory nuisance, especially within the production plants. The majority of these projects were delivered in 2013. In 2014, the second stage of tank tightening was completed in Jaslo and the pre-mixer of the bitumen modification unit was connected to the vapour extraction system in Gdańsk.

Investment projects were also carried out to reduce energy consumption per production unit. As a result, inverters lowering electricity consumption were mounted on circulating pumps at the Jaslo and Czechowice production plants, which is to translate into annual savings of PLN 94,000.

#### **Best practice**

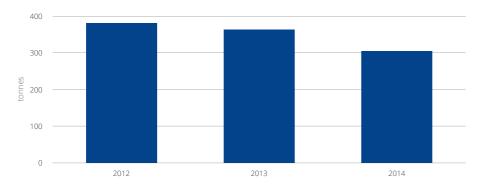
The lifespan of bitumens and bitumen binders may reach several dozen years, and so it is essential to assess their health and safety impacts at every stage of their life. Every project which involves the marketing of a new product includes an analysis of potential threats the product's use may pose to the environment and users.

In 2014, the company launched new products, Warm Mix Asphalts (WMA), used to build hot-rolled road surfaces, which reduce energy consumption and emissions, and improve working conditions. The composition of the new bitumens is also compliant with guidelines according to which petroleum fractions should not contain additives with a negative impact on the environment and people's safety.

As far as bitumen products are concerned, the industry is discussing the issue of harmful effects of bitumen fumes generated when the product is used in high temperatures. Although there is no scientific evidence proving such harmful effects, and, according to binding regulations, petroleum bitumens are not classified as hazardous substances, LOTOS Asfalt in its materials (Information Sheets concerning substances or components of mixtures which do not require Safety Data Sheets) presents the latest recommendations related to safe use of the products. To ensure their safe use, safety enhancement measures have also been extended to transport and distribution. The company's employees have access to manuals and videos on how to safely handle bitumens during loading, unloading and transport, while providers of transport services are assessed for compliance with safety standards.

#### **Rail operations**

In 2014, LOTOS Kolej streamlined the rail car cleaning process, bringing down the washing time by nearly 30% and reducing the temperature of washing water, which resulted in energy savings and lower waste emissions. The sources of light on the railway siding in Gdańsk were replaced in order to limit electricity consumption. As a consequence, energy consumption dropped by 30%.



Source: In-house analysis.

Thanks to efficient sorting of municipal and industrial waste, accompanied by growing staff awareness, the amount of waste generated in 2014 was 16% lower than a year before.

LOTOS Kolej considers safety as one of its priorities, given the character of its services involving permanent contact with hazardous chemical substances. The company tries to mitigate all identified threats by introducing various security measures and monitoring. For instance, all locomotives in service are equipped with monitoring devices which reduce the risk of accidents.

Cases involving rail traffic are considered the biggest threats. Thanks to preventive measures, in 2014 LOTOS Kolej recorded only two cases of a second degree threat to process safety, namely a leak of fuel oil from heating equipment of a tank car standing near a loading station and a leak of gas (butane) during the loading of a tank car near a LPG loading station. Emergency procedures and additional security measures were introduced to minimise the negative consequences of any incidents.

#### Oils

The environmental impact of products and packaging produced by LOTOS Oil is greater after the end of their useful lives than during the production process. In 2014, a recycling organization, on the company's behalf, ran public education campaigns on the subject. We also joined an agreement with the Marshal of the Province of Gdańsk to create and maintain a system of collection, transport, recycling or disposal of packaging waste from hazardous substances.

In 2014, the branch in Czechowice-Dziedzice was working on solutions to limit soil, surface water and groundwater contamination by its materials or products, and reduced heat emissions from its production units. At the branch in Gdańsk, the source of cooling for packaging production was replaced.

#### **Best practice**

Certain lubricants and oil products are treated as environment-unfriendly or even harmful to human health. They are, therefore, subject to statutory classification and labelling. The most extensive document addressing these issues is a *Safety Data Sheet for a Product / Substance or Information on mixture components* (for non-hazardous products). The obligation to apply these documents is imposed by REACH, a Regulation of the European Parliament and of the Council.

Manufacturers of chemical substances and mixtures are obliged to hand such documents over in their supply chains and to register their chemical products with the European Chemicals Agency. Furthermore, the labels of packed products must have symbols (pictograms) specifying the nature of threats involved.

Under these requirements, nearly 40% of the LOTOS Oil products have special labels.

In line with LOTOS Oil's product policy, some products marketed by the company exceed the statutory requirements with respect to environment and health protection. The QUANTILUS T50 and QUANTILUS 60 plasticisers, placed on the market over the last three years, may serve as a case in point, since they meet all requirements related to mutagenicity level and content of carcinogenic agents, as confirmed by independent laboratories. Another example is the upgrading of motor oil lines in accordance with the ACEA specifications, requiring such products' conformity with the exhaust after treatment systems in passenger cars and trucks.

At LOTOS Oil, all irregularities in the operation of production units whose escalation might result in industrial failures are reported and immediately eliminated, in compliance with the approved plant engineering practice. The company has in place a procedure for responding to failures and emergency situations to ensure efficient and effective crisis management, including by containing and minimising their impacts on people's health and lives, and on the environment.

In 2014, one case of uncontrolled substance release into the environment was reported. All facilities and units were inspected for the presence of such threat, and measures to eliminate the risk in the future were taken. 22 cases of a second degree threat to process safety were also recorded.

#### **Fuels**

In 2014, LOTOS Paliwa continued to invest in mitigating the environmental impact of LOTOS service stations. To protect the environment against spills of petroleum products into the ground and groundwater, worn fuel pumps were replaced at selected locations. A number of upgrades to the stations' infrastructure were also carried out to mitigate their environmental emissions and improve other aspects.

To guarantee access to information on the impact of its products on the environment and customers' health, LOTOS Paliwa provides Safety Data Sheets, which include information on the hazardous properties of substances or mixtures, and on the rules and recommendations concerning their safe use. The same is done in the case of products sold at service stations, where substances requiring Safety Data Sheets account for 5% to 15% of the total number of products.

The company sells and delivers fuels to retailers (service stations) and wholesalers. Fuel deliveries by road are supervised and coordinated by employees of LOTOS Paliwa, but executed by subcontractors. In 2014, no threats were recorded to process safety in fuel transport outsourced by the company.

The safety of fuel sale at service stations is supervised, monitored and assessed at every stage. This applies to design, construction, reconstruction or purchase of service stations, technical supervision over the infrastructure of own (CODO) stations, monitoring and reporting of hazardous situations, procedures in case of emergencies and accidents, customer service and fuel sale.

The safety of fuel sale at service stations is monitored and assessed during OHS inspections, technical audits, safety inspections, service station audits carried out by relevant Area Managers, and the system for reporting and investigating hazardous situations. The assessments result in improvements or implementation of new procedures and in corrective or preventive measures designed to reduce the risk of threats and mitigate their effects at service stations.

In 2014, one case of a serious threat to process safety, which involved damage to an LPG installation at a service station, and 29 cases of a second degree threat were recorded at LOTOS Paliwa. All the hazardous situations were analysed by station managers and reported to the company's OHS Team to take preventive measures.

#### **Upstream**

One of the most important aspects of upstream operations is to protect the environment from contamination. We make every effort to avoid spills and mitigate the environmental impact of chemicals used in drilling. We also take measures to eliminate the risk of failures and, should they occur, mitigate their possible consequences. Pollution levels are constantly monitored to ensure safety. The bottom sediments and sea water within the range of a platform's environmental impact are tested for the contents of hydrocarbons and other pollutants.

Once a year, LOTOS Petrobaltic carries out an oil spill response drill, often in cooperation with the Maritime Search and Rescue Service (SAR) and the Maritime Office in Gdynia. In 2014, the drill was held on the B3 field to exercise an oil spill recovery operation during transshipment of crude oil from one tanker vessel to another.

Our activities comply with the 'Oil Spill Response Plan for Spills Resulting from Exploration and Production Work Conducted within LOTOS Petrobaltic's licence areas', agreed upon with the SAR and approved by the Head of the Maritime Office in Gdynia, which was updated in 2014. Additionally, we have emergency procedures in place, to be followed for example in the event of an eruption, and each platform has its own 'Oil Pollution Emergency Plan'.

To minimise the risk of gas leakage, we perform regular preventive check-ups. Platform crews monitor the operating parameters of installations on an ongoing basis to eliminate the risk or minimise the consequences of the opening of a pressure relief valve. If the maximum permissible parameters are exceeded, system operators take appropriate preventive measures.

For the purpose of fire prevention, we have implemented rules to minimise the risk of accidental fire during work and rest time on platforms. For example, one of the rules is that works entailing a potential risk of fire are permitted only upon authorisation. Smoking is prohibited on platforms and in port facilities, outside of designated areas, and use of open fire is prohibited in all buildings. All the rules applicable in the facilities are set out in a dedicated guide. Additionally, to mitigate risks related to the activities of our subcontractors, each subcontractor agreement includes a Safety Annex, the provisions of which are binding to all representatives of subcontractors working in our port facilities and on our platforms.

Moreover, we have carried out a review of the installations to be deployed on the 'Petrobaltic' platform, which is currently under alterations. It has allowed us to identify the risk of an accidental substance release into the environment and implement solutions minimising this risk as early as at the design and assembly stage.

In 2014, no events were recorded at the LOTOS Petrobaltic Group where process safety would be compromised by an accidental or uncontrolled release of substances, including non-toxic or non-flammable materials, into the immediate environment.

# Assessment and prevention

The activities carried out in our key locations and products of Grupa LOTOS meet very strict legal requirements, including those which relate to the use of best available techniques (BAT) in the refining sector, as well as applicable product standards. In regular operating conditions, our products have no impacts on biodiversity of protected areas or other areas of high biodiversity value. The refinery itself is also neutral in this respect, because areas of high biodiversity value are located at a significant distance from the plant.

Some important locations of the biological network in the vicinity of the refinery include the Martwa Wisła, Czarna Łacha and Motława together with its oxbow lake. There are also legally protected areas at a certain distance from the refinery. Our retention reservoir in the village of Przejazdowo lies in the proximity of the Żuławy Gdańskie Protected Landscape Area, and to the east of the refinery is the Sobieszewo Island Protected Landscape Area. In close proximity of the refinery are the Ptasi Raj and Mewia Łacha nature reserves, as well as Natura 2000 sites: 'Zatoka Pucka', 'Ujście Wisły' and 'Ostoja w Ujściu Wisły'.

#### **Best practice**

Until recently, we had no information on biodiversity of the refinery grounds and surrounding areas. Surveys were taken for the purpose of planned investment projects; however, they failed to deliver any representative data on the condition of the natural environment in the area of the Company's direct environmental impacts, or on how the refinery's operation affects the surrounding wildlife.

In 2014, we commissioned a voluntary comprehensive wide-area survey of wildlife, covering the parts of the Gdańsk and Pruszcz Gdański municipalities where Grupa LOTOS operates or which may be directly affected by its operations.

The survey covered the refinery grounds (2.5 km²), areas surrounding the refinery (approximately 12.1 km²), and the area of the Company's retention reservoir in Przejazdowo (2.4 km², 2.5 km from the boundaries of the complex). The product of the survey was a report detailing all the identified fungi, lichen, plant and animal species, with a particular focus on species or natural habitats protected by Polish and EU laws.

The report contains an assessment of our impacts on various significant or valuable components of the environment, and specifies ways to minimise them. The components identified as particularly valuable or sensitive to anthropogenic pressures include locations which will be surveyed regularly to monitor changes in the refinery's environmental impact.

A wildlife survey conducted voluntarily on such a large scale is, according to its authors, who have extensive experience in this type of work, the first or one of the first such projects in Poland. The report provided information which had been unavailable even to the offices and authorities dealing with environmental protection in the municipalities of Gdańsk and Pruszcz Gdański. Among the identified species were both those under protection, entered in the Polish Red Data Books, and those which had never been spotted before in that part of the region, or even in the country.

By conducting the wildlife survey and preparing an initial assessment of the refinery's impacts on the surrounding environment, we opened a new chapter in the strengthening of our environmental responsibility as one of the pillars of our strategy of corporate social responsibility. Having identified the most valuable and sensitive components of the environment in the refinery's surroundings, we will be able to monitor them or initiate procedures to bring them under protection. It is worth noting that such procedure has already been initiated with respect to one area close to the refinery, which will be probably granted the status of an ecological site.

We believe that our initiative will take the best environmental practice of large industrial plants to a higher level, and we hope to inspire other organizations to take a deeper interest in the surrounding nature.

The 2014 wildlife survey has confirmed our conviction that the refinery's surroundings, in spite of being an industrial area, have a vibrant wildlife. The grounds of our plant in Gdańsk and the retention reservoir in Przejazdowo have become a habitat of many protected species. In total, the following species have been identified in the surveyed areas: 118 animal species (3 of which are entered in the Red List of Threatened Species of the International Union for Conservation of Nature (IUCN)) and 4 plant species under strict protection, as well as 50 animal and 11 plant species under partial protection.

#### STATEMENT

The Institute of Environmental Protection - National Research Institute was commissioned by Grupa LOTOS to conduct a wildlife survey on the grounds of its refinery in Gdańsk and in surrounding areas. The survey covered valuable natural resources of the area, including natural habitats, species of plants, fungi and lichen, avifauna, insects, fishes, molluscs, amphibians, reptiles and mammals (including bats).

Agnieszka Kuśmierz, PhD and Jan Borzyszkowski, PhD
Institute of Environmental Protection - National Research Institute





As a result, threats to the identified habitats and species posed by the refinery and use of the surrounding areas, as well as measures to protect them from these negative impacts and minimise the nuisance, have been specified.

The rules of protecting natural habitats as well as plant and animal species are set out in the Nature Conservation Act of April 16th 2004 with secondary legislation, while the responsibilities of an industrial plant with regard to environmental protection are set out in the Environmental Protection Law and the Act on Preventing and Remedying Environmental Damage.

The initiative taken by Grupa LOTOS to perform the wildlife survey is not typical of companies whose operations may have significant impacts on the condition of the local environment. Few companies go an extra mile in their efforts to protect the environment in the area of their operations over and above their obligations resulting from applicable laws, decisions and

rulings of relevant authorities. The standard approach is to merely meet the imposed requirements: use facilities to reduce pollutant emissions, conduct monitoring and pay fees for the use of the environment.

The identification and survey of wildlife components have enabled us to assess the current level of biodiversity and track its development. It is especially valuable and important in industrial urban areas, where degradation of the environment is most common.

One of the important findings of the work is the discovery of saline soils in the area of Wiślinka. Even before the survey was completed, Grupa LOTOS had taken steps to bring the area under protection as an ecological site.

The survey and the resulting initiatives, as well as earlier environmental initiatives by Grupa LOTOS (a nesting box for a couple of peregrine falcons on the chimney of the CHP plant), reveal high environmental awareness of the Company's employees.

The habitats as well as plant and animal species identified in the survey show a relatively high level of biodiversity for an area adjacent to a large industrial plant, such as the refinery. We can see it as a positive example of how of a large industrial plant can function in the natural environment.

The LOTOS service stations, similarly to the production plants, do not have significant impacts on protected areas. The design, construction and operation of our service stations limit their environmental impacts to the property boundaries, and the majority of them are located in urban areas.

To mitigate the risk of uncontrolled environmental impact, LOTOS Paliwa has undertaken to monitor each station's environmental impact beyond mandatory measures. In line with our Corporate Social Responsibility Strategy for 2012–2015, we have reviewed the archives of all operated service stations. The locations of selected stations will be assessed in terms of protected areas, in order to identify such areas and pinpoint any possible risks posed by the stations. The first stage of the work, i.e. a review of 50% of the selected service stations, was completed in 2014. The locations of the remaining stations included in the project will be assessed in 2015. Additionally, the same assessment will be performed for facilities incorporated into the LOTOS service station chain from the secondary market, as their environmental impacts were not assessed at the design and construction stage.

In 2014, we did not conduct any activities related to active protection or revitalisation of habitats. However, we do support various large-scale projects involving this type of activities, in partnership with environmental organizations and authorities.

- We cooperate with the **Society for Wild Animals 'Falcon'**, whose goal is to recover the population of the peregrine falcon in Poland. We started to cooperate more closely two years ago, when a couple of falcons set up their nest in a nesting box mounted for that purpose on the chimney of our CHP plant in Gdańsk.
- The wide-area comprehensive wildlife survey of the refinery's grounds and surrounding areas, commissioned last year, started to bring tangible effects. Halophyte habitats, valuable for their biodiversity, were located east of the refinery. In 2014, we held a meeting with representatives of the Pruszcz Gdański municipality and the Regional Directorate for Environmental Protection in Gdańsk to discuss this discovery. There are plans to grant the area the status of an ecological site. As such, it will be covered by environmental monitoring, regularly mown and tidied up; pedestrian and vehicular traffic will be properly channelled, and infrastructure will be built for the purposes of tourism and education, to facilitate its use while preserving optimal conditions of the habitats.
- In 2014, we got involved in efforts to help injured wild animals in the Gdańsk-Gdynia-Sopot agglomeration. As a result, we established a partnership with OTOZ Animals, which is working to create a **Wild Animals Rescue Centre** in the Gdańsk district of Górki Zachodnie. We hope that northern Poland will soon have a centre where every injured wild animal will receive professional veterinary help. Under the partnership, we provided financial support to the **'Falco gedanense kestrels from the backstreets of Gdańsk' project**, run by OTOZ Animals together with the 'Polish Birds' Association. The project's objective was to create nesting places for kestrels within the city to boost its biodiversity.

# 'Headed for the Baltic'

As our refinery is located at the coast of the Baltic Sea, we pay particular attention to cooperating with partners specialising in issues related specifically to the region's environmental conditions. These partners include: the Foundation for the Development of the Gdańsk University (FRUG) and the Marine Station of the Gdańsk University's Institute of Oceanography (SMIOUG) in Hel. Together with these institutions, for years we have implemented projects aimed at protecting the natural riches of the Baltic Sea under the common name of 'LOTOS Protects the Baltic Sea's Wildlife'. Another key initiative covering areas of great natural value within the Natura 2000 network is the long-term 'Protect the Wildlife of the Sobieszewo Island' programme. It is implemented together with the KULING Waterbird Research Group, Ornithology Station of the Museum and Institute of Zoology of the Polish Academy of Sciences, Stowarzyszenie Przyjaciół Wyspy Sobieszewskiej (Association of Sobieszewo Island Lovers), the Marine Station of the Gdańsk University and – starting from 2015 – with the 'Wyspa Skarbów' ('Treasure Island') Gdańsk Archipelago of Culture.

Since 2014, in close cooperation with expert partners, we have implemented the Kierunek Baltyk ('Headed for the Baltic') project, sharing the potential of human resources, financial resources and skills. The project links all our environmental efforts undertaken under the 'LOTOS protects the Baltic Sea's Wildlife' and 'Protect the Wildlife of the Sobieszewo Island' programmes.

The 'Headed for the Baltic' initiative originated from the need to gather all information in one place – most importantly, the audio and video materials held by the partners, and the need to create a database and calendar of events related to the Baltic Sea. The Baltic Sea is the primary focus of the established partnerships as well as one of the key areas covered by the LOTOS Group's Corporate Social Responsibility Strategy for 2012–2015

# 'LOTOS Protects the Baltic Sea's Wildlife'

The main objective of the programme, which has been in place for six years, is the recovery and protection of the endangered species of marine

fauna, in particular mammals: the porpoise and the grey seal. The Marine Station of the Gdańsk University's Institute of Oceanography conducts research projects on the biology and ecology of coastal fish in the Baltic Sea as well as of marine mammals, their habitats and interaction with human activity.

The equipment purchased in the course of our cooperation has been used to support research on the presence of harbour porpoises under the project entitled 'Biological and ecological research of marine organisms and habitats with a view to implementing more effective methods of managing their resources and protection'. Our joint efforts to protect the natural resources of the Baltic Sea also led to the purchase of special cod pots for testing purposes, which are safe for harbour porpoises and seals and also make it possible to catch living fish. Grupa LOTOS's support manifested in co-financing of equipment and modernisation of the Zelint research vessel significantly aided the research on the presence, distribution and habitat preferences of the Baltic Sea porpoises. Still in the first half of the 20th century, the population of harbour porpoises was so large that the authorities introduced a bonus for catching or killing one. In 1922–1933, at least 600 porpoises were caught in Polish waters.

In late 2014, research results were published according to which the Baltic Sea is now home to approximately 450 porpoises, whose number – before the research was conducted – had been estimated at around 100. It is still an extremely low number and our intention is to contribute to its increase

Thanks to our support the 'Headed for the Baltic' educational website was set up, where anyone can watch the other endangered species of marine mammals – the seal. Also, a Facebook page under the same name was launched. A camera has been installed in Hel to provide a live online video broadcast of the Seal Centre in Hel. It allows users to watch growing animals while they acquire new skills needed to survive in the Baltic Sea. In 2014, more than 35,000 users subscribed to the educational Facebook Fanpage. The www.kierunekbaltyk.pl website was viewed by 81,605 users, and its www.sledzfoki.pl section with live streaming from the Seal Centre was viewed by 56,450 users.

#### 'Protect the Wildlife of the Sobieszewo Island'

The second pillar of the 'Headed for the Baltic' project is a long-term programme supported by environmental organizations: the Kuling Waterbird Research Group, Institute of Zoology of the Polish Academy of Sciences, Stowarzyszenie Przyjaciół Wyspy Sobieszewskiej (Association of Sobieszewo Island Lovers), and since 2014 – the Gdańsk University's Biological Station.

The programme is aimed at protecting nature, in particular the endangered bird species (including the sandwich tern (Thalasseus sandvicensis) and the common ringed plover (Charadrius hiaticula)), and educating the public about biological diversity of the nature reserves located within the Sobieszewo Island in Gdańsk. The local 'Ptasi Raj' and 'Mewia Łacha' reserves are part of a very important international ecological hub, which throughout a year is a stopover site for a vast number of migrating aquatic and wetland birds.

The programme, launched in 2009, has resulted in the construction of protective infrastructure, including development of an educational ecoroute within the 'Mewia Łacha' reserve. The specially designed route, away from bird breeding grounds and protected flora, is marked with educational info-boards and enables visitors to see the reserve all year round.

Under the programme, all partners run regular ecological education projects for both local residents and tourists. The Kuling Waterbird Research Group actively conducts educational sessions at such events as 'Biodiversity – learn to preserve', 'Baltic Science Festival' and 'Edu-picnic'. Apart from that, it constantly monitors the 'Mewia Łacha' Nature Reserve, where in 2014 alone it recorded 2,200 visitors, who were informed about the natural riches of the reserve, its protected species and habitats. As the administrator of the reserve, Kuling also conducts a survey among visitors to the reserve to test their knowledge of the area and of the protected species residing there. The level of knowledge about the natural riches of the reserve was high – as many as 84% of the respondents said that they had heard of and visited the place, and 72% had heard of and could name actions taken to protect the environment under the 'Protect the Wildlife of the Sobieszewo Island' programme.

In conjunction with the Ornithological Station, for years we have helped organize free-of-charge lectures for students of Gdańsk schools devoted to 'The Sobieszewo Island and Natura 2000 Nature Protection Area. Protection of birds and their habitats'. The objective is, among other things, to draw their attention to environmental protection and promote the European Natura 2000 Network, with a special focus on the role of the protected areas of the Sobieszewo Island in the preservation of biodiversity.

In 2014, over 2,500 people took part in educational visits to the 'Mewia Łacha' Nature Reserve as part of the 'Protect the Wildlife of the Sobieszewo Island' programme, while lectures organized at the Ornithological Station were attended by 2,000 pupils from 31 primary and junior high schools from the Gdańsk-Gdynia-Sopot agglomeration.

# Capital expenditure on environmental protection

	Costs and expenditure [PLN '000]		
Item	2012	2013	2014
Grupa LOTOS			
Costs			
Cost of environmental management	3,143	2,137	2,852 ⊘
Spending on environmental protection	23,555	22,336	22,569 🕢
Financing of pro-environmental efforts of third-party institutions	525	509	544 ⊗
Expenditure			
Pro-environmental investment	67,606	63,012	16,040 🤡
Expenditure on property, plant and equipment	141,913	202,314	134,572 ⊘
LOTOS Group			

#### Costs

Cost of environmental management	4,729	4,695	4,442 ⊘
Spending on environmental protection	26,716	28,336	33,254 ⊘
Financing of pro-environmental efforts of third-party institutions	547	509	544 ⊗
Environmental insurance*	105	194	0 🔗
Expenditure			
Pro-environmental investment	75,515	66,348	17,665 ⊘
Expenditure on property, plant and equipment	814,264	1,130,446	980,174 ⊘

<sup>\*</sup> Environmental insurance premiums are paid at the LOTOS Group level. The structure of the insurance contract effective in 2014 does not allow to explicitly determine the part of the insurance premium paid for the environmental protection cover. Therefore, costs related to environmental insurance are not reported for 2014.

	Expenditure		Expenditure [PLN '000]
Item	2012	2013	2014
Grupa LOTOS			
Air emissions	2,980	1,256	1,265 ⊗
Water abstraction	140	162	150 ⊘
Wastewater discharge	298	316	333 ⊘
Waste landfilling	0	0	0 🕢
Total	3,418	1,734	1,748 🕢
LOTOS Group			
Air emissions	3,218	1,651	1,622 ⊘
Water abstraction	173	240	220 🕢
Wastewater discharge	388	511	537 ⊘
Waste landfilling	0	0	0 🕢
Total	3,779	2,402	2,379 ⊘

## RELATED CONTENT:

#### Environment

We seek to reduce the environmental risk of our operations and continually minimise our environmental impact. We support initiatives designed to enhance energy sector security in a socially and environmentally responsible manner.

Go to the page » <a href="http://raportroczny.lotos.pl/en/business-strategy-and-model/environment">http://raportroczny.lotos.pl/en/business-strategy-and-model/environment</a>

## Key objectives

We achieve our business objectives with due regard to corporate social responsibility and sustainable development by the best possible use of the organization's resources and capabilities to generate economic and social value for the benefit of the Company and its environment.

Go to the page " <http://raportroczny.lotos.pl/en/business-strategy-and-model/key-objectives>

## Operational (refining) segment

In the operational (refining) sector, we identify operational risks related to the refinery and environmental risks, including risks related to carbon emission caps.

Go to the page  $\,$  »-http://raportroczny.lotos.pl/en/risk-and-opportunities/operational-refining-segment>



Results and prospects > Sustainable development > Social impact

# **Social impact**

In 2014, we carried out a wide-scale survey to engage our stakeholders in the evaluation of activities undertaken by the LOTOS Group under its Corporate Social Responsibility Strategy in terms of their intended outcomes. The survey covered local inhabitants and entrepreneurs in our key operating regions, i.e. the towns of Jasło and Czechowice-Dziedzice in the south of Poland, and the Gdańsk Province in the north.

## Territorial scope of the survey

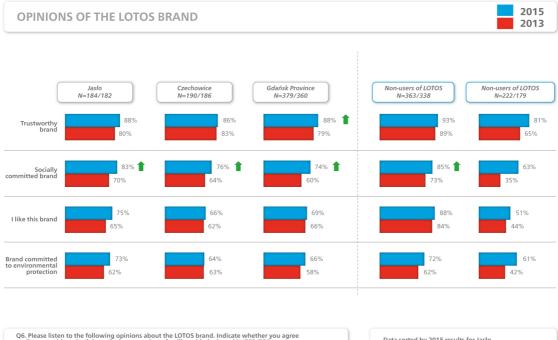


## Key stakeholders of the LOTOS Group

Internal stakeholders	Social environment	Market environment
Employees	Local communities	Contractors and subcontractors
LOTOS Group companies	NGOs	Suppliers
Trade unions	Local government institutions	Customers
Employee Council	Government administration	Trade partners
	Science and research institutes, and educational centres	Competitors
	Employer organizations	Industry organizations and international institutions
	Media	Regulatory and monitoring organizations
	Natural environment	Participants of the capital market

(more < http://2012.raportroczny.lotos.pl/en/the-organization-and-its-report/stakeholders/stakeholders-involvement>)

Opinion ratings of the LOTOS brand directly related to its mission of social responsibility were higher than in 2013. Questions about the perception of Grupa LOTOS's social and environmental commitment were answered affirmatively by 83% of the respondents in Jaslo, 76% – in Czechowice-Dziedzice and 74% – in the Gdańsk Province. In each stakeholder group, we noted a more than 10% growth in affirmative responses compared with the previous year.

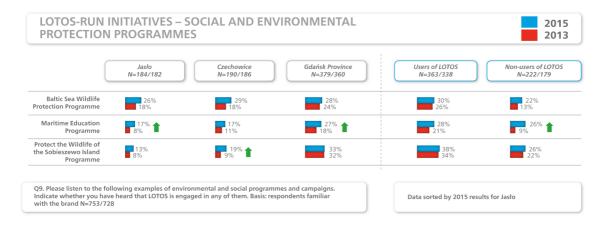


Q6. Please listen to the following opinions about the LOTOS brand. Indicate whether you agree or disagree with each of them. Basis: respondents familiar with the brand N=753/728

Data sorted by 2015 results for Jasło

## **CSR** and environmental protection programmes

The awareness of our environmental protection programmes has grown compared with previous years. This means that the organization's activities have been recognised and appreciated by local communities, who are their direct beneficiaries.



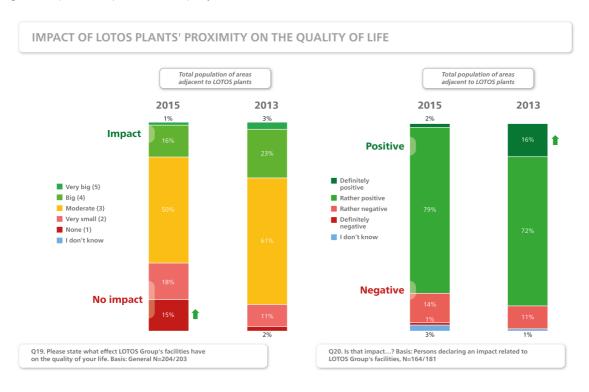
## **Awareness of Grupa LOTOS's activities**

The awareness of CSR activities undertaken by Grupa LOTOS was discussed with our stakeholders. Compared with 2013, a considerable growth in awareness of our key CSR programmes carried out for the benefit of local communities is seen in the Gdańsk Province and the towns of Jasło and Czechowice-Dziedzice (up by 10%, on average, in each group covered by the survey). An increase in the area of education has also been noted

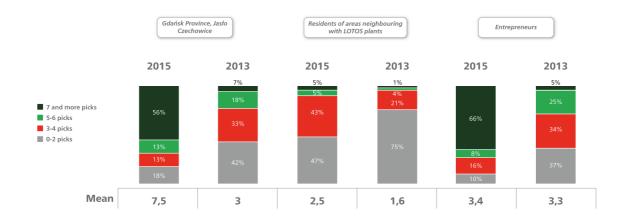


## Impact of production plants' proximity on the quality of life

In 2014, local communities in the vicinity of the LOTOS Group's production facilities reported a perceived increase in their negative impacts. These survey results challenge us to intensify our efforts in working for the benefit of local communities and educating them on how we actually mitigate the impact of our operations on the quality of their lives.



Among all respondents, those living in direct vicinity of the plants declare the lowest awareness of the LOTOS Group's CSR activities – a result which has remained unchanged since 2011. These stakeholders tend to perceive LOTOS in terms of the nuisance of living near to a large industrial plant. However, the inhabitants of individual regions in general showed increased awareness of our activities for the benefit of local communities and the natural environment.



Although the operation of the LOTOS Group's facilities does not have a considerable negative impact on the environment or local communities, we continually seek to minimise our overall influence and ensure prompt response to any possible incidents. All companies of the LOTOS Group hold the required environmental permits and meet their conditions by a wide margin. We have a dedicated, trained chemical response team, which is on stand-by in case of any incidents involving chemical substances. We are also in contact with relevant authorities, representatives of public utility facilities and of local communities, providing them with information on any incidents, both planned and unexpected, which may affect our environment. We respond to every nuisance reported (e.g. odour or noise) which may be caused by our plants. In response, we carry out an inspection of the relevant area, looking for sources and causes of the nuisance, and keep the reporting person posted on the progress of this work. If a complaint if found to be justified, we take action to eliminate the source of the nuisance or at least to minimise its impact.

In 2014, we completed an environmental impact assessment for the heavy residue processing unit, scheduled to be launched at the refinery in 2018. One of the requirements of the environmental impact assessment procedure was to give the public an opportunity to participate. In order to obtain the opinions and agreements required to be included in the environmental impact report from all groups of stakeholders, we carried out a series of public consultations with local communities, public officials and businesses in the neighbourhood.

In January 2015, we also consulted our key partners, who cooperate with us in our CSR programmes and initiatives, on the level of satisfaction with our dialogue, frequency of meetings and contacts, and quality of communication. The majority (93%) of the over thirty stakeholders, including representatives of NGOs, self-governments, universities and cultural institutions, rated the communication and flow of information as very good. Close to 100% of the respondents answered affirmatively to the question about fulfilment of Grupa LOTOS' commitments and obligations related to our cooperation in 2014.

## **Customer satisfaction**

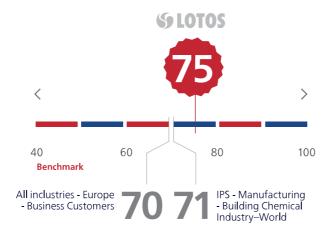
In line with our Corporate Social Responsibility Strategy, our primary objective is to build lasting customer relationships through a focus on understanding customer needs and delivering the expected product quality and safety, measured as the level of customer satisfaction with the LOTOS Group's marketing segment companies. Progress in this area is monitored by means of regular surveys on factors taken into consideration in the selection of supplier, supplier accessibility and competences, quality and availability of products, time of response to requests for proposal, price levels compared with other suppliers and the brand image.

#### Satisfaction surveys among the LOTOS Group's customers

Survey frequency (number / year)	Customer segments	
1	B2B	
1	B2B – bitumen and heavy fuel oil	
2	LOTOS Group, forwarding companies, direct customers	
1	B2B	
1	B2B	
	Survey frequency (number / year)  1  1  2  1  1	

At most of the marketing segment's companies, satisfaction surveys are conducted using the CAWI (Computer-Assisted Web Interview) technique. The result analysis is based on the TRI\*M methodology developed by TNS Polska, the TRI\*M Index being a single number score which measures customer satisfaction and loyalty levels. The TRI\*M Index questions relate to overall satisfaction, probability of recommendation, repurchase intent and competitive advantage. The TRI\*M Index is a measure of customer retention levels – the higher it is, the more customers are attached to the brand and the less likely to transfer their business to competition.

The 2014 overall customer satisfaction rating, as captured by the TRI\*M Index, reached 75 points, which testifies to the high level of customer satisfaction. Moreover, the score improved slightly on last year's result.



<sup>\*</sup> The aggregated score for the LOTOS Group has been calculated based on the ratings of separate LOTOS Group companies, as adjusted for the number of their



The 2014 customer relations and loyalty rating indicates a high level of customer satisfaction among the customers of **Grupa LOTOS**. As compared to previous years, their readiness to recommend the Company's services has increased and now 84% would definitely recommend cooperation with Grupa LOTOS to other businesses. Moreover, a higher percentage of customers declare that they would definitely choose the Company again as their supplier. Grupa LOTOS customers tend to be very loyal and strongly attached to the LOTOS brand. That means that the percentage of customers who are mostly price-oriented in their purchasing decisions has shrunk.

In 2014, the satisfaction survey among **LOTOS Asfalt** customers was extended to include a sample of foreign customers. Also, the percentage of customers who took part in the survey increased almost fourfold. At present, the satisfaction and loyalty rating (as captured by the TRI\*M Index) testifies to a high level of customer satisfaction with their cooperation with LOTOS Asfalt. The company's customers are satisfied and loyal, with almost half of them being classified as apostles, i.e. customers with strong emotional attachment to the brand. The high level of satisfaction finds is confirmed by the fact that most customers would recommend cooperation with LOTOS Asfalt to their business partners and choose the company again as their supplier. According to the respondents, the biggest strength of LOTOS Asfalt is timeliness of deliveries. Moreover, they believe that the company is reliable and trustworthy (score: 8.8 out of 10), has a comprehensive offer (8.5/10) and treats its customers fairly (8.4/10). Also, the customers perceive the company as concerned about environmental protection and eco-friendly.

**LOTOS Oil** conducts customer satisfaction surveys covering two primary areas of the company's operations: the indirect and the indirect sales channel. This year's satisfaction rating, as captured by the TRI\*M Index, indicates a high level of satisfaction and loyalty among LOTOS Oil customers. The score is high both for the direct and indirect sales channel, with all TRI\*M Index dimensions (general and for individual sales channels) improving year-on-year. The higher loyalty of LOTOS Oil customers is proven by the increase in customers declaring that they would definitely recommend the cooperation with the company to others (53%, up 13pp on previous year) as well as those who would choose LOTOS Oil again as their supplier. LOTOS Oil provides high quality products. Customers are also very satisfied with their availability. The image of the company in all dimensions is assessed positively.

The satisfaction survey among **LOTOS Paliwa** institutional customers has revealed a significant improvement of its customer service. A substantial increase in scores for almost all dimensions of service has been observed and the overall rating is higher than achieved by competitors. The customers tend to be very satisfied with their cooperation with the company; they are also strongly attached to the brand (brand apostles) and likely to recommend the cooperation with LOTOS Paliwa to other businesses. Moreover, customers are satisfied with consistency between their orders and deliveries, product availability and clarity of invoices.

The survey conducted at LOTOS Paliwa in 2014 among individual customers, including about their knowledge of fuel brands and use of the service stations and of advanced fuel brands, was prepared based on the OMNIBUS method. The results of the survey show that the LOTOS brand awareness remained virtually unchanged on 2013's ratings, at +/-5% compared to other oil companies with a similar number of service

stations. The awareness of the LOTOS Optima brand is still on a growing trend, and the use of the economy segment stations remains stable. The level of knowledge and use of the LOTOS Dynamic advanced fuel has also remained unchanged year-on-year.

For **LOTOS Kolej**, top quality of its freight services is of key importance. The level of customer satisfaction depends mainly on specialist staff, timely and predictable deliveries, service quality, up-to-date and reliable shipment status tracking, customer-oriented approach and flexible terms of business, adjusted to customer needs.

Customer satisfaction ratings are obtained by direct interaction with the customers. Another tool used for measuring customer satisfaction is a questionnaire-based evaluation system. Its results are analysed during the annual review of the Integrated Management System.

The new customer satisfaction survey form introduced in 2014 organizes the various aspects of the company's operation in a more systematic manner. In terms of overall satisfaction, LOTOS Kolej was rated 8.55 (good - very good). The individual areas were rated as follows: freight services 8.69, sales support 8.34, rolling stock and technical service 8.64. The survey covered 12 customers.

These results show that, despite certain issues related to commercial speed and frequent closing of railway lines in Poland, the service quality is still one of the company's fortes. Flexibility, willingness to respond to customer needs, consultation of delivery schedules and scope of service are the strengths on which the company builds its customer relations, order book and market reputation. In 2013–2014, LOTOS Kolej took over a lot of traffic from other carriers, in spite of quoting higher prices. The factors of key importance here were the high service quality and timely deliveries. One of the company's strengths is the availability and quality of its rolling stock.

## Social aspects

Last year, we ran a number of initiatives to support local communities and entrepreneurship in close vicinity of the LOTOS Group's plants. Organized in the form of programmes implemented consistently for several years and compatible with our competence areas defined in consultation with stakeholders, they can make a real contribution to improving some aspects of life vital to the local communities.

#### 2014 was:

- outstanding in terms of the number of CSR programmes and campaigns as well as activities undertaken under the cross-sectoral cooperation model, for instance with the social economy, education and scientific sectors;
- a period of initiatives aimed to establish a responsible supply chain;
- an important period of strengthening the LOTOS brand reputation as a socially responsible brand.

# Road traffic safety

Commitment to increasing road traffic safety has always been one of the crucial elements of the LOTOS Group's Corporate Social Responsibility Strategy.



#### Social issue

Poland ranks among the countries with the highest risk of road traffic accidents. Last year, nearly 3.5 thousand road accidents were reported involving children aged up to 14, resulting in nearly 3.9 thousand casualties (including 90 fatalities), of which 72% were children aged up to 6 who accounted for as much as 58% of all under-aged casualties of road accidents. Findings of research institutes and checks performed by the Police have revealed numerous cases of incorrect fastening of safety belts or of under-aged passengers transported in child safety seats in an inappropriate manner.

## **Partners**

The social partners of the LOTOS Safety Belt Champions programme are the National Road Traffic Safety Centre and the fotelik.info web portal. The project is run under the auspices of the Gdańsk Province Commandant of the State Fire Service and Chief of Police, the Head (Voivod) of the Gdańsk Province, as well as the Road Transport Institute and the National Road Safety Council.

#### Objective

The LOTOS Safety Belt Champions programme is meant to ingrain and strengthen the good habits of correct seat belt fastening, and to remind people just how important it is for their children's lives to transport them in correctly installed child safety seats. Through preventive and educational activities, we would like to draw the interest of all car users, both drivers and passengers.

#### **Activities**

The pilot edition of the programme, run in 2014 in the Gdańsk Province, showed how desirable the initiative was. The inspections at pit-stops, set up at selected LOTOS service stations and in other places, revealed that an astounding 70% of those inspected badly needed our expert advice on how to fasten their safety belts correctly. Additionally, we organized a series of seminars at which almost 4,000 people learned how to properly fasten their seatbelts and how to select and install a child safety seat. We also reached out to the youngest passengers, as more than

## Ensuring equal opportunities and preventing social exclusion

For many years, we have been committed to ensuring equal opportunities and preventing social exclusion, especially among children and youth.

## **Good Neighbour programme**

#### Objective

We take responsibility for the wellbeing of children and young people growing up in the vicinity of our plants, especially the refinery in Gdańsk. The programme's objective is to tackle social inequalities, prevent social exclusion, engage and integrate local communities and support education of the youngest through equal access.

#### Selected activities

#### Science Children's Day

In 2014, we held the Science Children's Day family festival in the refinery's neighbouring district of Przeróbka. The thematic scope of the event, which attracted about one thousand people, included experiments, new technologies and crude oil processing at the refinery.

#### Partner

The event was co-organized by LOTOS Lab, Vocational and Lifelong Learning Centre No. 2 in Gdańsk, basketball players of LOTOS Trefl and Primary School No. 11 in the Gdańsk district of Przeróbka.

#### Results

Almost all (95%) parents, teachers and local inhabitants who attended the festival expressed their overall satisfaction with its quality. 88% of them admitted that Grupa LOTOS cared for its neighbourhood, and 80% expressed an opinion that the event met social needs and expectations

## Supporting the needy

Under the Good Neighbour programme, we cooperate with NGOs working in our immediate vicinity to support people in need, with a special focus on children and youngsters. The key projects run in 2014 included our activities for the benefit of participants of the 'Osiedle Sitowie' project.

## **Best practice**

'Osiedle Sitowie' is a project run in the Gdańsk district of Rudniki, located in the vicinity of the LOTOS Group refinery. It promotes social inclusion, helps find employment and provides housing to over 40 persons socially excluded due to temporary incapacity for work, loss of means of support, problems with social adjustment or disability. Osiedle Sitowie has become home to single mothers, young people who have left residential institutions and begin to live on their own, as well as persons suffering from mental disorders. The project is run by the Family Support Centre (Miejski Ośrodek Pomocy Rodzinie) of Gdańsk, in association with NGOs acting for socially-excluded persons. Each organization employs a coordinator supervising a specific group of participants. The overall objective of the project is to prepare its participants, within two years, for self-reliant living and create jobs for them both in the social economy sector and on the open labour market.

Grupa LOTOS has supported the programme since 2013 with in-kind (used computer hardware) and financial donations (financing summer holidays for children). It has also helped five permanently unemployed persons return to the labour market through its cooperation with Ambra (a long-term subcontractor of Grupa LOTOS providing comprehensive cleaning and maintenance services in the facilities of the LOTOS Group) and coordinators of the Osiedle Sitowie project.



## **Large Family Card**

We support people with low incomes by making our products more affordable to the less well-off. In 2014, we joined the government-sponsored Large Family Card scheme, the first nationwide programme of support to large families. Thanks to the Polish government's cooperation with businesses and institutions, each family with at least three children can obtain special discounts and offers. The chain of LOTOS service stations offers high quality products and services at affordable prices to almost 630,000 Polish families with many children, of whom many are car users.

## **Contribution to society**

We support initiatives aimed to improve the quality of life for members of our local communities. Selection of projects is usually preceded by consultations with local governments or our social partners.

The funds we provided in 2014 were spent on medical equipment for public health facilities, equipment necessary for ecological and environmental protection, educational equipment for schools, and investment projects improving security of local communities and road traffic safety. All these investments were on a pro bono basis.

#### Involvement of the LOTOS Group in initiatives for the benefit of local communities in 2014

No.	Entity	City/town	Purpose of grant
1	Foundation for the Development of the Gdańsk University (FRUG)	Gdańsk	Co-financing of research projects
2	Ornithological Station, Museum and Institute of Zoology of the Polish Academy of Sciences	Gdańsk	Co-financing of activities set out in the charter, including purchase of educational materials
3	Stowarzyszenie Przyjaciół Wyspy Sobieszewskiej (Association of Sobieszewo Island Lovers)	Gdańsk	Co-financing of sports and leisure infrastructure
4	University Clinical Centre	Gdańsk	Purchase of medical equipment
5	Copernicus Sp. z o.o.	Gdańsk	Purchase of medical equipment
6	Długie Ogrody Housing Cooperative	Gdańsk	Co-financing of purchase and installation of a platform for transport of the disabled
7	Fundacja z Pompą – Pomóż Dzieciom z Białaczką (Help Children with Leukemia Foundation)	Gdańsk	Purchase of medical equipment
8	Vocational and Lifelong Learning Centre No. 2 in Gdańsk	Gdańsk	Purchase of educational equipment
9	Fundacja Bezpieczni w Ruchu Drogowym (Safe in Road Traffic Foundation)	Gdańsk	Purchase of specialist equipment
10	Fundacja Innowacji Społecznej (Social Innovation Foundation)	Gdańsk	Purchase of hostel furniture and fittings under a social economy project
11	Primary School No. 29	Bielsko-Biała	Purchase of educational equipment
12	Public Junior High School No. 1	Czechowice- Dziedzice	Purchase of educational equipment
13	Public Junior High School in Przejazdowo	Przejazdowo	Co-financing of school infrastructure renovation
14	Fundacja Dla Dzieci Niepełnosprawnych 'Nadzieja' ('Hope' Foundation for Disabled Children)	Słupsk	Purchase of equipment for the rapeutic sessions
15	Volunteer Fire Brigade	Szymbark	Purchase of specialist equipment

## **Development of intellectual capital**

Given the nature of our business and the key role we play in ensuring Poland's energy security, we share our knowledge and experience with students, because we feel committed to securing the future of our industry by training the next generation of experts. We carry out such projects in approximately 40% of the LOTOS Group's locations.

Since 2013, we have been implementing the 'Talent with LOTOS' project consisting of two programmes – 'Pomeranian Talent' in the Gdańsk Province and 'Jasło Science League with LOTOS' in the administrative district of Jasło.

'Jaslo Science League with LOTOS' is a unique educational initiative aiming to find Jaslo's most able schoolchildren and give them an opportunity to foster their talents. The project encourages schoolchildren to seek for their own answers to a given set of questions, through a number of research activities carried out under the eye of their teachers, with their work evaluated by a panel of experts and prominent academics. During the 2013–2014 school year, it was joined by 248 schoolchildren from 10 of Jaslo's primary schools, 5 junior high schools and 8 municipal preschools, as well as 496 parents and 45 teachers, who registered a total of 93 research projects.

The 'Pomeranian Talent' programme supports Pomerania's teachers and nearly 1,200 pupils exceptionally gifted in mathematics, physics, and IT, by providing them with opportunities for comprehensive development. The pupils attend after-school classes and meetings held at universities or in science and technology parks, and participate in competitions as well as task-oriented events. The most talented of them are covered by mentoring programmes run by academic staff. In 2014, the programme featured a summer science camp, after-school classes, teacher training, mentoring programmes and academic meetings.

As part of our cooperation with higher education providers, we also offer unpaid internships and summer work placements, giving students an opportunity to expand their knowledge under the supervision of a tutor – an industry expert. In 2014, we continued to cooperate with the Gdańsk University of Technology, the University of Gdańsk, AGH University of Science and Technology of Kraków, the Cracow University of Economics and the Cracow University of Technology. Considering our business profile, we offered opportunities mainly for students of the faculties of chemistry, drilling, oil and gas, electrical engineering and automatics, electronics, telecommunications and informatics, mechanical engineering as well as finance and accounting.

In 2012–2014, we offered 512 internships and work placements at Grupa LOTOS, LOTOS Petrobaltic, LOTOS Serwis, LOTOS Lab, LOTOS Oil, LOTOS Kolej and LOTOS Asfalt.

Internships and work placements at the LOTOS Group	2012	2013	2014
STUDENT INTERNSHIPS	135	145	131
WORK PLACEMENTS OUTSIDE OF PROGRAMMES	8	16	15

TOTAL	155	183	174
AKADEMIA ENERGII (ENERGY ACADEMY)	-	2	2
SUMMER WORK PLACEMENT	12	20	23
GRASZ O STAŻ (PLAY TO WIN INTERNSHIP)	-	-	3

In 2011–2014, we sponsored scholarships and awards to undergraduate and postgraduate students of the Gdańsk University of Technology and AGH University of Science and Technology in Kraków, in the total amount of PLN 195,000.

We work with vocational schools, student organizations and scientific institutions to support technical faculties and help young people entering the labour market. Our activities in 2014 included:

- a work placement programme launched by Grupa LOTOS in association with the Foundation of Economy and Public Administration (GAP) at the Department of Economy and Public Administration of the Cracow University of Economics;
- LOTOS Serwis's patronage over the industrial automatics class at the Communications School Complex (Zespół Szkół Łączności) in Gdańsk;
- LOTOS Kolej's patronage over special classes training students to become railway transport technicians at Technical Secondary School No. 3 of the K. Kałużewski and J. Sylla School Complex in Zduńska Wola;
- cooperation of Grupa LOTOS with the Vocational and Lifelong Learning Centre No. 2 in Gdańsk;

#### **Best practice**

In 2014, Grupa LOTOS in association with Kaszubski Uniwersytet Ludowy (the Kashubian Folk University) held a workshop entitled 'How to cope on the labour market? The secrets of recruitment', addressed to participants of the 'My goal - work' project. It was designed to help the unemployed under 30, primarily from the administrative districts of Kartuzy and Kościerzyce, re-enter the labour market.

The meeting was an opportunity to present the Company as an employer, explain its work culture and requirements expected of candidates. At the workshop, participants could learn about the recruitment process – what to pay attention to when reading a job offer, how to write a CV and covering letter and how to prepare for a job interview. They took part in interesting exercises and, in an open discussion, willingly shared their experience and talked about problems they encountered while looking for a job. The knowledge they have gained will help them cope on the labour market.

(See more <a href="http://raportroczny.lotos.pl/en/results-and-prospects/sustainable-development/responsible-employer">http://raportroczny.lotos.pl/en/results-and-prospects/sustainable-development/responsible-employer</a>)



## E(x)plory Festival

#### Objective

The nationwide E(x)plory Festival is a programme supporting scientific innovations, creativity and curiosity about the world. It promotes the achievements of science among children and youngsters, while addressing the challenges of modern times, such as the need for innovation and development of the next generation of professionals.

#### **Activities**

In 2014, Grupa LOTOS acted as a patron of the festival, which featured a competition for young scientists, technology fair, engineering design shows, workshops for students and teachers, lectures for representatives of business and science and scientific conferences. The festival stimulates the development of Polish science, while fostering links between business and science.

#### Results

So far, the festival has attracted more than 12,000 participants. Winners of the E(x)plory competition for young scientists succeed in international competitions, promoting Polish science. In 2014, a 17-year-old female winner of E(x)plory came fourth in the prestigious Intel International Science and Engineering Fair (Intel ISEF), the world's largest international pre-college science competition held in the United States.



Our Research Group brings together some 40 students in various fields of study and from various universities. A primary focus of our activities has long been on community projects.

President of the 'Strateg' Student Research Group in 2013-2014, and Piotr Wróbel, Supervisor of the 'Strateg' Student Research Group participants of the ENACTUS Poland Programme, awarded in the 'Responsibly with LOTOS' grant contest



This has made students attentive to social needs around them. But, even when we think we have identified a problem that needs to be tackled, we always put a great deal of effort to better understand the circumstances of the people involved. Things are rarely the same on the inside as they look on the outside.

The project called 'Give waste a second chance' can serve as a perfect example here. Our task was to collect PET bottles at schools and have them recycled into 300 duvets and 300 pillows, which were then donated to night shelters in the cities of Gdańsk, Gdynia and Sopot. Before we got down to work, we consulted our plans with the City Office of Gdańsk and the Gdańsk Materials Recovery Facility to get a better insight into the challenges we could face in promoting selective waste collection among members of the public. We also engaged in talks with the St. Brother Albert's Aid Society to understand who the homeless people are and what they need.

It is worth emphasising that we seek assistance from knowledgeable partners, mainly from the NGO sector, for the majority of our projects. We are well aware that complex problems require cooperation from different parties. Our key partner is Grupa Lotos, which co-sponsored the 'Give waste a second chance' project last year. Also, Grupa LOTOS employees helped us fine-tune the project's details by sharing their experience and ideas.

Dialogue with project beneficiaries and participants is vital for us. At schools, we were telling children about the benefits of selective waste collection. Our campaign was run as a competition, which got whole families engaged in collecting plastic containers. This was our way of promoting pro-environmental behaviours. At the ceremony marking the end of the project, children met with a representative of the St. Brother Albert's Aid Society to learn more about the lives of the homeless.

## **ENACTUS Poland**

## Objective

In the 2013–2014 academic year, Grupa LOTOS became a partner of ENACTUS Poland, the Polish branch of an international organization bringing together students, tutors and representatives of the business world. Students in the programme compete on business projects designed to support local communities. Their activities are a response to economic, environmental and social challenges, with the objective of improving the living conditions and standards of the target group. The best projects are entered into the Polish finals of the competition, and may go on to compete in the ENACTUS world cup. As part of the programme, students are mentored by their tutors, as well as business managers, who offer assistance and advice.

## Activities

In Poland, there are currently 15 university teams implementing about 40 projects in an academic year. In 2014, there were nearly 60 jury members and about 200 students in the Polish edition.

As part of the cooperation, we announced the 'Responsibly with LOTOS' grant contest, with the purpose of selecting the best CSR projects prepared by students of Polish universities whose objectives would be consistent with those of the LOTOS Group's Corporate Social Responsibility Strategy. 2014 saw the first edition of the contest and implementation of the winning project. Thanks to our engagement, students associated within the Strateg Scientific Society of the University of Gdańsk were able to spread their wings, using the awarded grant to implement the Ekorywalizacja (Eco-competition) project. Also known as SLOW – Second Life Of Waste, the project is aimed primarily to encourage pro-environmental behaviour among pupils in Gdańsk primary schools. The students carried out a series of classes and competitions on waste sorting and processing. The collected plastics and waste-paper were processed into filling for duvets, which were handed over to the needy and to charities. More than 200 duvets made from the collected plastic waste were donated to night shelters in Gdańsk.

The second edition of the contest was announced in November 2014. The jury awarded a grant in the total amount of PLN 10,000 to two student organizations winning jointly: the ENACTUS Group of the Warsaw University of Life Sciences SGGW, for the Aphasia project, and the Enactus Group of the University of Gdańsk, who developed a cross-sectoral project 'Furniture Anew' ('Meble od Nowa').

#### **Best practice**

The theme of the project prepared by students of Warsaw's SGGW ENACTUS Group for the 'Responsibly with LOTOS' grant contest was aphasia, and its target group – people suffering from aphasia, their families and friends. Aphasia is a loss of the previously acquired skill of speaking and/or impairment of the ability to understand speech, read and write, usually as a result of a cerebral stroke. The greatest challenge for aphasics is the lack of ability to communicate. To overcome it, the students have designed a prototype application which enables aphasics to communicate by means of simple symbols and signs. Its users can create simple notes and share them on a specially simplified version of Facebook. The application will be freely available to download from official mobile stores to all platforms.

Additionally, the project envisages the construction and promotion of a multilingual website which will be a source of knowledge for the families and friends of aphasics. In Poland alone, about 50,000 people have a stroke every year, with one in every three of them suffering from aphasia.

The other project selected by Grupa LOTOS has been developed by students associated within the ENACTUS Group of the University of Gdańsk. It combines a labour-market re-entry plan for the disabled with recycling of plastics and used furniture and with road safety education of children in the Province of Gdańsk. The students reached out to the coordinators of the 'Osiedle Sitowie' programme, implemented by the Family Support Centre of Gdańsk together with Grupa LOTOS. The project is addressed to several groups at risk of social exclusion, such as people with mental disorders, single mothers and challenging adolescents, and aims to help them re-enter the labour market and/or integrate into society. To increase the chances of employment for inhabitants of the 'Osiedle Sitowie' housing estate, the students have developed a long-term project to establish a furniture repair shop, where old furniture would be renovated, and new pieces designed and constructed under the supervision of an experienced professional and creative students of the Academy of Fine Arts in Gdańsk. Moreover, the project participants would produce safety reflectors from recycled plastics, enhancing the safety of children on the roads. The reflectors would be delivered to schools in small municipalities and villages of the Gdańsk Province.



## **Development Initiation Forum**

#### Objective

In 2014, we continued our cooperation under the Development Initiation Forum, which supports development of the Pomerania region, where most of the LOTOS Group companies are based. The Development Initiation Forum is an initiative born out of experience and needs of three sectors: local self-governments, businesses and NGOs. Aimed to drive the social and economic development of the region, the initiative is to be implemented through cross-sectoral projects. The binding element for all its activities is an annual conference.

In 2014, a grant fund - Development Initiation Fund – was launched. The idea of the Fund is to support cross-sectoral projects which respond to the actual needs of the Pomerania region, thus contributing to its development. Cooperation with the Development Initiation Foundation of the Development Initiation Forum in the launch of the Grant Fund resulted in the appropriation of a total of PLN 140,000 for cross-sectoral projects. Three of the five grantees are social enterprises which employ socially excluded individuals.

#### **Activities**

The Development Initiation Forum is a long-term initiative, successfully implemented since 2011. Its key results include cross-sectoral partnership of about 20 entities, represented by the Programme Board comprising representatives of NGOs, businesses and public institutions; three conferences on cross-sectoral cooperation (the 2014 edition saw a turnout of 300), and more than ten direct partnerships between entities.

50 projects submitted for the 2014 Grant Contest organized by the Development Initiation Forum confirm that social activity and cross-sectoral cooperation in the province are on the rise. In line with the cross-sectoral character of the project, Grupa LOTOS supported it not only financially, but first and foremost by providing expert knowledge during the contest, including in the evaluation of entries.

## **Best practice**

The Development Initiation Fund, inaugurated in October 2014, is a cross-sectoral partnership programme, directed at businesses, public institutions and NGOs. Only non-governmental entities were eligible to lead a partnership and apply for grants. The winners would receive up to PLN 25,000 as financing for their project. The jury awarded grants to the following entities: Spółdzielnia Socjalna Dalba of Puck, Fundacja Mamy z Morza of Gdynia, Pomorski Inkubator Przedsiębiorczości of Kościerzyna, Stowarzyszenie Grupa Kolarska Starogard Gdański, and Spółdzielnia Socjalna Kooperacja of Sopot.

This means that in 2015 the Development Initiation Fund will fuel a variety of interesting cross-sectoral initiatives, important to local communities and the entire Gdańsk Province. For example, the Fund will finance the next edition of the Kociewie Szlakiem MTB marathon, which is a unique initiative combining elements of sports, tourism and cultural heritage. The Fund will also help young parents through Pomorskie Kluby Rodzica (parents' clubs), which will be set up in new areas – Puck, Kartuzy and Kościerzyn. The jury decided the initiative was of vital importance given the demographic challenges faced by the region. It also resolved that the Fund would help finance initiatives aimed at promoting entrepreneurship, employment and social inclusion. Among the projects which can address these challenges in a particularly original and effective way is the Kashubia Business Academy (Kaszubska Akademia Przedsiębiorczości), where partners will engage in cross-sectoral collaboration to promote the spirit of entrepreneurship in the region of Kashubia. Deserving of special recognition are two projects to promote employment and social inclusion of those affected by long-term unemployment or disabilities: the Luk Luk Charity Shop ('Luk Luk Sklep Charytatywny') and a cooperative brewery ('Browar Spółdzielczy - kooperatywa, która warzy więcej').

# Responsibility in the supply chain

Management of the supply chain at Grupa LOTOS consists in coordinating the procurement process for raw materials and components, production planning and logistics associated with the delivery of raw materials and distribution of products. These business processes underlie the Company's value chain. Grupa LOTOS follows an integrated approach to managing its supply chain. This philosophy is implemented in such a way as to maximise the integrated economic effects of our operations, while meeting the expectations of all our stakeholders.

The supply chain is an international environment where Grupa LOTOS connects with its suppliers and customers. Given the large scale of the Company's operations, our network of relationships with suppliers and customers is a complex structure spanning various aspects, both at the operational and, in the case of certain partners, strategic levels. When engaging in long-term business relationships, Grupa LOTOS pays attention to the market position and CSR records of its prospective partners. Many of our partners are international oil companies which have pioneered the industry's commitment to corporate social responsibility and business ethics.

As a vertically-integrated oil company, we take active steps to control the flow of raw materials, products, information, and cash within the organization, from the moment a raw material is extracted, through production and distribution, to consumption of the final product by its end user. We seek to strengthen our vertical integration by pursuing key strategic objectives and striving to enhance our position both in the upstream segment and in the retail market. This approach supports our ability to ensure equally high CSR standards across all levels of the supply chain

Aware of the importance of working with a local supplier base, we strive to partner with companies which offer the expected competencies and meet our standards of cooperation. For instance, we seek to minimise the negative impact of fossil fuels in transport by sourcing 72% of the biocomponents (bioethanol and FAME) we use to produce our fuels from local suppliers.

We observe the highest quality and safety standards. Entities, including local businesses, which render services at our production facilities are provided with technical standards applicable to the works they are to perform, containing detailed information on the relevant technologies. Also, personnel employed by those companies undergo regular, mandatory training in safety awareness. Our trading partners are invited to meetings at which they learn about the standards and values we adhere to and the rules of conduct applicable at the LOTOS Group. (See more <a href="http://raportroczny.lotos.pl/en/ethics-and-corporate-governance/ethics/system-of-values">http://raportroczny.lotos.pl/en/ethics-and-corporate-governance/ethics/system-of-values</a>)

For example, in 2014 we held meetings with medium-sized and small enterprises at the Pomerania science and technology parks, where start-up companies often operate. The purpose of the meetings was to demonstrate that, as the region's largest company, we are open to collaboration with smaller enterprises, building such relations based on the principle of partnership. We also share our best practice and information when choosing a trading partner, and in the course of day-to-day business relations.

In 2014, we made consistent efforts to increase the scale of our operations through dynamic expansion of the LOTOS service station chain, thus creating further new jobs. The station chain's expansion involved both the construction of new service stations and acquisition of existing sites. After taking over existing service stations, LOTOS Paliwa, which is responsible for the development of the retail network, significantly expands their business with the addition of new services, introduction of modern management methods and improvement of customer service quality. In the end, all these efforts translate into increased staffing levels, which is of particular importance in regions affected by high unemployment.

At CODO stations staff are employed by the Dealer who has entered into a station management agreement with LOTOS Paliwa, whereas at DOFO stations they are employed by the Franchisee running the station. Employees working at the existing and newly acquired stations attend a series of courses to raise their qualifications.

For the last four years, we have also been gradually expanding our economy service station chain, which offers less expensive fuels, with 17 new locations added to the chain in 2014. Since 2011, we have launched a total of 169 LOTOS Optima service stations, both under the CODO and Franchise models, with a total headcount of approximately 1,440 persons.

Such strong expansion of the chain also translates into higher demand for our general construction work.

As a result of both legal and procedural considerations, including the principle of equal treatment of all business entities, the selection of suppliers is chiefly based on their business profile, contract delivery potential, knowledge and experience, lead times and pricing. The Polish law precludes any explicit preference for local suppliers, understood as trading partners based in the provinces where companies of the LOTOS Group are located, i.e. principally in the Gdańsk Province. Accordingly, local suppliers who take part in competitive bid procedures may only do so on terms equal with other bidders. Nevertheless, we keep monitoring the markets, including local markets, as a result of which we invite and

select local suppliers to do business with. We evaluate them on the basis of their work, creating a list of eligible suppliers of goods and services that meet our requirements.

In the process of executing contracts for products and services, Grupa LOTOS takes into account all business entities, including those operating locally in the Province of Gdańsk. Purchases from local suppliers accounted for 4.69% of all purchases made in 2014, while purchases from related entities located in the Province of Gdańsk represented 58.42% of total purchases made from all related entities. It needs to be emphasised, though, that the products which are essential to the Company's operations and represent the largest proportion of its procurement costs (94%) are not available on the Gdańsk Province's local market (crude oil, petroleum products and specialist equipment). It is also true for companies of the marketing segment, such as LOTOS Asfalt, LOTOS Oil and LOTOS Kolej (rolling stock), as well as those of the upstream segment, such as LOTOS Petrobaltic. These companies rely on the local markets only for non-strategic products and services.

Share of local companies of the Gdańsk Province in total supplies procured in 2014 (%)		
Grupa LOTOS (main location)		
Other entities	1.40	
Related entities	58.42	
Total	4.69	
LOTOS Kolej (main location)	13.00	
LOTOS Petrobaltic*	42.00	

<sup>\*</sup> Data from the SAP system since 2014

In purchases of energy utilities, such as electricity and gas, favourable terms of business are the primary factor behind the choice of a supplier. It is worth noting that a significant amount is allocated to purchase electricity, all of which was supplied by Energa Obrót, a company based in the Province of Gdańsk, while all gas purchases, associated with PGNiG, were made in the Province of Warsaw.

Purchases of Grupa LOTOS in 2014.



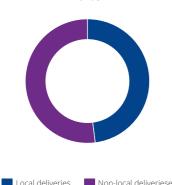
Given the nature of their businesses, suppliers working with LOTOS Asfalt and LOTOS Oil have their offices throughout Poland and the European Union.

Bitumen components purchased by LOTOS Asfalt suppliers of heavy fuel oil in 2014, by origin

LOTOS Asfalt in 2014, by origin

LOTOS Asfalt suppliers of heavy fuel oil in 2014, by share

Supplies of raw meterials and packaging to LOTOS Oil in 2014, excluding Grupa LOTOS



Supplies of raw meterials and packaging to LOTOS Oil in 2014, including Grupa LOTOS



LOTOS Paliwa purchases 100% of its fuel stocks from Grupa LOTOS, with the vast majority of the fuel being produced domestically, at the refinery in Gdańsk. Rail transport of fuels is handled entirely by LOTOS Kolej, also based in Gdańsk, while road transport is fully outsourced to third parties. In the case of fuel shipments to LOTOS service stations, the company works with entities with a countrywide presence, specialised in supplying service stations. Fuel deliveries to wholesalers are additionally handled by local carriers, because they are familiar with their regions and local transport considerations. LOTOS Paliwa's wholesale deliveries were outsourced to local freight service providers in the Provinces of Wrocław, Rzeszów, Gdańsk, Szczecin and Olsztyn (where local carriers handle all deliveries).

In the business environment in which we operate, human rights issues are governed by a legal framework. We maintain relations only with entities that operate legally and are required to comply with law, including regulations on human and employee rights. An agreement is considered material if it meets one of the following criteria:

- the relationship with the trading partner is long-term,
- the agreement has additional risks associated with it, e.g. access to sensitive data,
- the value of the contract is linked to a given procurement category,
- the agreement is related to a key area of the Company's operations.

In 2014, we sought to include provisions ensuring the highest standards of legal compliance in all our agreements with suppliers. We also amended our internal regulations so that relevant audits could be carried out to verify our trading partners. This approach was recommended to all companies of the LOTOS Group.

Due to the priority we give to occupational health and safety, fire safety and physical security, agreements executed with our suppliers include mandatory provisions requiring these entities to comply with the relevant regulations. For instance, in the course of choosing our trading partners, we require that all candidates provide documents certifying that they pay the required social insurance contributions for their employees. In 2014, this requirement was met by all trading partners carrying out contracts on the premises of our key production plants.

In 2014, we carried out 18 supplier audits. Having been audited, each supplier received a report, which included our comments on any identified failings. No gross violations of human rights were identified in the course of these audits. All our comments and recommendations were provided to the suppliers.

In 2015, Grupa LOTOS wants to carry out more supplier audits, through measures such as mandatory provisions included in our agreements. (See more <a href="http://raportroczny.lotos.pl/en/ethics-and-corporate-governance/approach-to-management/management-systems">http://raportroczny.lotos.pl/en/ethics-and-corporate-governance/approach-to-management/management-systems</a>)

#### STATEMENT

The LOTOS Group's business operations are inextricably linked with its trading partners, who are all treated on equal footing.

# Halina Stasiewicz Rusiness Process Management Office Director, Grupa LOTOS



We aim to make our key values – such as mutual respect and understanding of each other's business needs and objectives, mutual support, especially during economic downturns, and the principles of ethical conduct, including respect for fair competition and human rights – equally important to all companies we work with.

It is equally vital that trading partners meet our quality standards. We also seek to ensure and promote occupational safety and environmental protection. Even when calling for tenders, we clearly communicate our requirements, building good market practice. We wish to partner only with entities that make every effort to observe our rules of conduct in areas where we set the bar very high for ourselves. As we hope to encourage our trading partners to do the same, we monitor all entities contracted to do work for the Company.

We also promote safety at work, which is why our agreements with trading partners include appropriate provisions on compliance with the Company's internal safety regulations. Our requirements are openly communicated to customers and trading partners through a dedicated website 'Grupa LOTOS' Requirements for Contractors'. We release relevant publications and organize training for our trading partners to promote these standards and ensure they are observed, thus contributing to creating higher standards in safety and environmental protection. We wish to promote good practice that we have ourselves tried and tested. Audits are an important tool in this respect, as they allow us to evaluate our suppliers, identify areas that need to be improved and communicate with them about the required work. Our suppliers and trading partners have our support at every stage of the process. This approach has a positive effect on the local market, promoting appropriate conduct along our value chain.

# Socially committed brand

Fostering the image and strength of the LOTOS brand is one of Grupa LOTOS's top priorities. Our goal is to enhance the LOTOS brand value by building its image as a brand which:

- relies on the key values of modernity, development and partnership,
- has secured an international presence,
- represents top quality products,
- stands for corporate social responsibility.

Efforts are always made to increase consumer awareness of the brand and to position Grupa LOTOS as an organization recognised for its professional management style that builds on its quality, innovation, environmental awareness and security. This objective is supported by the Company's lasting commitment to sponsorship. (See more <a href="http://raportroczny.lotos.pl/en/business-strategy-and-model/brand">http://raportroczny.lotos.pl/en/business-strategy-and-model/brand</a>)

In accordance with the sponsorship rules adopted by Grupa LOTOS and its subsidiaries, we act as sponsors mainly in those administrative districts and provinces where our offices are located and where LOTOS Group companies conduct their business. Sponsorship may be also carried out abroad, in locations where the LOTOS Group or its key social and business partners are particularly active.

## Sponsor of culture and social initiatives

We are actively involved in initiatives of vital importance to the communities living in areas where LOTOS Group companies are located, i.e. in the Gdańsk Province and the districts of Jasło and Bielsko-Biała. Such events often reach beyond regional borders. The key criterion based on which we choose to support a cultural event is its social, artistic and promotional effect.

In 2014, the majority of cultural events sponsored by the LOTOS Group were ongoing projects from previous years. Working with the same partners under a proven model was a guarantee of successful and consistent implementation of goals. Because of their cyclical nature and repetitive formats, such events allowed us to reinforce our promotional message to specific groups of stakeholders which are key to the LOTOS Group's development.

Our actions help us establish and strengthen the image of a socially committed business investing in the future and good relations with our social environment. Furthermore, by sponsoring culture and arts and by becoming engaged in social outreach and environmental initiatives, we also implement the LOTOS Group's Corporate Social Responsibility Strategy. One of its key objectives is to integrate with local communities, by ensuring favourable attitudes among locals and strengthening the Company's reputation as a socially committed business, for instance by undertaking initiatives designed to provide lasting solutions to the locally relevant social and environmental issues.

Our social and environmental efforts focus on three key areas, as defined in the Corporate Social Responsibility Strategy:

- environmental and ecological protection, with a special focus on conservation of the environment and natural values of the Baltic
   Sea, and protection of areas directly adjacent to our plants,
- road traffic safety,
- ensuring equal opportunities through initiatives for children and youth at risk of social exclusion.

In 2014, the LOTOS Group sponsored 29 cultural and artistic initiatives, including several major projects in the Gdańsk Province, especially in Gdańsk, Sopot and Gdynia, by becoming a Strategic Partner of the Baltic Opera House and the Baltic Sea Culture Centre in Gdańsk, and supporting events such as the Solidarity of Arts Festival, World Gdańsk Reunion, Siesta Festival, Sopot Street of Art, Two Theatres Festival of the Polish Radio and Polish Television and the Daisy Chain Wonders - Summer Begins in Gdynia event.

In Southern Poland, key events sponsored by LOTOS included LOTOS Jazz Festival – Bielska Zadymka Jazzowa, Jasło Days, Czechowice-Dziedzice Days, Autumn Theatre Days, and the international Lemkowska Watra Lemko Culture Festival.

Also, in 2014 Grupa LOTOS collaborated with the Adam Mickiewicz Institute on the 'I, CULTURE Orchestra' project, supporting a group of talented young musicians from Poland and Eastern Partnership countries. Since its inception in 2011, the project has focused on culture as a medium for strengthening relations between the European Union and Eastern Partnership countries. In addition, sponsorship activities of the LOTOS Group include LOTOS Petrobaltic's support for cultural events in Lithuania.

## **Sponsor of sports**

In the eyes of external parties, our continuing involvement in sponsorship of sports and sports projects with a social agenda is proof of our social outreach, availability and commitment to supporting different forms of activity, not necessarily related to sport. The aim is to project the Company's values and enhance the LOTOS brand by associating it with dynamic change, action, growth and victory. This strategy reinforces the attributes of our products more credibly than any traditional form of advertising. The brand's image relies to a large extent on its ability to invoke empathy and familiarity, as well as on the image of the LOTOS Group as a socially responsible organization which develops its business while seeing people as its top priority.

With our sponsorship projects, which are consistent with our CSR approach, we promote physical activity, healthy lifestyles, recreational sport and sports education for children. In terms of business, we benefit from these initiatives financially through strong media coverage (advertising value equivalent).

Grupa LOTOS's sports sponsorship is used to showcase the Company's mission and values, while strengthening the association between our product brands and quality. In this area, we focus on sports embodying the values which are of particular importance to the market and social positioning of the LOTOS brand.

Sponsorship activities related to sports are consistent with the LOTOS Brand Strategy and the LOTOS Group's Corporate Social Responsibility Strategy, forming part of the Company's wider communication and promotional efforts.

In 2014, we continued to build and foster the LOTOS brand's image by engaging in sponsorship of professional and amateur sports. We also became involved in sports projects combined with social themes, as well as the most important sporting events in Poland, Europe and the world. Relative to 2013, the number of LOTOS-backed initiatives decreased from 27 to 25, falling into the following categories:

- Motor rallying continuation of certain motorsports projects, particularly the support of Robert Kubica, for whom LOTOS became an Official Partner during the World Rally Championship. Another rally initiative involved the LOTOS Rally Team, comprising European Rally Championship contender Kajetan Kajetanowicz. Apart from rally drivers, we also sponsored the largest motoring event in Poland the 71st LOTOS Rally Poland, a qualifying round for the World Rally Championship, as well as the Polish Rally Championship and the Barbórka Rally.
- Sporting initiatives at regional and national level like in previous years, we were involved in football projects carried out with the Lechia Gdańsk club, and supported LOTOS Trefl Gdańsk and Trefl Sopot volleyball and basketball teams. We also became the General Sponsor of Poland's Nordic Skiing, and sponsored Tour de Pologne, the largest national cycling event, the Polish Rugby Association and several golf tournaments. As regards local initiatives, we supported the LOTOS Baltic Cup International Dance Festival, Sopot Athletics Club, Malgorzata Dydek Memorial Tournament and Saint Dominic's Run.
- Physical education among children and teenagers as a socially committed business we continued our involvement with sports projects with a social agenda, addressed to children and teenagers, focusing mainly on football ('White and Green Future with LOTOS' programme organised together with the Lechia Gdańsk Football Academy), winter sports (National Ski Jumping Development Programme 'In Search for the Champion's Successors' programme implemented together with the Polish Ski Association), basketball (Gdynia Basketball Talents), mini speedway (GKŻ Wybrzeże) and sailing (Gdańsk Sailing Club).

In our sponsorship, we adhere to standards spelled out in voluntary codes of conduct, e.g. those published by business organizations of which we are members. The quality of our communications with the market is also subject to the standards of conduct defined in the LOTOS Group's Code of Ethics. We do not engage in any events which might cause damage to objects or facilities of historical or artistic value, or events which could have an adverse environmental impact. We conduct our operations without using any discriminatory or controversial content that might offend certain social groups or abuse the trust of recipients of our communications, and without inciting negative emotions.

The above corporate practices in marketing communications are applicable to Grupa LOTOS and all its marketing companies, i.e. those companies which, given their business profiles, target their messages regarding products and services at wider audiences.

RELATED CONTENT:

## Key objectives

We achieve our business objectives with due regard to corporate social responsibility and sustainable development by the best possible use of the organization's resources and capabilities to generate economic and social value for the benefit of the Company and its environment.

Go to the page » <http://raportroczny.lotos.pl/en/business-strategy-and-model/key-objectives>

## Awards and distinctions

According to the Chapter of the ninth edition of 'The Best Annual Report' contest, the 2013 Integrated Annual Report of Grupa LOTOS exemplifies a publication based on which investment decisions can be made at a relatively minimal risk.

Go to the page  $\,$  > <a href="http://raportroczny.lotos.pl/en/the-organization-and-its-report/awards-and-distinctions-">http://raportroczny.lotos.pl/en/the-organization-and-its-report/awards-and-distinctions-</a>

## Brand

Our strategic goal is to build lasting customer relationships by focusing on understanding customers' needs and ensuring expected product quality and safety. Our ambition is to create a brand that is dynamic and competent, friendly and trustworthy for our customers.



Results and prospects > Sustainable development > Energy security

# **Energy security**

#### STATEMENT

Grupa LOTOS actively supports the state policy for the energy sector. Representatives of the Company are members of expert teams appointed by the government to develop new legislative solutions for the energy sector, and actively participate in public consultation of draft acts regulating the sector.

# Marcin Bodio International Relations Office Director, Grupa LOTOS, CSR Strategy Leader in the Energy Security area



We support the Ministry of Economy, Ministry of State Treasury, Ministry of Environment and Ministry of Foreign Affairs in the organization of government and state meetings, by providing them with information and expert knowledge on the energy sector.

In 2014, representatives of Grupa LOTOS participated as experts in meetings of the Polish Parliament's Special Committee for Energy and Energy Resources and the State Treasury Commission, where important matters concerning Poland's oil sector were discussed. There, we had an opportunity present to the law makers the industry's current situation and key challenges resulting from the enacted and planned EU regulations.

Grupa LOTOS monitors, on an ongoing basis, all EU regulations concerning the energy sector, and cooperates with the government on drafting documents implementing EU directives in Poland. Being a member of Central Europe Energy Partners (CEEP) and Fuels Europe, Grupa LOTOS is also able to influence the shape of the EU regulations.

In 2014, through CEEP, we supported the process of negotiation between the EU and USA of the Transatlantic Trade and Investment Partnership (TTIP). We seek free access to the North American oil and gas market, which should help EU refineries compete with those outside the EU, which have access to less expensive gas and oil.

We are facing new challenges brought about by the recurring debate over the use of renewable energy sources in transport. The debate will take place in three main areas: amendment of the EU's Renewable Energy Directive (RED), a European discussion on the role of renewable energy sources in transport by 2030, and a national debate on solutions related to reaching a 10% share of renewable energy sources (RES) in the transport sector by 2020.

Other issues which require our attention are the EU's proposals to reform the Emissions Trading Scheme (ETS) and implementation of the Market Stability Reserve (MSR), which would maintain a high price of  $CO_2$  emission allowances. We have been monitoring the energy sector across Poland's eastern border, where customers for our oil products operate (Russia, Belarus, Ukraine, Kazakhstan and Azerbaijan). We take part in the work of Intergovernmental Committees concerning countries of the region, which set out the possibilities and directions of bilateral economic cooperation.

One of the major events we participated in last year was the publication of the 'Completing Europe - From the North-South Corridor to Energy, Transportation and Telecommunications Union' report, drawn up by CEEP and the Atlantic Council think tank. Economic growth and energy security determine the EU's strength. We should seek to strengthen the competitiveness of European economies through construction of adequate infrastructure that would allow Europe to successfully compete with other economies of the world.

We consider as priority the investment project concerning the creation of the North-South Corridor, i.e. an integrated network of interconnections in the energy, transport and telecommunications sectors extending from the Baltic Sea to the Adriatic and

The LOTOS Group realises its business strategy and corporate social responsibility goals by increasing its role in strengthening Poland's energy security. With this end in mind, we carry out multiple projects aimed to increase the production of hydrocarbons and oil distillate yields, improve Poland's fuel balance and exploit synergies between refining and the energy sector.

In 2014, we were actively involved in the efforts to strengthen the energy security through various areas of our operation.

## Development of the exploration and production segment

We continued our work on development of the B8 oil field located in Poland's Exclusive Economic Zone of the Baltic Sea with a view to launching commercial production. This project will allow us to diversify our oil supply sources. On August 25th 2014, we signed relevant agreements under the Senior Note Programme with Bank Pekao S.A. and Bank Gospodarstwa Krajowego, and under the Subordinated Note Programme with Polskie Inwestycje Rozwojowe and Bank Pekao S.A.

LOTOS Petrobaltic continued its work, carried out jointly with CalEnergy Resources Poland, on development of the B4 and B6 gas fields located in Poland's Exclusive Economic Zone of the Baltic Sea. The project's objective is to launch commercial production of natural gas from the fields by 2018, with a 51% share of LOTOS Petrobaltic in the production. The project will help diversify the sources of natural gas supplies to Grupa LOTOS. In 2014, the engineering design for 2015–2017 was developed and a phased launch of production from the fields (B6 and B4) was analysed.

In May 2014, LOTOS Norge and PGNiG Upstream International signed a letter of intent concerning their joint operation on the Norwegian Continental Shelf, according to which both companies are planning to jointly review possible acquisitions, acquire assets and take part in licensing rounds held by the Norwegian Petroleum and Energy Ministry.

Last year, the Heimdal field development project was at a preparatory stage to determine its most profitable scenario. Development of the hydrocarbon discoveries acquired by LOTOS Norge in the Heimdal portfolio, i.e. Fulla, Frigg Gamma Delta and Rind, will lead to increased production of hydrocarbons in the Norwegian Continental Shelf and higher revenue from foreign sales.

Development of onshore oil and gas deposits in Poland was carried out in cooperation with PGNiG. Activities in this area were focused on raising the production of hydrocarbons from conventional deposits and further diversifying the sources of feedstock supply to the Grupa LOTOS refinery. The project, carried out under the 2013 agreement between LOTOS Petrobaltic and PGNiG on joint operations in the Kamień Pomorski onshore licence area, was in the phase of exploration and appraisal, as part of which seismic surveys were performed. (See more <a href="http://raportroczny.lotos.pl/en/results-and-prospects/segment-performance/exploration-and-production">http://raportroczny.lotos.pl/en/results-and-prospects/segment-performance/exploration-and-production</a>)

## Influencing Poland's and the EU's energy policy

In 2014, Grupa LOTOS was actively involved in promoting the policy of energy security. Activities in this area were conducted mostly through our membership in the association Fuels Europe and in Central Europe Energy Partners (CEEP).

A valuable initiative of the Ministry of Economy was to commence work on Poland's Energy Policy until 2050. Several industry organizations, including CEEP (co-founded by Grupa LOTOS), were invited to contribute. In May 2014, during the European Economic Congress in Katowice, Grupa LOTOS and CEEP organized a panel discussion entitled 'Single Energy Market in Europe', to present the idea and challenges of creating on our continent a single energy market.

The issue was further investigated during a panel discussion 'An Energy Union for Europe – Competitiveness, Growth, Security and Solidarity', organized by CEEP and Grupa LOTOS during the Economic Forum in Krynica-Zdrój, in September 2014.

Another major European event in 2014 was the '29 + 1' debate, held in April in Budapest and attended by representatives of 29 leading energy companies from Central Europe as well as the EU Commissioner for Energy. The initiative was under the auspices of Romania's Prime Minister Victor Ponta. The idea behind the '29+1' meetings is to ensure that Central European energy companies have a say in developing the EU's joint position and policy on energy security.

Last but not least, the Energy and Economic Summit, held in November 2014 in Istanbul, Turkey, was an opportunity to present the 'Completing Europe - From the North-South Corridor to Energy, Transportation and Telecommunications Union' report drawn up by the Atlantic Council and CEEP.

## **Best practice**

An example of best practice which combines building our international relations with supporting initiatives aimed to improve the energy security in Europe was the publication of the 'Completing Europe - From the North-South Corridor to Energy, Transportation and Telecommunications Union' report.

This strategic document was drawn up thanks to the cooperation between CEEE and the Atlantic Council, with the expert input provided by Grupa LOTOS, PERN "Przyjaźń and Kulczyk Investment. The Atlantic Council was founded in the 1960s and is a special, nonpartisan American think tank committed to promoting transatlantic cooperation and international security.

The report focuses on the role of oil, gas, transportation and telecommunications interconnectors in strengthening the security of the European energy sector, improving its competitiveness and creating common energy market.

The report was first presented at the Energy and Economic Summit, held in November 2014 in Istanbul.

The document is available on the Central Europe Energy Partners' website at www.ceep.be.

## RELATED CONTENT:

## Membership in organizations

Representatives of Grupa LOTOS take part in the work of different organizations and we treat our membership in them as strategically important. The goals of these organizations are e.g. to develop new legislative solutions for the energy sector and to actively participate in public consultation of draft acts regulating the sector.

Go to the page  $\,$  » <a href="https://raportroczny.lotos.pl/en/the-organization-and-its-report/membership-in-organizations-">https://raportroczny.lotos.pl/en/the-organization-and-its-report/membership-in-organizations-</a>

## Key objectives

We achieve our business objectives with due regard to corporate social responsibility and sustainable development by the best possible use of the organization's resources and capabilities to generate economic and social value for the benefit of the Company and its environment.

Go to the page » <a href="http://raportroczny.lotos.pl/en/business-strategy-and-model/key-abjectives-">http://raportroczny.lotos.pl/en/business-strategy-and-model/key-abjectives-</a>