

# Innovation is key to lasting success

Development and innovative projects are a core element of investment efforts undertaken by the LOTOS Group. Encoded in our corporate DNA, they allow us to maximize our profits and drive value for our shareholders and other stakeholders. Thanks to an innovative and flexible approach to our operations, we are equipped to tackle major challenges facing the oil industry and bolster our competitiveness in a difficult market.

Innovation is ingrained in all of our business segments. By being innovative, we are capable of ensuring the superior quality of our products and services. As an organization that embraces new technologies and is very active in research and development efforts, we are also an attractive partner for scientific institutions.



**THE GLOBAL GOALS**  
For Sustainable Development



Our key initiatives designed to increase competitiveness in 2015 included:

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## EFRA Project

Initiation of the EFRA Project, another important endeavour in the LOTOS Group's history. The project will improve our financial efficiency and product margins. After its completion, Grupa LOTOS will become one of the most advanced refinery in the European Union. With the new units within EFRA project, the plants will produce an additional 900,000 tonnes of top quality high-margin fuels and 300,000 tonnes of petrochemical coke, without increasing crude input volumes.

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## B8 field

We also started production from the B8 field using the LOTOS Petrobaltic drilling rig. Thus, LOTOS Petrobaltic has doubled its production of hydrocarbons in the Baltic Sea, and the incremental output generated by the field has a positive effect on its financial standing. The B8 field is situated in Poland's Exclusive Economic Zone of the Baltic Sea. It is the third largest oil production facility in Poland and the oil field holding the largest recoverable oil reserves in the Polish part of the Baltic Sea.

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## Sleipner area

LOTOS Norge finalized the purchase of a portfolio of Sleipner assets located in central part of the North Sea. Being the second largest gas hub in the North Sea, the Sleipner area is of strategic importance to gas exports from Norway to Continental Europe and the United Kingdom.

## How do we create value for investors?

Key financial indicators	Key non-financial indicators
<ul style="list-style-type: none"><li>■ EFRA Project: <b>PLN 2.3bn</b></li><li>■ Construction of the Hydrogen Recovery Unit: <b>PLN 44.4m</b></li><li>■ Eco-friendly projects: <b>PLN 72m</b></li><li>■ Capital expenditure, in the strategic period 2011–2015: <b>PLN 4.2bn</b></li><li>■ Refinery margin: <b>USD 7.77/bbl</b></li><li>■ Annual expenditure on training: <b>PLN 4.9m</b></li></ul>	<ul style="list-style-type: none"><li>■ Record crude oil and gas production in the LOTOS Group (production volume includes the annual output of Sleipner assets, in line with the effective transaction date of January 1, 2015): <b>10.4m boe</b></li><li>■ Number of R&amp;D projects: <b>31</b></li><li>■ Number of newly-introduced/significantly modernised products: <b>12</b></li><li>■ Number of cooperating R&amp;D units and research centres: <b>14</b></li><li>■ 50% of water intake is reused or recycled</li><li>■ CO2 emission intensity ratio for the refinery in Gdańsk: <b>29.8 kg CO<sub>2</sub>/CWT</b></li><li>■ Yield of high-margin products in the refinery: <b>78.3%</b></li><li>■ Crude oil diversification rate: <b>23%</b></li><li>■ Refinery system availability: <b>99.4%</b></li></ul>

The 10+ Programme triggered an intensification of our innovation efforts. Now, new advanced technologies are being rolled out under our key [EFRA Project](#). By investing in state-of-the-art deep oil processing technologies, we will be in a position to increase output of high-quality fuels and eliminate the products with a negative margin from our production structure, reducing their adverse environmental impact. This is something we find very important, as when selecting and implementing modern solutions, we always consider synergies between the needs of the company and benefits to the environment, especially the natural environment. The technologies we use are ahead of increasingly stringent environmental protection standards and regulations.

We realize that improving and seeking ever better solutions is a continuous process. Hence, our plans assume investing in new technologies across all business areas, improving our efficiency by developing business processes, leveraging advanced technological process optimization techniques, including by promoting innovation among employees, as well as our trading and social partners.

