

Other investments

The investment activity of Grupa LOTOS in 2008 focused on the performance of the 10+ Programme. A number of smaller projects were executed outside the 10+ Programme related to the enhancement of efficiency, safety and the performance of assets and ecological investments (e.g. the air-tight sealing of tanks of the sewage treatment plant at the refinery in Gdańsk).

The companies of the LOTOS Group continued investments related to the strategic directions, i.e. the development of oil production on the Baltic Sea, the development of the retail fuel sale network, the extension of the fuel logistic base and the management of assets in the southern companies. Moreover, investments were started aimed at entering the JET fuel supplies market at Polish airports and creating real competition for the dominant position of Petrolot.

Natural gas

In cooperation with PGNiG and Pomorska Spółka Gazownictwa, a medium-pressure natural gas pipeline was conducted to the refinery in Gdańsk and a gas compressing station was constructed to feed the refinery's fuel gas network. Natural gas has replaced the propane-butane produced at the refinery, which was utilised in the furnaces. As a result, an additional 9 thousand tonnes of LPG were sold on the market, the processing costs were reduced by PLN 4m and the CO₂ emission into the atmosphere was reduced.

Modified bitumen tank

In order to increase the availability of modified bitumen at the peak of the road-work season (usually in the autumn), a storage tank was constructed on the system of LOTOS Asphalt in Gdańsk of a capacity of 1,000 m³. This will enable the enhanced utilization of the throughput at the bitumen modification system. It will also fulfil the growing demand for modified bitumen, which are used more and more commonly to produce pavements on the most loaded sections of roads, e.g. on motorways, fast roads, crossroads and bridges. The tank will be used upon the start of the bitumen oxidation system after the overhaul downtime in spring 2009.

Key investments in the companies of the LOTOS Group

Petrobaltic

The B8-Z1 bore hole was performed on the B8 field, which will enable the performance of a production test and the recalculation of the field resources. Based on the available information on the field, the Company has concluded that it has good prospects for production.

The cycle of seismic work started on the B23 and B28 structures (in 3D) and on B22 and B101 structures (2D). The seismic tests will enable further recognition of the potential hydrocarbon resources and the optimization of the exploration risk.

LOTOS Paliwa

The development of the station chain was continued in the CODO formula (company-owned stations) and the DOFO system (franchise-operated stations). 7 new stations joined the Company's CODO network (Warszawa, Szczecin, Bydgoszcz, Kraków, Strzeszowice, Radzymin and Zegrze) and 13 new stations the franchise network (Trzebiel, Kotlin, Bartoszyce, Dębica, Włodawa, Cieszyn, Zwoleń, Kórnik, Gronowo Górne, Lublin, Żabno, Rusiec and Ostrowiec Świętokrzyski).

In 2008, LOTOS Paliwa won the tender for 6 Service Areas along the A2 and A4 motorways. In 2009, LOTOS fuel stations, McDonald's restaurants and hotels will be constructed at the Service Areas.

LOTOS Tank

The construction of the aviation fuel base commenced at the Lech Walesa Airport in Rębiechowo near Gdańsk. In 2009, LOTOS Tank will become the second (in addition to Petrolot) fuel operator at this airport. The construction of the base marks the expansion of Grupa LOTOS on the market of aviation fuels. The facility is being constructed as part of the first stage of the strategy providing for the construction of a permanent fuel distribution channel. It contributes to the strategy of the LOTOS Group, which includes the increase of aviation fuel sales in Poland and a major increase of the market share.

LOTOS Biopaliwa

The construction and start of the FAME system for the production of engine fuel biocomponents was completed. The design capacity of the system amounts to 100 thousand tonnes of esters and 12 thousand tonnes of technical glycerine per year.

The general contractors of the investment were MAN Ferrostaal AG Essen Germany (the production part) and Prochem S.A. Warsaw (the infrastructure). The system comprises six production units: cleaning (raw material standardization), alcohol neutralization, transesterification, methanol recovery, acid esterification and glycerine evaporation. The basic production process is conducted at a normal pressure, a temperature of approximately 60°C and is based on the CD Process licence. The main raw materials are rape-seed oil and methanol.

The quality of the produced FAME complies with the requirements of the PN-EN 14214 standard, while for some parameters (the acid value, water content, contamination and glycerols) it exceeds the standard. FAME is used as an additive in producing diesel oil (biodiesel) and is sold as a self-contained engine fuel (B100). This production will enable Grupa LOTOS to fulfil the National Index Target with regard to the application of biocomponents in fuel production.

Logistics

LOTOS Jasło and LOTOS Czechowice continued investments in the development of the tank depot and in increasing the storage and fuel distribution capacities. Both these companies of the LOTOS Group are to focus on logistics and the storage of obligatory stocks.

LOTOS Czechowice constructed a tank for the storage of diesel oil of a capacity of 32 000 m³, while 6 tanks of a total capacity of 6000 m³ were modernised. LOTOS Jasło modernised 6 tanks of a total capacity of 23,000 m³ used for the storage of diesel and heating oils.

LOTOS Jasło constructed a line for the granulation of polyolefine wastes to recycle waste containing polyethylene. The polyethylene granulate produced on the line is sold as the raw material for producing PE foil and other products. The throughput of the line amounts to approximately 4 thousand tonnes of waste per year, used to produce approximately 300 tonnes of granulate per month.

Operation maintenance and overhauls in 2008

As regards maintenance and overhauls, the most outstanding achievement was the provision of the operation of basic production and auxiliary systems on the availability level exceeding 99%, which ranks Grupa LOTOS among top European refineries.

The safe and stable operation of the production and auxiliary lines was achieved by providing a high level of production operation, a systematic raising of staff qualifications, implementing modern work organization methods and information flow, introducing the principles of project management in executing modernization projects and overhauls and the development of prophylactic measures and the prevention of technical failures.

The performance of the above tasks was combined with streamlining overhaul and maintenance costs with the assumption of the maximum use of potential of the companies in LOTOS Group.

Parallel to the current maintenance and overhauls, work was continued on preparations for the 'Spring 2009' Overhaul Down-Time, i.e. the complete shutdown of the production lines for regular repairs due to the connection of the systems constructed in the 10+ Programme. The 'Spring 2009' project includes the scope of work to be performed, contracts signed with general contractors and the schedule of work. Together with the service contracting processes, materials and equipment were procured as required for replacements.