ANNUAL REPORT 2012

DEAR READER,

once again, the Polish Organisation of Oil Industry and Trade has produced its "Oil Industry and Trade" report, summarising 2012 and presenting key statistics on the liquid fuels sector in Poland. It contains an analysis and a discussion of the main problems of the industry and covers selected topics on fuel and lubricating oil production and logistics. The report covers a sector which is of vital importance to the Polish economy, ensuring the energy security of the country, employing tens of thousands of people and providing a significant part of the state's revenue.

The report was made possible by our experts' continuous monitoring of the market, analysis of data from POPiHN member companies and observation of the segment of independent businesses operating in wholesale and retail. To ensure reliability of data, good cooperation with the government, including the Ministry of Finance and the Material Reserves Agency was of crucial importance.

The portrayal of the market in this report is different from what we have been used to in previous years. It is the first time when market forecasts at the end of 2011, have differed so much from official results following the end of 2012. In our opinion, apart from obvious reasons, such as the economic downturn or high fuel prices, this situation was due to the dramatic expansion, in recent months, of the shadow economy in fuel trading. This was evidenced by such issues as discrepancies between data reported by POPiHN member companies and by firms outside the organisation operating in retail and non-retail fuel sales. According to official data, the Polish market experienced a significant slump in demand for diesel and a further fall for petrol. At the same time, the LPG market grew. In our opinion, diesel consumption did not decrease quite as much, in fact, and probably even remained at the previous year's level. The fallaciousness of official data is contributed to by the shadow economy, which, according to POPiHN's member firms, has developed to an extent not seen previously. Decline in demand for petrol and the increase in demand for LPG is due to price disparities between these alternate fuels, resulting not only in lower net LPG prices, but also significantly lower taxation of this fuel.

Over various periods, the price of petrol was also lower than that of diesel. This situation may arise more often, particularly in view of the European Commission's plans for taxing fuels, and it may affect the structure of the vehicle market.

Wishing you interesting reading, I am delighted to be forwarding the report, "Oil Industry and Trade 2012".

Andrzej Magryś President of POPiHN Management Board



Petrol .0,750 Mg/m³ Diesel .0,834 Mg/m³ Light fuel oil .0,835 Mg/m³ LPG .0,569 Mg/m³

POLSKA ORGANIZACJA PRZEMYSŁU I HANDLU NAFTOWEGO

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MAIN PROBLEMS OF THE FUELS SECTOR IN POLAND

1. GREY MARKET

2012 saw a dramatic increase in the grey market for fuels, which can be seen both in official statistics on the fuels market, as well as in the individual observations of oil companies operating on the Polish market. This is also shown by the discrepancies between the data from the fuels market (particularly wholesale), and data on the pace of economic growth and the freight market. We estimate that in 2012, the grey market for trade in diesel, the main grey market area in fuels trading, was at 6-7% of the market, which is about 100,000 m³ of diesel per month, worth approximately PLN 500m gross per month. Just the losses to the state from unpaid taxes on fuels sold may total about PLN 3 billion. Fiscal evasion and offering fuels on favourable terms to client firms, confronting cash-flow problems and difficult conditions in the very competitive fuels market, created the opportunity of achieving significant revenues to the detriment of the state and companies operating in full compliance with the law. Deals appeared with discounts of PLN 300 or more on every 1,000 litres of diesel, while normally such discounts are at most PLN 150. In this situation, legitimate businesses could not compete with the grey market. Representatives of some independent operators, mostly operating in the small stations sector, publicly admitted to buying fuel from grey market firms, because the low margin on fuels did not allow them to compete with large networks in any other way. In this way, the low profitability of the sector contributes to the development of the grey market.

THE GREY MARKET IN FUELS MAY BE DEFINED IN TWO WAYS:

1. as activities which blatantly violate the law for financial gain, namely commercial crime:

a. VAT fraud;

- **b.** excise tax evasion;
- **c.** importation of excessive amounts of fuel;
- **d.** operating illegal fuel stations (no central register)

2.1.as activities which avoid imperfect laws for financial gain:

a. taking advantage of legal loopholes in the Mandatory Reserves Act;

b. taking advantage of the imperfect

provisions on using biofuels (NCW); **c.** introducing onto the market lubricating oils imported from countries, where they are not subject to excise tax.

Our position:

We expect decisive steps in reducing the grey market economy, both by law enforcement agencies and fiscal inspectorates, as well as by appropriate changes in the law (introduction of bank guarantees or cash deposits as security for licences to trading in fuels, changes to the system of mandatory reserves and in provisions on biofuels, etc.). The creation of a central register of fuel stations (termed the nation-wide fuels platform), enabling individual state authorities to exchange information and coordinate inspections and verification of all entities operating in this area, with the low costs of establishing such a system, would superbly assist in combating the grey market. Integrating cash registers with fuel flow meters at fuel stations would decidedly secure the fuel trading system, for a relatively low cost.

2. SECTOR PROFITABILITY

Despite short periods when the profitability of trading in fuels improved slightly, average annual fuel trading margins continue to remain at low levels. Certain politicians have put pressure on oil companies and called on them to reduce prices for the sake of social responsibility. Meanwhile, in 2012, average margins were PLN 0.18/l for diesel (3% of retail price), and PLN 0.16/l for petrol (2% of retail price), whereas the development and competitiveness of the industry require margins of approximately PLN 0.30/l. In the long term, this situation threatens the stability of the fuels market in Poland and has hard to predict consequences. In a situation of high prices and low margins, many fuel stations have only been able to continue in business through developing non-fuel product and services sales, as well as by sourcing grey market fuels. The high price of fuels is heavily affected by taxes and the like; currently they constitute 48% of the price of petrol, 44% of diesel price and 35% of LPG. Difficult market conditions mean that some international players are withdrawing from the Polish market, such as NESTE Poland.

Our position:

We look forward to fuel market prices being solely determined by economic factors and to passed regulations not leading to further, unjustified price increases. Laws should be drafted in ways which ensure minimal profitability in fuel trading, justifying entrepreneurs' continuing engagement in this business. In 2013, the level of excise duty on petrol and diesel continues to remain above the EU minimum which is derived from the euro exchange rate of 1 October 2012. The reduction of revenues in this respect could be offset by more effective combating of the grey market and by a boost in demand for fuel. Setting of excise duty at the EU minimum level would allow for a reduction in the retail price of petrol by PLN 0.24/l, and diesel by PLN 0.12/l. We oppose any attempts to limit the scope of services provided and goods sold at filling stations, for example, by prohibiting the sale of alcohol or tobacco, or basic needs medicines.

3. PROVISIONS OF LAW

Further amendments to Energy Law and other acts have led to a situation where the entire system covering production, logistics, storage and marketing of fuels has become inconsistent. Regulations prepared by different government departments often do not correlate, which hinders sector enterprises' operations and increases associated costs. The draft Energy Bill, presented at the beginning of October 2012, included provisions eliminating requirements for licences for production, transportation, storage and marketing of liquid fuels. If the proposed solutions are adopted, this will deepen the grey market and lead to a collapse of the legal system governing compulsory reserves, implementation of the National Indicative Target, fuel quality requirements, etc.

Our position:

The fuels industry criticizes the proposed changes to Energy Law, involving abolishing licences for production, storage, transmission and marketing of fuels and proposes recognition of this business as

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regulated and calls for existing provisions to be upheld until the passing of a comprehensive law governing the activities of oil refineries, and fuels logistics and trading: Petroleum Law. We believe that there should be significant increases in penalties for operating without a licence, which are currently much lower than penalties imposed for even minor transgressions on legal businesses. Obtaining a licence should be subject to providing bank guarantees or cash deposits as securities for licences for trading in fuels.

4. STATE AUTHORITIES' DIALOGUE WITH SECTOR REPRESENTATIVES

Although intensive dialogue is underway between the administration and representatives of the fuels sector regarding planned EU and national regulations, in many cases the position of the sector has not been taken into account.

The result of this is the passing of measures that generate huge costs and fail to take into account the economic situation in the whole EU, especially the difficult condition of the refining industry. This results in further increases in fuel prices. The round table conference, in July 2012, was a valuable initiative convened by the Ministry of the Economy.

Our position:

Once again, we are proposing to organise, under the patronage of the Prime Minister of Poland, an interdepartmental roundtable with representatives of the Sejm, government, sector delegates and experts. This would enable mutual expectations and requirements to be clearly defined and, consequently, lead to better lawmaking and improvements in the competitiveness of the Polish economy. We look forward to continuing the debate, initiated by the Ministry of the Economy, as a round table conference.

5. ELECTRONIC PAYMENT **INSTRUMENTS**

Poland is still a country in which merchants who handle charge and debit cards incur huge costs associated with accepting card payments. The average cost of all fees (MSC) is about 2% (approximately 1.6% for large merchants), of which the fee to issuers (interchange fee) is currently about 1.8% (about 1.4% for large merchants). This results in high costs of doing business, and higher prices for customers. In this

situation, many traders refuse to accept card payments, hindering the growth of cashless transactions, which are so important for the development of the Polish economy, especially in view of potential Polish accession to the euro. Initiatives taken by the National Bank of Poland to reduce the interchange fee to a level generally found in other EU countries by seeking a compromise between all parties, collapsed due to opposition from Mastercard. As a result, work has started on legal regulations limiting the level of fees paid by merchants in credit and charge card payments.

Our position:

We support the early passing by the Sejm of a draft act, prepared and approved in 2012 by the Senate. Further delays in the legislative process will result in increasing costs to merchants, and so to all Polish consumers. It is worth recalling that cross-border fees oscillate around the level of 0.2-0.3%, while in its offer to the authorities and local government, Visa has quoted set fees for accepting cards, where the given rates of PLN 0.20 and PLN 0.30 are, in our opinion, a real point of reference. Mastercard has taken similar decisions.



6. RENEWABLE ENERGY AND BIOFUELS

There is continuing failure to transpose into the Polish legal system Directive 2009/28/EC on renewable energy sources (RES) of 23 April 2009, covering issues of electricity, heat and transport fuels. Against the industry's view, the government decided to transpose separately the provisions on transport fuels via an amendment to a controversial Act on Biocomponents and Liquid Biofuels of 25 August 2006.

The act's assumptions, when subjected to public consultation, gave rise to numerous concerns and therefore steps were taken to modify it. During public consultations, the fuels sector pointed to the need to adopt provisions enabling the most effective economic implementation of the RES Directive, in particular, flexibility in determining the National Indicative Target (NIT) with reference to market conditions, the transferability of NIT surpluses to a following year, and finally the possibility of implementing NIT with modern biofuels, such as HVO (hydrogenated vegetable oil), including those produced with co-hydrogenation technology.

The policy on biofuels, in particular the imposition of a very high NIT level, translates directly into increased prices of liquid fuels in Poland. Further promotion of the use of such biofuels as B100 will result in further increases in costs and therefore retail prices of fuel and food.

Our position:

We look forward to work accelerating on the implementation of the provisions of Directive 2009/28/EC (RES) into the Polish legal system, taking into account the interest of the Polish economy as a whole. When planning promotional campaigns for renewable fuels, including biofuels, it is essential to take into account the economic impact of the adopted solutions and their influence on the final price of fuel, as well as to incorporate the latest biofuels production technology accepted by vehicle manufacturers, which means principally HVO. In accordance with EU recommendations, the government should not insist on the use of first-generation biofuels over the level of 5%. NIC should be reduced to a level achievable through the sale of standardised fuels (E5 and B7), at least until a new cost-effective generation of biofuels has been developed and introduced onto the



market. Maintaining a high NIC is not helpful to Polish agriculture, as it is unable to produce oilseed rape in quantities that meet the demand of the Polish food industry and RME producers. We hope that the Polish government will support the European Commission's proposal to reduce the share of first-generation biofuels (produced from food crops) to 5%.

7. COMPULSORY RESERVES

The Polish legal system has still not implemented Council Directive 2009/119/EC of 14 September 2009 on the system of mandatory reserves. The outlines of a new act on stocks of crude oil and liquid fuels, which were presented at the beginning of October 2012, only minimally reflect the long-term demands of the fuel industry regarding changes to the scheme for holding compulsory reserves. Current solutions for compulsory fuel reserves, which force oil companies to physically maintain liquid fuels, or their equivalent in crude oil, at a consumption level of 76 days, have a negative impact on their finances and, therefore, on the retail prices of fuels. The system also encourages the development of the grey market and threatens Poland's energy security.

Our position:

An early adoption of the act, which transposes the 14 September 2009 Directive, is essential, as it will allow a gradual, but as soon as possible assumption by the state of the obligation to create and maintain mandatory reserves. The reduction of the obligation of businesses to hold stocks by only 10% in 2013 and only 30% in 2017 definitely does not correspond to the sector's demands.

8. EXCISE DUTY ON LUBRICATING OILS

Businesses operating in the lubricants industry have long been pointing out that the extension of excise duty to oils is an

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approach which is highly ineffective and harmful for the market. Apart from Poland, oils are only taxed in three other EU states, but in none of them is this excise tax, because in prevalent European opinion the Energy Directive does not envisage subjecting these products to excise tax. Maintaining excise tax on lubricating oils reduces the competitiveness of the sector and at the same time encourages the development of the grey market, which has risen to become the main problem for the industry. Excise disrupts the level playing field for firms which introduce oils onto the market, as it increases operating costs for legitimate businesses, which leads to a decline in their competitiveness and higher product prices.

There should be an equal situation in different Member States of the Community for firms which operate in the same industry (level playing field principle), because inconsistent rules create grey market growth opportunities. In addition, if excise duty and all additional costs connected with it are not present in other EU countries, its adoption in Poland constitutes an additional and unwarranted restriction on firms operating in the country, as well as for end-users of those products.

Our position:

We believe that changes are essential in Polish excise duty law to ensure consistency with the laws in force in other European Union countries and to level the conditions for all players and to prevent the obstruction of the activities of Polish enterprises in this industry. A possible solution, in line with EU law and sector-friendly, which would ensure control over oil sales and be without any additional burdens, would be to zero rate them. Given the scale of the monies involved - a reduction in revenue to the state of around EUR 150m per year - in relation to the benefits achieved by the state, we suggest symbolically increasing the rate of any other existing tax, as a more effective solution for the economy.

9. LPG REFUELLING

Self-service LPG refuelling is permitted in almost the whole of the European Union as a most cost-effective solution, as well as helping to improve security. As a result of many years of POPiHN's efforts, in 2012, the Ministry of the Economy and the Ministry of Transport, Construction and Maritime Economy reached an agreement on permitting self-service operation. The necessary draft regulation of the Minister of the Economy is undergoing public consultation.

Our position:

The fuels industry favours an as early as possible adoption of the regulations of the Minister of Transport, Construction and Maritime Economy and the Minister of the Economy, so as to enable an as rapid as possible introduction of self-service LPG refuelling. The introduction of selfservice operation may reduce LPG prices by about PLN 0.5-0.10/l.

10. MOTORWAY INVESTMENTS

The development of the motorway and expressway network is being accompanied by the siting of MOPs (motorway service areas). Excessive demands on their operators and lease fee rules (3% of sales and a declared set fee) in a situation where the motorway network is still fragmented, may lead to a deterioration in their commercial viability and therefore be counterproductive; resulting in loss of revenue to the state and a worsening of level of service to travellers. Stability of investing is also not helped by changes to the business environment, such as the change in the classification of MOPs during their construction.

Our position:

We anticipate that the administration will maintain dialogue with representatives of firms interested in participating in tenders for MOPs with the aim of agreeing terms acceptable to both sides - for the benefit of drivers using the network of highways and expressways. It is essential to change the template lease agreement for operating MOPs and the provisions of the Toll Motorways Act, so that GDDKiA (General Directorate for National Roads and Motorways) could reduce the level of fees from lessees, depending on market conditions, levels of prices, etc.

11. AMENDMENT OF EXECUTORY REGULATIONS TO THE TECHNICAL INSPECTION ACT

There is no consideration of the specificity of the fuels sector in the provisions on technical specifications to be met by equipment for filling and emptying transportation tanks, as

defined in the regulation of the Minister of Transport of 20 September 2006 on the technical conditions of technical supervision to be met by equipment for filling and emptying transportation tanks, nor have the provisions been adapted to technologies available on the market, nor do they consider any other environmental protection methods than those described in the regulation, even though they are used in the European Union. The Ministry of Transport, Construction and the Maritime Economy has begun work on preparing amendments to the regulation.

Our position:

We expect that the final draft of the regulation of the Minister of Transport, Construction and the Maritime Economy will take into account the specificity of the fuels sector and will also admit solutions which are now widely used in other industries in Poland and in other European Union countries.

12. EUROPEAN UNION REGULATIONS

The decision-making bodies of the European Union are currently debating tightening climate and transport policy in the long run. The solutions which will be adopted will have direct impact on the future of the refining industry in Europe. They should take into account that in the medium term, oil will remain the main source of energy for transport. Poorly thought-out laws, which do not take into account the interests of not just the refining sector, but also related sectors of the economy, could lead to the collapse of the sector and the relocation of production outside the EU. This would have disastrous consequences for the entire EU economy, as well as its energy security.

Our position:

We expect the administration to continue its dialogue with sector representatives and to take account of our voice in the position presented by Polish representatives on the European Union forum. It is essential for Poland to be appropriately proactive on the "Refining Roundtable" forum which started its work within the European Commission in May 2012.





PROCESSING OF CRUDE OIL

(Fig. 1) by Polish refineries in 2012 was just over 25m tonnes, which is 5% more than in 2011.

■ Fig. 1 PROCESSING OF CRUDE OIL – DATA FOR THE YEARS 2011 AND 2012.

Year	2011		Reference 2011=100		
OVERALL	24,0	25,2	5,0		

Source: POPiHN own data

Another year has passed in which Polish refineries have increased processing of crude oil – this time by 5%, meaning an increase in refining by 1.2m tonnes. At its Polish refineries PKN ORLEN processed 15.5m tonnes of crude (4% more than in 2011), and LOTOS Group 9.7m tonnes (5% more than in 2011). It is clear that LOTOS Group is approaching the 10m tonnes level of processing assumed in the "10 +" programme. Polish Petroleum Concern ORLEN, despite strong competition from north Poland, has also increased oil refining, improving its previous results.

There was no significant change, in 2012, to the structure of supplies to Polish refineries. Again, most oil was imported from Russia (93%) and it was a REBCO-type medium-sulphur crude. Due to its price and that Polish refineries have facilities tailored to this type of crude, the eastern source of oil supplies will still remain dominant for a long time. This does not preclude processing of other types, which we had examples of in the past year in the form of supplies

of oils from Norway, Algeria, Saudi Arabia and Iraq. It is worth noting that sources other than Russia and the North Sea were tested only by LOTOS Group.

The diagram (Figure 2) shows the structure of supplies of crude oil to domestic refineries. The above-described dominance of supplies from the east is not in doubt. Over 24m tonnes of crude

were supplied to refineries from this direction. Refineries can take advantage of the geographic proximity and transport premium for supplies from this direction, which they eagerly do by using the pipeline of Przedsiębiorstwo Eksploatacji Rurociągów Naftowych PERN SA for their supplies. Supplementary purchases were brought in via the port facilities of Naftoport on the Baltic sea. These supplies were of about 2.7m tonnes.

The volume of crude oil supplies from domestic fields was slightly more than 2.5% of supply to refineries, which is equivalent to only about 10 days of processing.

■ Fig. 2 SHARE OF CRUDE OIL SUPPLIES TO DOMESTIC REFINERIES IN 2012 [%]



PRODUCTION OF LIQUID FUELS

(Fig. 3) of petrol (BS), diesel (ON), JET aviation fuel, light fuel oil (LOO) and heavy fuel oil (COO) and liquefied petroleumgas (LPG) amounted in 2012 to 24.6mm3. Thus, according to our estimates, compared to 2011, an increase of 3% was reported in liquid fuels production.

■ Fig. 3 COMPARISON OF LIQUID FUELS OUTPUT IN 2012 AND 2011 [In '000 m³]

Description	2011	2012	Reference 2011=100
Petrol	5 219	5 357	103
Diesel	13 199	13 040	99
LPG	448	654	146
JET fuel	1 075	1 156	108
Light fuel oil	933	1 299	139
Heavy fuel oil	2 943	3 111	106
OVERALL	23 817	24 617	103

The only product, whose production was lower than in the year before, was diesel, reflecting the demand for this type of fuel. Increased processing of crude, led to an increase in the production of Source: POPiHN own data

remaining types of fuels, including light fractions, such as engine petrol and LPG, as well as medium ones, like JET aviation fuel and light fuel oil. A consequence of increased throughput was also an increase in the production of heavy fuel oils, especially as from the second quarter of 2012 there was a significant weakening in the domestic market for asphalts. The need to implement the increased (from 6.2% to 6.65%, according to the calorific value of fuels) National Indicative Target (NIT) forced blending of bio-components with each litre of petrol and diesel sold, which is also classified by Polish law as production. Increased production of most fuels resulted in a reduction of their imports. The significant decrease in demand for diesel, driven also by a growth in the gray economy's share of this fuel market, led to small adjustments

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■ Fig. 4 BREAKDOWN OF LIQUID FUELS PRODUCTION IN 2012 [%]

in production. The increase in the production of medium fractions (JET, LOO) necessitated increased production of petrol, which being unable to find buyers in the country, were sent outside Poland. The increasing domestic demand for JET aviation fuel, as new terminals were being opened at Polish airports, resulted in increased production. Meanwhile products, which could not find buyers in the country, were eagerly purchased abroad.

Production of diesel fuel fell by nearly 160,000 m³ (by 1%), which was a new phenomenon for this fuel. The last few years saw strong growth in the production of diesel engine fuel, stimulated by the good results of the economy and by the conversion of transport fleets to diesel. The increase in petrol production is estimated at 3%, which also reverses the trend for this type of fuel. Until now, declines in production were forced by reductions in demand. Increased output of LPG was supplied to clients outside refineries. This was due to refineries switching energy supply lines to a new fuel, which is natural gas. Until now, some LPG output was used to produce hydrogen and some for heating. The reduction in the production of diesel with, at the same time increased processing of crude oil, led to an increase in production of medium fractions, such as light fuel oil, or JET fuel. In the case of the former, the increase in production helped to limit imports.

Compared to 2011, there was a 3% rise in output of liquid fuels, with the largest increase in production recorded for light fuel oil, whose volume increased by 366,000 m³. Petrol production increased by about 138,000 m³, and the decline in diesel production was 159,000 m³. In total, liquid fuels production increased by 800,000 m³, thus repeating the same percentage increase in production between 2011 and 2010.

Due to the reduction in production of diesel and the increase in production of other types of fuels, there was a small change in the breakdown of fuel production compared to 2011, which is shown in Figure 4.

While diesel continues to dominate in domestic refineries' output, nevertheless, this fuel's share in the breakdown of production decreased by 2 percentage points. Petrol maintained its share, while the shares of fuel oils and LPG increased by one point.

The production of liquid fuels also includes blending traditional fuels with bio-components. In April 2012, diesel Ê



Source: POPiHN own data

with a 7% blend of esters, named B7, was consigned to production and sale as a typical standard fuel. This decision of the regulator allowed a significant reduction in forced sales of B100 fuel, thereby making it easier for companies to achieve the National Indicative Target. But no provisions entered into force allowing increased amounts of alcohol to be added to petrol, so, according to the law, these fuels could only have bio-components added to them, up to 5% of their volume. Statutory restrictions meant that it was not possible to implement NIT just through the sale of standard fuels containing biocomponents. In 2012, NIT was set at 6.65% of bio-components converted into calorific value of individual fuels, so it would have required adding to petrol up to 10.03% by volume of ethanol, and to diesel up to 7.16% by volume of esters, in order to achieve the NIT just by selling fuel blends containing biocomponents. Therefore, companies producing and importing fuel had to continue selling pure esters as bio-fuel B100, although due to a legal amendment, their amount could have been much lower than in 2011, despite the increase in NIT. This was contributed to by the possibility of individual firms reducing NIT, provided that they made 70% of ester purchases in the European Union. All indications are that, at a cost to their own profits, which was lower than in the pervious year - but still there, POPiHN member firms implemented the NIT imposed on them. According to preliminary data, about 300,000 m³ of ethanol and about 780,000 m³ of esters were added to fuels. It is estimated that about 125,000 m³ of B100 fuel were sold (final figures will be known by the end of March 2013). This means that B100 fuel sales, compared to 2011, decreased by approximately 345,000 m³. The National Indicative Target for 2013 is set at 7.1% according to calorific value, which is likely to result in maintaining or even, increasing sales, again, of B100.



IMPORTS (the sum of actual imports and intra-Community supplies) of liquid fuels

(figs 7 and 8), in 2012, according to initial estimates, were nearly 6m m³. This is almost 30% lower than in 2011. The big surprise is the large reduction in diesel imports. An almost 50% drop in official imports was reported for this fuel type. This large decline is not explained by the high reduction in domestic demand, especially, since domestic production also decreased. The reasons for the decline should be sought more in the development of the grey market for this type of fuel.

■ Fig. 5 BREAKDOWN OF LIQUID FUELS IMPORTS IN 2012 [%]

10% BS 25% ON 58% LPG 4% LOO 1% JET 2% COO

Source: POPiHN own calculation

Fig. 6 COMPARISON OF IMPORTS AND INTRA-EU PURCHASES OF ABOVE LIQUID FUELS IN 2012 AND 2011

Description	2011 '000 m ³	2012 '000 m ³	Reference 2011=100	
Petrol	769	596	77	
Diesel	3 160	1 485	47	
LPG	3 500	3 386	97	
Light fuel oil	608	218	36	
JET fuel		36	-	
Heavy fuel oil	122	127	104	
Liquid fuels overall	8 159	5 848	72	

Source: Ministry of Finance and POPiHN own data

■ Fig. 7 SOURCES OF ENGINE PETROL IMPORTS [%]



Source: Ministry of Finance and POPiHN own data

POPiHN imported 2.5m m³ of liquid fuels, while independent operators 3.4m m³ (including 2.7m m³ of LPG). Sources of engine petrol imports remained unchanged. Just as in the previous year, most petrol was imported

The decline in domestic demand for petrol and the increase in domestic production, transposed into a reduction of supplies from abroad. Another trend, an increase in domestic production with an increase in domestic demand, caused a slight decrease in LPG imports. Foreign supplies of light fuel oil declined, being replaced by domestic production.

Officially recorded imports of liquid fuels, compared to 2011, declined by 2.3m m³ and contributed to a significant reduction in the difference in volume between Polish imports and exports of the commodity (net import).

Increased production at Lotos Group's and PKN ORLEN's production facilities undoubtedly contributed (in the context of the total market for liquid fuels) to the reduction in imports. However, in the case of diesel, there were numerous market signals that a part of official imports was replaced by supplies organised outside official statistics, in violation of fiscal regulations (grey market). Such a significant reduction in fuel supplies to the country has changed the structure of fuel imports. Imports of LPG have gained in significance (increase of 16 percentage points) while diesel has lost out (decline of 14 percentage points). There has also been a two-fold decrease in light fuel oil's share of total imports.

Import reductions affected both POPiHN member companies, as well as independent operators. For the former, the increase in domestic production and the drop in demand, resulted in a reduction of around 40% in the whole pool of liquid fuels imports. For independent operators, for which imports of LPG are an important position, covering more than 80% of demand, the decrease in fuel imports into the country was of about 15%. In volume terms, the concerns brought in about 1.8m m³ less fuels (of which about 1.4m $m^{\scriptscriptstyle 3}$ was diesel), whereas independent operators around 600,000 m³ (of which about 250,000 m³ was diesel). These numbers clearly show, who is most affected by the grey economy in the liquid fuels market. In total, the companies affiliated with



from Germany and Slovakia. Trace amounts were imported from other sources.

Diesel was imported from more countries than petrol, but also for this type of fuel, sources of supply changed only slightly, compared to the previous year. Most diesel fuel was imported officially from Germany and Belarus. About 25% of all imported fuels were imported from over Poland's eastern border, from countries outside the EU. Including Lithuania and Latvia with the East, about 45% of total diesel imports were from this direction. This is about 2 percentage points more than in the previous more.



Source: Ministry of Finance and POPiHN own data

EXPORTS (the sum of actual exports and intra-Community supplies) of liquid fuels

(figs 9 and 10) in 2012 amounted to almost 4.3m m³ and were higher by 26% than in 2011 Therefore, in 2012, about 900,000 m³ more of liquid fuels left the country than in the year earlier.

Increased production in domestic refineries and the decrease in domestic demand forced by the economic slowdown, high fuel prices and a growing shadow economy, caused a significant growth in fuels exports. The largest percentage increase in exports was for diesel, three times more of which left the country than in the preceding year. In volume terms, the largest increase was noted for heavy fuel oil (312,000 m³ more) and petrol (211,000 m³). Heavy fuel oil still remains a key Polish fuel export. It should be noted that each year there are increases in exports of engine petrol and diesel fuel. Foreign sales of JET fuel are also growing, despite the increase in demand from domestic airports. Heavy fuel oil's share in total exports of liquid fuels has, once again, decreased by 5 percentage points, but was still 55%.

The export supplies of JET fuel mentioned here were deliveries made directly by domestic producers. However, most of the output of this type of fuel, goes to domestic intermediary companies

■ Fig. 10 BREAKDOWN OF LIQUID FUELS EXPORTS IN 2012 [%]



which make airport deliveries to aircraft of international carriers. The scale of these deliveries, in 2012, was 584,000 m³, therefore 22,000 m³ less than in the previous year.

The main destinations of exports and intra-Community supplies for petrol were Ukraine (39%) and Sweden (22%) and for diesel United Kingdom (59%) and Germany (17%). Heavy fuel oil went mainly to the Netherlands (37%) and Denmark (36%). Direct foreign supplies of JET fuel made by domestic refineries go mainly to Sweden (32%) and Lithuania (24%).



■ Fig. 9 STRUCTURE OF ABOVE EXPORTS AND SUPPLIES IN 2011 AND 2012 [in '000 m³]

Description	2011	2012	Reference 2011=100
Petrol	698	909	130
Diesel	136	407	299
JET aviation fuel	476	546	115
LPG*	36	51	142
Heavy fuel oil	2 047	2 359	115
OVERALL	3 393	4 272	126

*eksport bezpośredni bez reeksportu Source: POPiHN own data

[■] Fig. 8 SOURCES OF DIESEL IMPORTS [%]

DOMESTIC CONSUMPTION of liquid fuels in 2012

Below is a preliminary comparison of domestic consumption of liquid fuels in 2012 compared to that in 2011. Final data, taking into account the final calculation by the Ministry of Finance of imports and intra-Community supplies, as well as approved reports of companies which are members of POPiHN, will be available in mid-2013. Therefore, the presented data should be treated as estimates, albeit very close to final results.

■ Fig. 11 ESTIMATE OF DOMESTIC LIQUID FUELS CONSUMPTION IN 2012, COMPARED TO 2011.

Description	Description			2011			
-		'000 m ³	share of	'000 m ³	share of	2011=100	
			consumption %		consumption %		
Petrol	Consumption	5 309		5 024		95	
	including total	769	14	596	12	77	
	imports						
Diesel	Consumption	15 748		14 289		91	
	including total	3 160	20	1 485	10	47	
	imports						
LPG	Consumption	3 911		4 024		103	
	including total	3 500	89	3 386	84	97	
	imports						
Total for 3 fuel types	Consumption	24 968		23 337		93	
	including total	7 429	30	5 467	23	74	
	imports						
JET fuel	Consumption	606		614		101	
	including total	0	_	36	6-	-	
	imports						
Light fuel oil	Consumption	1 293		1 121		87	
	including total	608	47	218	19	36	
	imports						
Heavy fuel oil	Consumption	673		709		105	
	including total	122	18	127	18	104	
	imports						
OVERALL	Consumption	27 540		25 781		94	
	including total	8 159	30	5 848	23	72	
	imports						

The figures for fuel consumption in 2012 are somewhat surprising. Although a slight lowering was expected in the growth dynamics of the Polish fuel market due to changes in the excise tax on diesel, the slowdown in the economy and a decrease in the wealth of society, but the scale of the changes came as a surprise, all the more because the Polish economy maintained a growth rate of 2%. Most of the decline in fuel consumption was due to a reduction in demand for diesel. It was much lower than expected, based on economic indicators, despite the fact that the condition of the market for this type of fuel depends precisely on the condition of the economy. The causes for this are attributed to the development of the grey market, for which high fuel prices and a desire to reduce costs of commercial operations in a slowing economy were excellent drivers. According to POPiHN's estimates, the shadow economy in the diesel market may extend to even 6-7% of supplies in the market. Some market analysts suggest that this may be even greater. Price increases contributed significantly to the reduction in demand for petrol. It was yet another year, in which a reduction was observed in the demand for spark ignition engine fuel. The only motor fuel for which demand exceeded the level in 2011 was LPG, mainly due to increased demand for autogas which is a substitute for petrol. The relatively good price favouring autogas encourages refuelling with this fuel for cars with bi-fuel systems (autogas/petrol). The annual summary of the overall market for liquid fuels shows a decline in the consumption of petrol, diesel and light heating oil, and a slight increase in demand for LPG, JET aviation fuel and heavy fuel oil. In terms of volume, the liquid fuels market in Poland returned to the level of 2008.

Source: Ministry of Finance and POPiHN own data

Domestic demand for liquid fuels was fully satisfied and there were no instances noted of market perturbations.



4 POPIHR

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■ Fig. 12 DOMESTIC CONSUMPTION OF LIQUID FUELS IN 2012 AND 2011 ['000 m³]



It is believed that diesel consumption reflects the condition of the economy. In 2012, the Polish economy clearly slowed, which was particularly evident in the second half of the year. In addition, the high cost of buying diesel, the prices of which for a significant duration exceed the price of 95 octane petrol, encouraged the search for a cheaper fuel, a large amount of which was offered by the grey market. The stopping or slowing of infrastructure investment just after the EURO 2012 championship, the growth of the shadow economy and high prices and the slowing growth trend in moving the passenger fleet to diesel, were reflected in reduced demand. This is a complete reversal of the trend for diesel over several years. The decline of 9% in demand for high compression engine fuels caused a return of the market for this fuel to the 2010 volume. The market share of imports of diesel decreased by half and reached a level of 10%. In volume terms, this is less than 1.5m m³, when only a year earlier this was more than 3m m³. Data held by POPiHN relates to officially recorded fuels. Meanwhile, the organisation's estimates of the possible size of the gray market for diesel assume that the market could have been supplied with about 6-7% more of the product, without obviously observing the requirements to remit the appropriate state levies. If this additional amount of fuel was taken into account, the rate of diesel consumption decline would be smaller by a few percent.

The level of retail prices is the main factor contributing to the amount of petrol purchases, as it is a fuel which is bought mainly by Polish drivers for their private needs. Thus, the market is highly correlated with fuel prices, and although they were relatively stable during 2012, they were still umpteen percent higher than in the previous year. It was the price of petrol which caused, to a large

part, demand to decrease by 5% compared to 2011. It was a consecutive year with a similar drop in demand. Petrol consumption is also significantly affected by the difference between its price and that of autogas, which is a petrol substitute. This difference favoured purchasing autogas throughout the year. The increase in domestic production of petrol meant that, to meet the needs of the market, less petrol was imported than in the year before. The foreign-sourced share of the market for petrol fell by 2 percentage points to 12%.

There was a re-affirmation of the principle that the more expensive other fuels are, and the greater the costs of living which Poles face, the better the sales of autogas. An estimate for the whole year is that LPG consumption increased by about 3%. Until recently, autogas was used mainly by frugal and less affluent customers, but after the price rises of petrol and diesel, it has gained new supporters, as evidenced by the rising number of new LPG installations in cars, including in those just off the assembly line. In addition, low temperatures at the beginning and end of the year stepped up purchases of LPG for heating purposes. Ultimately, this fuel recorded a 3% increase in consumption and, what is important, using the growth in output from domestic refineries. There was slightly less, by 3%, LPG sourced from abroad, but it was still about 84% of supply to the market. This is about five percentage points less than in the previous year, but this fuel is still an important part of Poland's foreign exchange of goods.

As expected, a further reduction was observed in the market for light fuel oil. In 2012, the decline was 13% and so the market is increasingly approaching 1m m³, when even five years ago it was at about 2.5m m³. Undoubtedly, the high prices of supplies were a contribution (this fuel is subject to the same trends as diesel), which in comparison to other heating fuels, such as natural gas and coal, were not very competitive. The vast majority of demand for this fuel (81%) was met by supplies from domestic production.

There is a year-on-year increase in domestic demand for JET aviation fuel.



■ Fig. 13 STRUCTURE OF LIQUID FUELS CONSUMPTION IN 2012 [%]



■ Fig. 14 BALANCE OF INTERNATIONAL TRADE IN LIQUID FUELS IN 2012 [*000 m³]

			L
	Import + Purchases	Export + Supplies	Difference (2-3)
1	2	3	4
Petrol	596	909	(-313)
Diesel	1 485	407	1 078
LPG	3 386	51*	3 335
JET aviation fuel*)	36	546*	(-510)
Light fuel oil	218		218
Heavy fuel oil	127	2 359	(-2 232)
OVERALL	5 848	4 272	1 576

(by about 2 percentage points) and so has light fuel oil's (by about 1 percentage point), while petrol's has risen (by about 1 percentage point), as has LPG's (by 2 points). There have been no changes in the positions of JET fuel and heavy fuel oil.

The main sales market for Polish refineries is the domestic one, which is determined by economic, trade and logistics factors. At the same time, normal foreign trade continues, although domestic requirements play a role in stimulating foreign exports.

In 2012, Poland still imported more liquid fuels than it exported. However, due to increased domestic production reduced imports and a drop in demand, net liquid fuels imports fell to 1.6m m³, or by more than 3m m³ in relation to 2011. Up to last year, the international trade balance was, in fact, formed by the import of diesel and LPG on the one hand, and the export of heavy fuel oil and JET fuel on the other. In 2012, diesel fuel imports decreased markedly, while at the same time there were significant increases in shipments abroad of petrol and diesel.

Source: Ministry of Finance, POPiHN *) - dor

*) – domestic producers' trade

In 2012, the increase was 1%, despite the slowdown in the economy and high airline ticket prices (low-cost domestic airlines went into liquidation, although for a while they were good clients for the domestic product). Despite new investments, it is still time-consuming to travel along Polish roads and via rail, so the air transport market has a good future, particularly as the number of domestic civil airports is growing.

Heavy fuel oil consumption increased slightly, although this is still far short of Polish refineries' production capacity. Therefore, production surpluses were consigned abroad.

Total domestic consumption of six types of liquid fuels amounted to 25.8m m³ and was lower by 1.8m m³ than in 2011. This decline in the market of 6% also followed from the reduction in recorded imports by 28%, namely by 2.3m m³. Despite this reduction, about 23% of the market is still supplied from foreign purchases. This is seven percentage points less than in the previous year. Total imports of liquid fuels amounted to just over 5.8m m³, mainly due to foreign purchases of LPG and diesel.

The breakdown of fuel consumption in Poland is shown in the diagram (fig.13).

Due to the drop in domestic consumption of most types of liquid fuels, the structure of consumption has changed. Diesel's share has diminished



RETAIL MARKET

At the end of 2012, Poland had around 6,800 fuel stations operating, of which about 44% were still independent outlets under their own brands, or under private fuel chain brands. This is about 3 percentage points less than in 2011. At the same time, an increasing number of independent stations are operating under a common logo. The advantages of being within a group are being increasingly appreciated by this part of the market. Apart from operating under a common brand, the concept of purchasing groups comprising stations which operate under different brands is developing increasingly well. The market leaders in fuel stations are still national companies operating under the logos: ORLEN, BLISKA, LOTOS and OPTIMA. These stations constitute more than 32% of the domestic stations market. International companies are also strengthening their positions by building new stations and including in their networks private outlets operating as franchises. At the end of 2012, international stations significantly exceeded the level of 1,400 outlets, which accounted for just over 21% of the fuel stations market. The number and role of stations next to large shopping outlets is growing. Although these sites constitute only just over 2% of the total number of stations, their aggressive pricing approach, given the high fuel prices in the market, means that their share of total fuel sales is estimated at already nearly 6%. The value of the retail market for fuel sales has already reached about PLN 106bn, while the volume of engine fuels sales (petrol, diesel and autogas) has exceeded 20bn litres.

The main developments in 2012 were Shell's announcement of the acquisition of NESTE's network (the transaction is to be completed in 2013) and the further dynamic commercial development of LOTOS Group stations operating under the OPTIMA logo. It is worth noting that it was yet another year with an increase in the number of stations operating under colours of national companies.

The market gained many modern stations built on motorways and expressways. These are large fuel stations, located in the Motorist Service Areas, offering travellers the opportunity to buy fuel and a wide range of additional services and often overnight accommodation. On the other hand, high fuel prices are encouraging the development of low-cost station chains, located not just in towns, but also outside

■ Fig. 15 NUMBER OF STATIONS OF RETAIL OPERATORS IN 2010-2012

	2010	2011	2012
Fuel station networks	31.12.2010	31.12.2011	31.12.2012
Domestic companies	2 038	2 117	2 172
Foreign companies	1 351	1 392	1 424
Independent chains			
(operating under a common brand)	517	580	630
Other independent			
operators (approx.)	2 703	2 520	2 370
Shops	146	154	160
TOTAL (approx.)	6 755	6 763	6 756

Source: POPiHN own data

them. The example of the NESTE chain shows that the Polish market is not profitable for automated stations. The lack of ability to generate additional margin on non-fuel operations means that in tough economic times such stations cannot compete with those having such capability. Hence the lack of development of this market segment.

In 2012, as in previous years, the market leader in fuel stations continued to be PKN ORLEN, which increased by 19 the net number of stations in its possession (net, because the still ongoing chain restructuring is leading to decommissioning of commercially unattractive outlets, termination of patronage agreements which are ending, gaining of new stations within franchises and greenfield station projects). The company is completing the process of adapting its network to standards set a few years ago. PKN ORLEN did not increase the number of stations in its economy segment BLISKA, but this is not meant to imply that no adjustments were carried out also in this group of stations, gaining new facilities and eliminating those which ceased to be any longer commercially viable. At the end of the year there were 489 stations with the BLISKA logo. The company launched 2 new motorway stations.

LOTOS Group increased by 36 the net number of stations under its own brands. There was a significant, 51 station increase in the number of facilities operating under the OPTIMA brand. In the coming years, the company plans to expand its network mainly through the development of the economy and motorway segments. At the end of 2012, the company had 405 fuel stations. It also built one new motorway station.

International companies with representation in Poland are also not slowing the growth of their networks. In 2012, this segment of the market gained 32 stations. BP, number two on the Polish fuel stations market, had 446 stations at the end of 2012, which means that over the year it increased by 22 the number of the facilities which it owns, by the same number as in 2011, and it also built 2 new forecourts located on motorways. Shell maintained its third place in the fuel stations market ranking, although in 2012 the company only gained 1 station. Statoil moved closer to Shell by launching 7 new fuel stations in its own colours. The vast majority of the concerns' new acquisitions were stations from independent operators who saw an opportunity of remaining in the market through collaborating with large providers, although there were also greenfield investments which met latest global trends.

The year 2012 saw an increase in the number of sites under common brands within groups of independent private networks. POPiHN recognises, as such, chains which have a minimum of 10 stations. The most active of these are Huzar, Delfin and Anwim with the Moya brand. Common logos embrace increasing numbers of independent forecourt owners. Today, it is often a nationwide Polish logo. Common fuel purchasing policies, loyalty programmes and, at the same time, a large degree of independence of operation, mean that these associations are becoming viable competitors to stations of national and international companies.

LUKOIL, which is operating in Poland, opened two new stations. The only network with no change in its holdings was the NESTE chain, which, following the favourable decision of the Polish Competition and Consumer Protection Office, will, most probably, be taken over by SHELL POLSKA.

Rys. 16 FUEL STATIONS IN POLAND AT THE END OF 2012



Source: POPiHN own data

Hypermarkets launched new stations at their sites, thereby increasing the number held by them to 160. This meant an increase of 6 operating stations. With this, hypermarkets pulled ahead of companies such as LUKOIL and NESTE in terms of station numbers. Most new stations, (6) were opened near to Intermarche stores, but the leader of this group of businesses is still Carrefour. Due to the volume of trade by stations of this type (low margin – low price), their role in the total fuel retail market is growing from year to year.

Much of the network expansion of fuel concerns was through franchises offered to independent operators and this lead to a decrease in the number of independently operating forecourts. Information available (not easy in the case of independent forecourts) shows that, at the end of 2012, the Polish market had approximately 2,370 stations operating as independents. The ending of exclusive agreements, the forming larger purchasing groups and the search for survival opportunities by accepting franchises from larger operators were the most important issues observed in this group of fuel resellers. It was also a way to survive in the very difficult low-margin Polish market. The year 2012, was to be the last in which existing environmental regulations would apply to fuel stations. However, the Ministry of the Economy decided to extend for another year the current legislation and, therefore, delayed for one year the spectre of, probably, hundreds of mainly these independent operators, who have not had enough time or sufficient funds for modernisation, having to close their stations. This decision was met with protests of those operators who incurred costs of rebuilding stations.

The motorway filling stations market is growing slowly, due to the delays in



Rys. 17 BREAKDOWN OF FUEL STATION MARKET AT THE END OF 2012 [%]

Source: POPiHN own calculation

opening new motorways and expressways and the very unfavourable conditions imposed on station operators by GDDKiA. Only five new stations opened in 2012 in the Motorist Service Areas. Motorists could use a total of 43 stations located on motorways. Most of these sites fell to PKN ORLEN (22 stations), LOTOS Group had 11 stations, Shell 6 and BP 4. Umpteen new motorway locations are in preparation. A consequence of opening motorway stations will be the closure filling stations which are currently operating on the verge of profitability, and because of their locations will become less attractive after the motorway network is completed.

The European economic slowdown is affecting Poland, forcing firms and individual drivers to economise. The grey economy is also taking advantage of this adversity and making it difficult for legally-operating firms which pay all the required state levies, and the low margins on fuel sales dot not allow them to even approach the prices offered by the unfair competition. All of this does not encourage optimism in service station operators who are having to modernise and upgrade station facilities to comply with inspection authorities and increasing customer expectations. Postponement for one year of the new technical requirements for fuel stations has only delayed judgment day for some, mostly independent, firms. This may mean that at the end of 2013, there will be significant changes in the fuel station market, mostly at the expense of independent operators.

Independent outlets constitute about 44% of the filling stations market in Poland and it is extremely difficult to obtain any data on their commercial activities. But more than 53% of the fuel station market and about 70% of domestic fuel sales belongs to firms which are members of POPiHN (Polish Organisation of Oil Industry and Trade) and reliable data obtained from these companies allow the presentation of trends which are occurring in the fuel retail market, as well as sales of other products offered at the stations, and most services such as car washes, hotels and restaurants. The trends observed for this group of operators reflect, in practice, the state of virtually the entire market,

because the standards implemented by those companies are copied by other operators. The following information is based on data from filling stations of POPiHN member companies.

Key trends in the retail market for fuels are shown in Figure 18. Three things are most noticeable: an increase in sales of premium fuels, an increase in the number of stations operating as franchises (a continuation of the previous year's trend) and a significant decrease in the number of fuel stations operating under DODO arrangements (patronage agreements).

The increased sales of premium fuels, both for petrol and diesel, were achieved mainly through appropriate pricing by oil companies which reduced the spreads between standard and "top shelf" fuel prices. Reductions in price differences with appropriate incentives such as additional discounts for cash payment or loyalty programme points had a measurable effect, despite the long periods of time when forecourt pylons showed price differences of several or a dozen or so groszy. In Poland, price is still decisive when making a sale, while other aspects, such as environmental, are of second order consideration.

The growth of premium fuel sales was accompanied by opposite trends for standard fuels (petrol 95, standard diesel). The figure covers the relationship for forecourts of POPiHN member companies, so it must be presumed that independent stations had greater declines in standard fuel sales.

There is a continuing trend, observed in previous years, of an increase in the number of fuel stations operating as franchises, with an accompanying drop in the number of stations operating on the basis of patronage agreements.

An increase was noted in sales at forecourt shops, although taking into account the increase in the number of stores, the conclusion can be drawn that motorists have slightly reduced their expenditures on goods bought at fuel stations.

Figure 19 shows the monthly retail sales at forecourts of POPiHN member firms, showing the seasonal nature of fuel sales. Also the changes in sales of diesel caused by the progressive slowdown of the economy can be clearly seen and, in the case of petrol and LPG, the influence of price on the level of sales.

Fuel stations recorded lower sales of engine petrol than in the previous year. This trend was observed in all forecourt groups, including stations of POPiHN affiliated firms. Customer retention in a weaker market can only be accomplished through appropriate price setting, including re-





Source: POPiHN own data

Rys. 19 SALES OF ENGINE FUELS AT FORECOURTS OF POPIHN MEMBER FIRMS IN 2012 [m³]



Source: POPiHN own data

duction of margins achieved. Especially in the first half of the year, there were times when retail margins were nearly zero and this resulted in customers moving to forecourts of large concerns which could afford to maintain prices at the lowest possible levels for extended periods of time. The petrol and LPG markets are the realms of retail customers, who are careful with their money. With the general increase in prices, including those for fuel, this money diminished, which was visible at fuel pumps. Sales of diesel closely follow the state of the economy, which was clearly slowing down in 2012. Sales at the end of the year were the best reflection of this situation. For this fuel, pricing does not have such a big role as in the case of petrol and autogas, but the grey economy interfered with the market with its high pump prices and constituted a tempting alternative for individual drivers and for transport or infrastructure firms looking to limit spending by minimising the costs of all supplies, including fuel.

The levels of sales at forecourts of POPi-HN member firms in individual months of 2012 are shown in the diagram (Fig. 20).

The relationships described above are clearly visible on the graph showing the dynamics of fuel sales. Petrol and diesel experienced a downward trend in sales almost throughout the year, but only in the case of LPG did this trend reverse itself in the second half of the year, for which the main reason was the price comparison to both petrol and diesel fuel. It is also worth noting that in November and December 2011, the market experienced increased stockpiling of fuels, mostly diesel, in response to the announced increase in excise duty, and therefore the dynamics of

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Rys. 20 DYNAMICS OF RETAIL SALES AT FUEL STATIONS IN 2012 [month/month as %]



Rys. 21 CHANGING TRENDS IN PREMIUM FUEL SALES IN 2012 [month/month as %]



fuel sales at the end of 2012 were distorted by this high base from the previous year. But regardless of this, the slowdown in the economy which grew in the third and fourth quarters of 2012 contributed significantly to lower purchases.

For the whole year, the average growth rate of fuel sales at POPiHN member companies' forecourts was only 0.1%, while diesel sales showed an increase of 1%, petrol a decline of 2% and autogas an increase of 3%. Analysis of sales growth data of POPiHN member companies and results of total fuel consumption in the country clearly shows large falls in sales at independent forecourts and in the whole non-forecourt segment (transport depot, construction, rail). The pricing policy of the largest market operators had the desired effect. A section of the customer base changed where it purchases its fuel.

After the collapse in sales in 2011, the past year saw a rebuilding of and a significant increase in sales of premium fuels. Sales of these fuels showed a completely opposite trend with respect to the whole fuel market and ended the year with a significant increase in growth, as shown by the chart in Figure 21. The growth trend for premium petrol sales for the full year was 7% and for diesel 2%. The main reason for these increases was the above described pricing policy of vendors, but also a number of campaigns promoting premium fuels played a significant role. With the narrowing of the price range, a large group of customers for whom the traction and higher performance features of higher guality fuels are important, returned to using premium fuels in their vehicles.

The first half of the year was a time of rebuilding the premium fuel market and

the other of a marked increase in sales. The above-described base effect at the end of 2011, when mostly basic types of diesel were being purchased, gave, in 2012, very clear increases in premium diesel sales at the end of the year. One can expect that with the increase of Poles' incomes and the increased use of biocomponents in fuels, interest is likely to increase in these types of fuel, all the more so because modern engines in new vehicles require fuels of the highest quality. A lot depends on relative prices, because in poor economic conditions, customers may, nevertheless, also seek savings by buying cheaper fuels.

With an increase of just over 2% in the overall number of stations in POPiHN members networks (Fig. 18) the growth trend in the number of forecourts operating as franchises was over 6%. Although this is a slightly smaller percentage increase than in the previous year, quantitatively it is very similar. This was another year of strong growth observed in this type of station. Franchising is the main tool for gaining independent stations to each concern's network. New facilities were, of course, also built, but these forecourt were mainly located on motorways and trunk roads. Just as in 2011, 2012 saw a decrease in the number of fuel stations operating under patronage agreements (DODO) due to the expiry of these contracts and no signing of new ones.

Growth was also observed in the market of shops which operate at these stations, but it was not revolutionary. There number of stores operating at fuel stations is increasing and so is the level of these stores' turnover.

As in previous years, provisions that prohibit trading on selected public holidays in premises which do not sell necessities, contributed to an increase in turnover in forecourts, which have been categorised as selling them. Other factors contributing to increased sales were a broadening of the product range and extension of forecourt shops' offers to include food service. Attempts were made to enact legislation prohibiting the sale of alcohol at fuel stations, but this initiative was not adopted, to the advantage of operators, because alcoholic beverage sales are an important source of revenue for station owners. Often, only due to non-fuel sales, is it possible to survive periods of very low margins on fuel sales.

There were very wide variations in sales in individual months. Sales increases were noted during periods of increased travel (holidays, vacations, public holidays with closed shops). Interestingly, during the



Source: POPiHN own data

EURO 2012 Championships, lower sales were reported than in June of the previous year. Most motorists remained at home watching the games on television. The second half of the year, except for the two-month holiday travel period, was a period of much weaker sales. A rebound, though small, occurred only in December and was caused by a long period when supermarkets were closed. Fuel prices have

Rys. 23 CHANGE IN THE VALUE OF SALES IN SHOPS OF POPIHN MEMBER FIRMS IN INDIVIDUAL MONTHS OF 2012 IN RELATION TO 2011[%]



Source: POPiHN own data

Rys. 24 BREAKDOWN OF RETAIL SALES OF MOTOR FUELS OF POPIHN MEMBER FIRMS IN POLAND IN 2012 [%]



Source: POPiHN own data

a significant impact on the level of sales in shops. High fuel prices can discourage customers from buying fuel or they spend more on fuel and so have no money left for shopping at the station. Hence the efforts of retail operators, including through the sale of fuel with almost no margin, if only motorists would want to fill up on their forecourts. Acquisition of a fuel customer usually resulted in purchases of other products in the forecourt store and so enabled profit to be generated required to maintain the site.

The Polish Oil Industry and Trade Organisation (POPiHN) monitors changes in the geographical distribution of motor fuel sales from data submitted by the organisation's member companies. The figures for 2012 are not that different from the those for the previous year and show that the leader in the retail sale of fuel is still the Mazowieckie (Mazowsze) province, with Slaskie (Silesia) just behind. Further provinces with the largest sales of fuels are Dolnoslaskie and Wielkopolskie, which swapped positions. These four provinces still account for almost half of all fuel sold in Poland. The Podlaskie province, as usual, brings up the rear in terms of volume of fuel sold.

The graph shows the total sales of motor fuels, diesel and autogas. A similar order of provinces applies to the sales of each of these fuels separately. But it is worth noting that, compared to 2011, there was a decrease in the difference between the amount of petrol sold in Mazowieckie and Slaskie, while the difference for diesel sales remained the same. A comparison of fuel sales in the largest province, Mazowieckie, with those in the smallest, Podlaskie, shows that the ratio of fuel sales in these regions is 6:1.





DEMAND FORECASTS for the Polish market up to 2020

24

23

22

2006

The Polish Oil Industry and Trade Organisation, in response to market results for 2012, has prepared modified scenarios for liquid fuels demand trends up to 2020. Previous forecasts did not anticipate such a large collapse in the domestic fuels market. New scenarios were developed with the participation of POPiHN member companies, taking into account current developments in the domestic and international oil market. Special attention was given to such factors as the current market slowdown in Poland and in Europe, the growth of the Asian economies and associated increases in demand for oil and fuels in the coming years, and therefore the increased interest in these products affecting also retail prices on the Polish market. Finally, the grey market was also considered, which, in recent months, has developed particularly intensively in the domestic diesel market. Availability was assumed, from 2014, of a new pool of aid funds from the European Union, as well as their impact on a return to broadly-understood infrastructure investment and domestic consumption growth, including in the area of motor vehicles and greater mobility of the population. Account was also taken of the systematic modernisation and development of the road network, and the lower demand for fuel in modern car engines.

The baseline scenario assumes an annual growth rate of 3-4% for the Polish economy from 2014 and the other two variants use values below and above this level. The baseline scenario also assumes a stable situation in the international commodities market and fluctuations in crude oil prices of +/-10%. The GDP for 2012 and the government expected GDP figure for 2013 of about 2.5%, suggest that fuel market growth can be expected from 2014. The baseline scenario assumes an increase in demand for diesel and stable demand for motor petrol and autogas, which are considered substitute fuels. No significant changes in demand for light fuel oil are assumed; in fact, a tendency is assumed of decreasing demand for this fuel with the growing importance of natural gas. In this variant, the domestic market demand for liquid fuels in 2020 is estimated at about 26.6m m³.

2012

2014

2016

Rys. 25 SCENARIO FOR LIQUID FUELS DEMAND

IN THE YEARS 2013 - 2020 (in million m³)

The optimistic scenario assumes that tax burdens will remain unchanged in the future and that effective combating of the shadow economy will start as early as in 2013. The variant assumes effective utilisation of EU funds for strategic infrastructure investments (rail, expressways, town bypasses). It is also assumed that the income of Poles will return to a path of growth and that their mobility will increase. Autogas will somewhat lose its importance in transport uses, but due to its favourable price compared to both diesel and petrol, it will continue to interest motorists. In this variant, the domestic market demand for liquid fuels in 2020 is estimated at about 28.4m m³.

2008

2010

The pessimistic scenario assumes the lengthening of the economic slowdown in the European market and thus in Poland (GDP growth of 0-2%). Alternatively, a possibility of high oil and fuels prices has been assumed, as a possible result of tensions in international relations. Also account has been taken here of the possible introduction of new fiscal and environmental regulations, changing the price relationships between petrol, diesel and LPG. A weakening of zloty's exchange rate may adversely affect the ability to offset the growth in crude and fuel prices. Economic stagnation and rising unemployment will result in a lower demand for fuel from domestic refineries, and their place may be taken by products from the grey market. Market demand for diesel, the main fuel in the Polish fuels market, will grow at a slow rate and the high prices of other fuels will not be able to increase the rate of demand. Relative consumption of petrol to autogas will be improved slightly by sales of autogas, but it must be remembered that it is a product which is almost 90% imported. In this variant, the domestic market demand for liquid fuels in 2020 is estimated only about 23.9m m³.

2020

2018

Source: POPiHN own calculation

If no external factors arise affecting the political and economic situation and, if account is taken of set economic goals and the possibility of utilising EU funds earmarked for investment after 2014, the coming years should be favourable for the liquid fuels market. Diesel will remain the leading fuel of the Polish economy, but the growth of its consumption will not be as impressive as in the past. Excise regulations announced by the European Union will slow the dieselisation of individual transport and lead to more interest in cars with petrol or hybrid engines.



ENGINE FUEL PRICES

Throughout 2012, the prices of both EU95 petrol and diesel remained above PLN 5.40 per litre of fuel. The beginning and the end of the year is traditionally a time when retail prices of diesel exceed those of EU95 petrol. This was also the case last year. Practically throughout the whole year, fuel prices remained at relatively similar levels and the spreads between the lowest and highest price of the year did not exceed 45 groszy. It should also be noted that retail prices were lower at the end of the year than at the beginning, but were also the lowest in relation to the whole of 2012. The previously-described fuel demand data leaves no doubt that the increase in fuel prices affected the amounts of fuel purchased. Motor petrol is particularly price sensitive and forecourt operators were careful not to transgress the fine line between price and demand. The price of diesel was influenced by the expanding grey economy, offering prices, which legally-operating businesses found difficult to compete with. All the more, because margins, although they rose slightly compared to 2011, still remained at levels which made operating a forecourt a far from tranquil business.

In 2012, crude oil process reached their highest average annual level ever, which was USD 111.82 per bbl. This was an increase of 1% compared to the previous year. In the first half of the year, there were dynamic changes in price quotations, first with intensive rises and then with similarly intensive falls. The second half of the year exhibited rapid price rises in July and August followed by a relatively stable situation with fluctuations at levels of USD 105 to 120 per bbl. The changes were the result of economic and political turmoil in Europe, North Africa and the Middle East. Also, the situation in the U.S. was important, as well as that in the still welldeveloping Asian countries, such as China and India. Oil from shale began coming onto the market, especially in the U.S. In the coming years, it may cause many changes in the geography of crude oil supply. Finished fuels quoted on international commodity exchanges achieved slightly higher rises than the average price increases of crude oil, and this means that this time it was the demand for finished fuel that was pushing up the crude oil market. The interrelation

of the U.S. dollar with crude oil prices has usually a kind of compensatory effect in the final price of fuel. This is particularly important in the Polish market, where all oil transactions are settled in U.S. dollars. Therefore, the Polish zloty's exchange rate against the U.S. dollar is significant for domestic prices. In 2012, the Polish zloty unfortunately weakened and thus this weakness was an additional factor contributing to the price increases in the domestic market. This resulted in an increase in the level of inflation, and also in a change to the dynamics of liquid fuels consumption in Poland.

The increase in fuel prices was a consequence of the growth of import parity, the main components of which are commodity market prices of finished fuels and the Polish zloty exchange rate against the U.S. dollar, which is also the basis used by Polish producers for setting liquid fuel prices. Brent crude oil prices, which determine prices for the European market, are shown in Figure 26.

From the beginning of the year, there was a conviction on the crude oil market that the global situation should promote stabilisation on the market or even an prices, on the other the unclear situation in the Persian Gulf, due to a lack of solution to the Iranian issue, the large amounts of funds flowing from U.S. banks and the actions of oil producers regulating the market in accordance with demand as well as good data from Asian markets all encouraged optimism. All these factors caused last year's crude oil prices to set a new record, but it was still at a level acceptable to the market, and was, in practice, set at the beginning of the year by the producing countries. Despite the European slowdown, the global economy, however, continued to develop, of which the best example is the demand for diesel, the trading price of which in the second half of the year exceeded that of premium petrol. The progressing dieselisation of fleets in developing countries and high prices are reducing the demand for engine petrol. Biofuels, including biodiesel and alcohol are also making their small contributions to this trend.

Unfortunately for the Polish motorist, in 2012, the Polish zloty weakened, on average, against the U.S. dollar by about 10%, which could not fail to impact



Rys. 26 BRENT CRUDE PRICES AND THE U.S. DOLLAR EXCHANGE RATE IN 2012

Source: e-petrol.pl, POPiHN

increase in prices. Although on the one hand, the European economic slowdown and the decision to release a part of mandatory reserves negatively impacted domestic fuel price levels. On average, one USD cost PLN 3.26 compared to PLN 2.96 in 2011. Weakening of the zloty meant that price increases on the domestic market exceeded in extent those which could follow from rises in spot market prices for finished fuels. Domestic refinery prices of engine petrol rose by 15% and of diesel by 12%. In Poland, liquid fuels prices are set based on import parity, the main components of which are listed prices for finished fuels, the U.S. dollar exchange rate and the level of domestic taxation.

Factors affecting domestic wholesale and retail prices (spot prices of crude oil, spot prices of main engine fuels and the dollar exchange rate) were as follows in 2012 (Fig. 27).

The interdependence in the Polish market of crude oil prices and the USD exchange rate is shown in Fig. 28. In 2012, the compensating effect of the zloty was much less noticeable.

Comparison of trends for crude oil and finished engine fuels is shown in Fig. 29.

There was particularly high optimism in the crude oil market in the first half of the year, when quoted prices of finished fuels, followed then by crude oil, were climbing up. Demand for diesel kept up virtually to the end of the year, albeit to a lesser extent, keeping trading prices of this fuel type at high levels. It was the same case with petrol. Tax policy favouring dieselisation of fleets is playing a smaller role worldwide, and small petrol cars are increasing in popularity.

International market trends transfer to the Polish market, and the relationship of the Polish zloty to the U.S. dollar strengthens or weakens them. In 2012, this dependency was unfavourable for the zloty, the effects of which can be seen in prices on the wholesale and retail markets. Changes in annual ex-refinery prices for both Polish oil companies are presented in Tables 30 and 31.

The average gross price of petrol 95 at both main Polish producers rose above a level which would follow from increases in exchange prices and it was due to the depreciation of the zloty and an increase of 4.2% in fuel duty.

The were 15% increases in net prices, which are directly related to fuel prices on international markets, which was a degree higher than gross price rises.

Comparisons of diesel prices in the Polish refinery market are given in Figure 31.

The average wholesale price for diesel was 12% higher than in 2011, an increase greater than that in the price of EU95 petrol. The large increase comprised: a net price increase by 12%, an increase in excise duty of 14% and an increase in fuel duty by 4%.

■ Rys. 27 COMPARISON OF AVERAGE ANNUAL SPOT PRICES FOR CRUDE OIL, LIQUID FUELS AND USD EXCHANGE RATE IN 2011 AND 2012

Description	2	2011		2012	
					2012 to 2011
	Value	Units	Value	Units	2011=100
1	2	3	4	5	6
Spot prices					
for Brent crude	110,86	USD/bbl	111,82	USD/bbl	101
Spot prices for					
premium petrol 10 ppm S	988,9	USD/tonne	1 039,2	USD/tonne	105
Spot prices for					
diesel 10 ppm S	966,8	USD/tonne	988,1	USD/tonne	102
USD exchange rate	2,9638	PLN	3,2578	PLN	110

Source: Prices from e-petrol.pl for Brent crude FOB Sullom VOE, for fuels CIF NWE ARA

Rys. 28 CHANGES IN PRICES OF BRENT CRUDE AND IN THE USD EXCHANGE RATE IN 2012 COMPARED WITH AVERAGES IN 2011 [%]



Rys. 29 CHANGES IN CRUDE OIL AND FUELS PRICES IN 2012 COMPARED WITH AVERAGES IN 2011 [%]



Source: POPiHN and e-petrol.pl

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■ Rys. 30 COMPARISON OF AVERAGE ANNUAL WHOLESALE PRICES OF ENGINE PETROL AT DOMESTIC FUEL PRODUCERS

Description	2011		2012		Ratio
					2012 to 2011
	Value	Units	Value	Units	2010=100
1	2	3	4	5	6
EU95 Petrol PKN ORLEN					
gross (without VAT)	4 093	PLN/1000 l	4 050	PLN/1000 I	109
Excise	1 565	PLN/1000 I	1 565	PLN/1000	100
Fuel duty	95	PLN/1000	99	PLN/1000	104
EU95 Petrol PKN ORLEN					
Net	2 422	PLN/1000 l	2 797	PLN/1000	115
EU95 Petrol GRUPA LOTOS					
gross (without VAT)	4 095	PLN/1000 l	4 451	PLN/1000	109
EU95 Petrol GRUPA LOTOS					
Net	2 425	PLN/1000	2 798	PLN/1000 I	115

Source: PKN ORLEN SA, Grupa Lotos SA, POPiHN

Rys. 31 COMPARISON OF AVERAGE ANNUAL WHOLESALE PRICES OF DIESEL AT DOMESTIC FUEL PRODUCERS

Description	2011 20		012	Ratio 2012 to 2011	
	Value	Units	Value	Units	2011=100
1	2	3	4	5	6
Diesel with 0.001% S					
PKN ORLEN gross (without VAT)	3 968	PLN/1000 I	4 458	PLN/1000	112
Excise on diesel					
with 0.001% S	1 048	PLN/1000 I	1 196	PLN/1000 I	114
Fuel duty	240	PLN/1000	250	PLN/1000	104
Diesel with 0.001% S					
PKN ORLEN net	2 679	PLN/1000 I	3 009	PLN/1000 I	112
Diesel with 0.001% S					
GRUPA LOTOS gross (without VAT)	3 973	PLN/1000 I	4 462	PLN/1000	112
Diesel with 0.001% S					
GRUPA LOTOS net	2 683	PLN/1000 I	3 013	PLN/1000	112

to raise prices. A smaller percentage increase in the average retail price of EU95 petrol was mainly due to weaker demand than in the previous year for this fuel type, as well as higher tax regulations for diesel. Petrol is mainly a fuel for engines of private passenger vehicles of individual customers and demand for this fuel is heavily linked to its retail price. Petrol prices affected the demand for autogas, which is an alternative to petrol. The substitution of petrol by autogas was further reinforced by the fact that the price of autogas was more stable throughout the year than the price of EU95 petrol and rose a little less. The demand for autogas increased, despite the fact that the ratio of its price to that of EU95 petrol decreased from 51% in 2011, to 49% in 2012.

The rise in diesel prices in 2012 was, on average, 13%, therefore 5 percentage points less than that in 2011, compared to the previous year. High compression engine fuel became dearer due to high exchange prices, an increase in the fuel duty, but mostly due to the increase in excise duty of PLN 0.15 per litre. The year 2011 was the last in which a preferential rate operated in the Polish market. From the beginning of 2012, the minimum excise duty set for EU countries is also in force in Poland. Also, for this type of fuel, retail operators were very careful when determining the price, because they had to contend not only with the problem of the demand barrier caused by price, but also unfair competition offering fuel for sale on the grey market, at a cheaper price because not including any due taxes (all or some of: excise tax, VAT,

Source: Own calculation based on data from PKN ORLEN SA, Grupa Lotos SA

In 2011, the difference between the average prices of EU95 petrol and diesel was PLN 0.07 per litre. In 2012, this difference decreased to just PLN 0.02 per litre. It is worth remembering that only two years ago, prices differed by PLN 0.28 per litre. From the start of the year to the end of March and from the beginning of November to the end of the year, retail prices of diesel were higher than prices of EU95 petrol. The biggest difference was PLN 0.18 per litre in favour of diesel. Prices of diesel exceeded prices of EU95 petrol, despite the fact that in 2012 excise tax plus fuel duty on this type of fuel was lower than for EU95 petrol by PLN 0.21 per litre.

A comparison of the retail prices of EU95 petrol, autogas and diesel in the years 2011 to 2012 is shown in the table (Fig. 32).

Retail prices of EU95 petrol and diesel increased when prices of supplies were rising, but in both cases the increase in retail prices was lower in percentage terms than the increase in wholesale prices. Retail

Description	2011		20	12	Ratio
					2012 to 2011
	Value	Units	Value	Units	2011=100
1	2	3	4	5	6
Average retail price					
of EU95 petrol	5,13	PLN/I	5,71	PLN/I	111
Average retail price of diesel	5,06	PLN/I	5,69	PLN/I	113
Average retail price					
of autogas	2,61	PLN/I	2,79	PLN/I	109

Rys. 32 COMPARISON OF RETAIL PROCESS OF ENGINE FUELS

Source: Own calculation based on data from e-petrol.pl, WNP and ARE

operators took on part of the wholesale price increases at a cost to their generated margins. This was particularly difficult in the first half of the year, when margins on fuel sales were very low. Maintaining sales and so, in the long run, retaining customers was more important than generating a respectable margin. Profits of station operators were restored, somewhat, in the second half of the year, when a decent level of margins was reached without the need fuel duty) or burdened with obligations (reserves, NCW). The price trends of individual fuels on the domestic market are illustrated in the following graphs (Fig. 33 and 34).

Retail prices during the year were at previously unprecedented levels, especially over such long periods of time. One can probably forget the days when 4 stood before the decimal point. The question remains, when will this figure be replaced by 6? This is another psychological boundary which was successfully defended in 2012. But for how long? So far, in periods of when economic indictors were rising in Europe and the world, a strong zloty was able to protect Poland from high prices. This time, the zloty's value was not such effective protection and the effects of this weakening could be seen at forecourt fuel pumps. The fairly stable level of prices throughout the year is more a result of a response to changes in demand. The chart below shows the relationship between the prices quoted on international markets and the retail prices of motor fuels in Poland.

According to some analysts, to remain in the market, a fuel station should have profit margins of at least PLN 0.25-0.35 per litre of sold fuel. Unfortunately, in 2012, few stations were able to achieve this target, moreover for a long period of time. So, additional profits were sought from non-fuel sales and services. Such wide range of products was offered to customers by premium-type stations, including those located on expressways owned by operators like BP, LOTOS Group, PKN ORLEN, Shell and Statoil. These stations had the highest prices. Attracting customers through lower prices fell to low-cost segment forecourts with the logos LUKOIL, 1-2-3 (Statoil), OPTIMA (LOTOS) and Bliska (PKN ORLEN) and independently operated stations. The cheapest fuel could be bought at forecourts next to shopping centres stations and at automated ones owned by NESTE. Unfortunately, the latter, not benefitting from support in the form of additional services, could not cope with the problem of low margins and the company's head office decided to sell the forecourts and withdraw from business in Poland.

As in previous years, various parts of the country, sometimes even within the same city, saw significant price differentials between stations of particular operators. Prices were mainly affected by station location and standard. Price differences were as much as PLN 0.20 per litre. Factors which determined levels of retail prices in different parts of the country were the level of demand, the scale of competition between different operators, and the comprehensiveness of offered services offered and thus the level of non-fuel margins achieved.

Poles' weekend and holiday trips mean that a high seasonal price range remains between different regions of the country. Statistically, the most expensive provinces in the country are now, traditionally: Mazowieckie, Malopolskie, Podkarpackie and Zachodniopomorskie. During the

Rys. 33 RETAIL PRICES OF EU 95 PETROL, DIESEL, LPG AND LFO IN 2008-2012 [PLN/1000 litres]



■ *Rys.* 34 RETAIL PRICES OF EU 95 PETROL, DIESEL, LPG AND LFO IN 2012 [PLN/1000 litres]



Source: Own calculations based on data from e-petrol.pl, WNP and ARE

Rys. 35 CHANGES IN SPOT PRICES FOR FUELS AND IN RETAIL PRICES OF EU95 PETROL AND DIESEL IN POLAND IN 2012, COMPARED TO AVERAGE PRICES IN 2011 [%]



Source: POPiHN, e-petrol.pl



summer and winter holidays, prices are much more expensive along the main transit routes and within resorts themselves. EU fuel tourists contribute to higher prices being maintained at stations near borders with EU countries.

In 2012, the average tax burdens on motor fuels in the country were the following (Fig. 36).

The tax burden on EU95 petrol increased only with respect to fuel duty and VAT on the increase of the net price. The result was an increase in total burdens of just over PLN 100 per 1000 litres, thus of about 4%. The increase was mainly due to an increase in the net price and therefore output VAT increased, which is a tax levied on the net price, but also a tax on other taxes, as it is levied as the last fiscal burden on a product.

The rises in tax burdens on diesel were more pronounced. The main reason for this was the increase in the rate of excise duty by PLN 148 per 1000 litres due to the adjustment to the EU's minimum rate. The increase in levies by 12% was also a result of the increase of VAT due on the higher net price. To this must be added the increase associated with the rise in fuel duty. The purchase of each litre of high compression engine fuel was associated, because of tax increases, with having to pay an additional PLN 0.28.

As a result of higher average retail prices than in 2011, there was little change in the structure of EU95 petrol prices. With the small change in taxes and an increase in the net price, the share of public levies in the total price fell to 48% (51% in 2011). For diesel, there were no change in the share of taxes in the final price of fuel, and this share was again 44%.

The composition of annual average retail prices for EU95 petrol and diesel fuel, when comparing average prices for 2012 to those for 2011, is shown in the chart of Fig. 37.

In terms of value, the price structure is as follows (Table 38).

Table 39 shows the comparison of prices of motor fuels in the European Union with domestic prices at the end of December 2012.

Rys. 36 COMPARISON OF TAX BURDENS ON MOTOR FUELS IN 2011 AND 2012

Description	2011		2012		Ratio
					2012 to 2011
	Value	Units	Value	Units	2011=100
1	2	3	4	5	6
Total taxes for EU95					
(VAT+excise+fuel duty)	2 619	PLN/1000	2 732	PLN/1000	104
Total taxes for diesel					
(VAT+excise+fuel duty)	2 233	PLN/1000 I	2 511	PLN/1000	112
% share of taxes					
in retail price of EU95	51	%	48	%	94
% share of taxes					
in retail price of diesel	44	%	44	%	100

Source: POPiHN own calculation

Rys. 37 STRUCTURE OF RETAIL PRICE OF ENGINE FUELS IN 2011 AND 2012.











Source: POPiHN's own calculations.

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Rys. 38 BREAKDOWN OF RETAIL PRICES OF ENGINE FUELS IN 2011 AND 2012 (PLN per litre)

	Eurosuper 95 Petrol						Diesel					
	Retail	Excise	VAT	Fuel	Margin	Net	Retail	Excise	VAT	Fuel	Margin	Net
	price	1		duty	-	price	price		1 '	duty		price
Average in 2011	5,13	1,57	0,97	0,10	0,08	2,42	5,06	1,05	0,96	0,24	0,13	2,68
Average in 2012	5,71	1,57	1,08	0,10	0,18	2,78	5,49	1,20	1,08	0,25	0,16	3,00
% change	11,3	0,0	18,8	4,2	140,9	14,9	12,5	0,0	12,5	4,2	24,6	11,9

Source: POPiHN's own calculations.

■ Rys. 39 AVERAGE PUMP PRICES AND TAXES IN EU STATES AND IN POLAND AT THE END OF DECEMBER 2012 IN EURO PER 1000 LITRES

Eurosuper 95 Petrol					Diesel (EN 590)						
1	2	3	4	5	6	7	8	9	10	11	
	Sale	Price without	Excise	VAT		Sale	Price without	Excise	VAT	VAT [%]	
	price	taxes		amount		price	taxes		amount		
POLAND	1 336	675	407	254	POLAND	1 353	742	354	257	23	
European					European						
average	1 483	685	540	258	average	1 422	759	415	248		
Price in Poland					Price in Poland						
against average					against average						
European price	90%	98%	75%	98%	European price	90%	98%	75%	98%		

EUR 1 = PLN 4,4168 Source: EIA Weekly Oil Bulletin

During the whole of 2012, fuel prices in Poland, after conversion into euro, were among the lowest in the entire European Union. In this context, last year was a repeat of previous years, when similar trends were reported. At the end of December 2012, domestic retail prices of EU95 petrol were 10% lower and those for diesel 5% lower than average European prices. This is a few percentage points less than in the previous year.

■ Rys. 40 PUMP PRICES OF EU95 PETROL IN EU STATES AND IN POLAND AT THE END OF DECEMBER 2012 [Euro/1000 l]



Source: EIA Weekly Oil Bulletin

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■ Rys. 41 PUMP PRICES OF DIESEL IN EU STATES AND IN POLAND AT THE END OF DECEMBER 2012 [Euro/1000 1]

Domestic net prices (excluding taxes, but converted into euros) of EU95 petrol and diesel were lower than the European averages by 10% and 5%. Net prices in all EU countries are guite similar, and the differences in retail prices are mainly caused by taxes in different countries and levels of margins. At the end of December 2012, the difference between the highest and lowest net price was EUR 167, and between the highest and the lowest retail price EUR 492 per 1000 litres. In 2012, there was a slight increase in the net price spread, but the difference between the highest and the lowest retail price was flattened.

Poland is one of the countries with the highest applicable rate of VAT for fuels, although it should be noted that, during the year, these rates were raised in several countries. At the end of December the difference between amount of VAT paid on EU95 petrol, compared to the EU average, was -2%. For diesel, this ratio exceeded the European average by 4%. The amounts of excise tax paid (after

conversion into euro) respectively for EU95petrol and diesel were 25% and 15% lower than the European averages.

In December 2012, EU95 petrol could be bought cheaper than in Poland, in 5 EU countries: Luxembourg, Estonia, Cyprus, Bulgaria and Romania. Diesel was cheaper in 7 countries. Poland's immediate EU neighbours reported higher prices, with the exception of diesel in Lithuania. This encouraged motorists of these countries engage in fuel tourism to Polish border areas. Traditionally, fuels across Poland's eastern border, in non-EU member countries, were much cheaper than in Poland, which in turn encouraged Polish motorists to buy in these countries, often for profit, not just for own needs.

It is widely claimed that the Poles are paying high taxes in the price of fuel. Indeed, their level is at about 50% of the price, yet as can be seen from the accompanying charts, the situation in Poland is better in this respect than in most other EU countries. A comparison of the total tax burden on motor fuels in European countries at the end of the year 2012 is shown in Fig. 42 and 43.

In 2012, Poland increased the tax burden on liquid fuels. Petrol was only subjected to an increase of 4% in fuel duty, but diesel was subjected to increases in both the rate of excise duty, which rose to the minimum value set for EU Member States, and that of fuel duty by 4%. The rate of VAT was not changed, but with the increase in net prices the amount of VAT actually paid increased significantly. These changes were not without effect on fuel prices, although main changes in prices occurred as a result of rising prices quoted on international markets. Despite these increases, when converted into euros, domestic fuel prices were still attractive for motorists travelling to Poland, and Poles fully refuelled their vehicles before crossing the border to the west, north and south.

Source: EIA Weekly Oil Bulletin



■ Rys. 42 SHARE OF TAXES IN RETAIL PRICE OF EU95 PETROL IN EUROPEAN STATES AT THE END OF DECEMBER 2012 (%)

■ Rys. 43 SHARE OF TAXES IN RETAIL PRICE OF DIESEL IN EUROPEAN STATES AT THE END OF DECEMBER 2012 (%)



Source: POPiHN's own calculation



LUBRICATING OILS MARKET

LUBRICATING OILS MARKET OVERALL The total lubricants market in 2012 comprised approximately about 222,000 tonnes of sold finished automotive and industrial oils and those classified "other". Therefore after two years of growth, the market shrank, year on year, by around 7.61%, falling to about the 2006 level.

It should be noted that the third and fourth quarters sealed the final outcome, because up to mid-2012, the market was behaving quite stably.

The automotive segment recorded a decrease of 5.2% compared to the previous year, reaching a level just below 118,000 tonnes.

The industrial oils segment declined by 8.23% in 2012, reaching a level of less than 97,000 tonnes.

In cross-section, the entire market is dominated by automotive engine oils, industrial hydraulic oils and a diversified group of products described as "other industrial".

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Rys. 44 TOTAL MARKET FOR LUBRICATING OILS IN 2012

Source: POPiHN's own estimate



■ Rys. 45 COMPARISON OF THE STRUCTURE OF THE ENTIRE MARKET FOR LUBRICATING OILS IN 2012 AND 2007

Source: POPiHN's own estimate

AUTOMOTIVE OILS

Rys. 46 AUTOMOTIVE SEGMENT: COMPARISON OF STRUCTURE IN 2012 AND 2007

In 2012, the automotive oils segment achieved sales of 117,793 tonnes of lubricating oil. Compared to the record year of 2007 (135,000 tonnes) this represents a decrease of about 13%, whereas compared to the previous year, the decline was 5.2%.

Engine oils for cars and auxiliary equipment (e.g. construction machinery) comprise 80% of the automotive lubricants segment. Quite different products constitute the rest of the market, with gear oils holding the dominant position.

For comparison, during 2007, motor oils for passenger cars accounted for 43.8%, and for trucks 36.4%¹, of the entire automotive segment in the European market (Western Europe).



Source: POPiHN's own estimate

AUTOMOTIVE ENGINE OILS

The engine oils segment achieved a volume of 99,097 tonnes in 2012 and therefore about 8% below the pre-crisis level (107,733 tonnes in 2007). This means that compared to the previous year, this segment registered a decline of nearly 4%.

The segment's share of oils for passenger vehicles has grown in recent years. This probably reflects the overall

increase in the number of vehicles in Poland caused, partly, by increased imports of used passenger cars following Poland's accession to the European Union. It is estimated that the share of passenger vehicles in the total arriving in Poland during the vehicle boom may have been around 80%. Another clear trend is the shift in demand toward synthetic oils and semi-synthetic mineral oil at the cost of mineral oils, which applies both to the passenger and goods vehicles segments. This development is taking place mainly at the expense of single-season oils. In addition, the only group of passenger vehicle oils, whose market share is shrinking, is the group of mineral oils (of 15W, 20W viscosity). Mineral oil's share of goods vehicles is also dropping.





¹ Source: EUROPALUB

PASSENGER VEHICLE ENGINE OILS

Currently, estimated on the basis of data from POPiHN's member companies, this segment is dominated by synthetic oils of the lowest viscosities (0W and 5W). In contrast, semi-synthetic (10W) and mineral oils (15W and 20W) constitute 30% of the market.

ENGINE OILS FOR GOODS VEHICLES AND AUXILIARY MACHINES

A similar trend is being observed also in multigrade oils for goods vehicles of a shift to lower viscosities, although medium-viscosity oils are benefitting to a greater degree here than in the passenger segment.

Currently, the structure of this segment is still dominated (75%) by mineral oils with the highest viscosities. However, semi-synthetic oils already constitute 22% of the market. Meanwhile the share of synthetic oils in this segment remains marginal (3%).

INDUSTRIAL OILS

In 2012, sales in the lubricant oils for industry segment reached 96,859 tonnes showing a year-to-year decline of more than 8%. This level is more than 12% lower than in the record year of 2007.

In recent years, this segment has been dominated in Poland by hydraulic oils, constituting more than 45% of this segment and by diversified products in the "other industrial" group. This is similar to the situation observed in Western Europe markets. Hydraulic oils also dominate in those countries, and their share in 2007 was, on average, 38.8%.²

MARKET FORECASTS

Both in the case of oils for the automotive industry and for industry, the levels of sales are correlated with GDP levels. Therefore, prediction accuracy is very highly dependent on the accuracy of economic growth forecasts, which, in recent years, have been overly optimistic and at the same time irrelevant, which meant that they were very often revised downward during the year. To illustrate this: a year ago, when the previous POPiHN report was prepared, the market consensus on expected increases in GDP between 2012 and 2013 was about 3 and 3.5%.

Currently, the accepted scenario is of a fall in GDP growth to 1% in 2013 and a rebound in 2014 to 2.6%, while in the first two quarters of 2013 even negative growth in Polish GDP is feasible.

Under this assumption, an extremely difficult period must be expected in the

■ Rys. 48 PASSENGER VEHICLE OILS WITH REFERENCE TO VISCOSITY CATEGORIES (EXCLUDING SINGLE SEASON OILS)



Source: POPiHN's own estimate

■ Rys. 49 GOODS VEHICLE OILS WITH REFERENCE TO VISCOSITY CATEGORIES (EXCLUDING SINGLE SEASON OILS)



■ Rys. 50 CHANGES IN THE OILS FOR INDUSTRY SEGMENT WITH REFERENCE TO CHEMICAL COMPOSITION (FORMULATION)



Source: POPiHN's own estimate

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Rys. 51 INDUSTRIAL SEGMENT IN 2012: STRUCTURE WITH REFERENCE TO USE



Source: POPiHN's own estimate

domestic oils market. While the previous slowdown showed a deep slump which occurred only in the first quarter of 2009, this time with similar or deeper drops, the signs are that the most difficult period will last longer: from the fourth quarter of 2012 to second quarter of 2013.

It is clear that this will not remain without effect on the level of falls in the market. In addition, at the moment, there is little evidence of factors which could contribute to a more distinctive economic recovery in the second half of the year.

In principle, therefore, some improvements could be demonstrated, at the moment, mostly by purely statistical factors (effect of a lower base) and by the growing oil exports, which, however, would have no impact on the domestic market being analysed here. The key to a sustainable and significant improvement of the situation, however, is the unblocking of business investment and domestic demand. This is currently unlikely, because of growing unemployment and rising costs of living, inflation and burdens on society, combined with inadequately rising household incomes. Added to this, is the slowdown in public investment at both central and local government levels. These may be decisively unblocked only in 2014 with the launch of the next EU financed infrastructure projects. Nevertheless, even then the problem may be the record public debt, including that of local government.

This macroeconomic situation and development of the shadow economy are already being reflected in the unprecedented (not seen since the downturn of 2009) decrease in fuel consumption, which may prove to be a more lasting development. From which, there is just one step to transferring the negative trends on to an even deeper decline in the consumption of lubricating oils.

Finally, the situation in the sector is not being helped by the EU-wide unique imposition of excise duty on lubricating oils in Poland, with the result that in Poland, they are up to ¹/₃ more expensive than in Western Europe. With the average level of prices in Poland estimated by Eurostat to be around 60% of the average for 27 EU countries, the oil industry's burdens (and, indirectly, those of end users) are, in Poland, complete divorced from the market environment. Therefore. quite abrupt shifts in demand can be expected in response to any worsening of the situation. This may manifest itself as mass decisions to postpone purchases of oil till "better times", seeking cheaper "replacements" or, what is more likely, the substitution of legal purchases by



Rys. 52 THE AUTOMOTIVE AND INDUSTRIAL SEGMENT COMPARED TO POLISH GDP TOGETHER WITH FORECAST



Source: GUS, POPiHN's own estimate

those from the grey market, which is currently becoming a particularly attractive alternative.

This study assumes, therefore, that in 2013, the consumption of lubricating oils will weaken in both the industrial and automotive segments to levels lower than in the crisis year of 2009. In the case of the automotive segment, this will be at a level of around 116,000 tonnes (compared to less than 120,000 in 2009).

Whereas, in the case of the industrial segment, falls may result in 85,000 tonnes being reached, compared to 87,300 in 2009.

Based on GDP projections, it should also be assumed that the rebound in 2014 will not be very strong and will not even allow a return to 2011 levels.

Finally, it is worth noting that POPiHN has accurately assessed that in the current economic downturn the key role in the

decline of consumption of petroleum products will be played by the fact that compared with the crisis year of 2009, fuel prices are now significantly higher. The effect of higher fuel prices has had a direct and indirect effect (through the growth of the grey economy) leading to a deeper collapse in consumption than in 2009.



EXPLANATION OF TERMS

PASSENGER VEHICLE OILS

- this group includes engine oils for motorcars, as well as motorcycles, vehicles and other auxiliary equipment. This category does not include single season oils (monograde).

GOODS VEHICLE OILS

- this group includes engine oils for cars vehicles and working machines. This category does not include single season (monograde) oils.

OTHER OILS EXCLUDING GAS ENGINES

- these are all other types of oils commonly used in the automotive industry, or not used in industry. The main groups of products in this category are: oils for marine engines, single season (monograde) engine oils, gear oils, automatic transmission fluids and all other lubricating products for the automotive industry not elsewhere classified.

MINERAL OILS

– in accordance with CN (Common Nomenclature), these are lubricating products, in which the content by weight of mineral oil, or of oils obtained from bituminous minerals (but not as a basic constituent) is greater or equal to 70%. In the automotive segment, most of such oils are used in the production of older type oils characterised by higher viscosities (mainly oil groups 15W and 20W). These products are obtained mainly from traditional base oils obtained by refining crude oil, mainly base groups I, II and partly III.

NON-MINERAL OILS

– these are other lubricating oils, which are defined under excise rules as lubricating preparations (including cooling and lubricating fluids, bolt and nut loosening preparations, rust and corrosion prevention preparations, lubricant-based mould release preparations) with the exclusion of preparations containing, as basic constituents, 70% or more by weight of petroleum oils or oils obtained from bituminous minerals. In practice, this is mainly concerns semi-synthetic oils (e.g. 10W SAE viscosity class engine oils) and synthetic oils (e.g. 0W and 5W SAE viscosity class engine oils). These products are mainly derived from synthetic bases (polyalpha-olefins or PAO) or from mineral base oils of the highest quality (Group III under API classification).

SAE (SOCIETY OF AUTOMOTIVE ENGINEERS) CLASSIFICATION

- SAE classification divides oils based on operational parameters and distinguishes 11 classes of viscosity:

- 6 winter classes marked with a number and the letter W: 0W, 5W, 10W, 15W, 20W, 25W;

- 5 summer classes 20, 30, 40, 50, 60

For the purposes of this study, oils were divided into three groups (0W/5W, 10W and 15/20W), a simplification which allows the structure of the market to be shown in terms of viscosity of lubricating oils used.

SINGLE SEASON (MONOGRADE) OILS

– these are older-type oils intended for use in certain, relatively narrow, temperature ranges. This distinguishes them from more modern multigrade (multi-season) oils which can be used in more varied temperatures, making them suitable for use, for example, throughout the year. For the purposes of this study, monograde oils were treated as a separate group in relation to multigrade oils (groups 0W/5W, 10W and 15/20W) as well as a separate group in terms of application (relative to groups of oils for passenger and goods vehicles), even though they are used within those groups.

MACROECONOMIC DATA

- used herein, unless otherwise specified, are based on information available at the web-site of the Central Statistical Office.

ABSOLUTE VALUES

– absolute values given in this report include sales figures of seven members of POPiHN: BP/Castrol, Fuchs, LotosOil, OrlenOil, Shell, Statoil and Total and were collected by the organisation as part of the ongoing monitoring of the lubricating oils market. Market data for the year 2012 have been increased, as a statistical correction, by 25% (for the automotive segment) and by 15% (for the industrial segment and other oils) to take into account the rest of the market which is outside the firms covered by the monitoring. The organisation's view is that this estimate reflects the current market share of firms not affiliated to POPiHN. It should be noted that the years 2006-2011 data was augmented statistically by 10% for both segments of the market. The changes introduced in 2012 arise from a review of the estimate of the market outside POPiHN.

DOUBLE REPORTING

The data collection and processing methodology used eliminates the problem of double reporting. POPiHN member companies only report sales outside POPiHN (directly to the domestic market and to small independent producers, whose market share is estimated at around 10%), and therefore sales between POPiHN member companies are not reported.

ESTIMATED DATA

For legal reasons relating to European regulations concerning sensitive data, at the time of publication of this report, POPiHN did not possess data for the fourth quarter of 2012, as it is aggregated after three months. For this reason, the data for the fourth quarter presented in this report was prepared based on estimates prepared by POPiHN with the participation of member firms and based on analysis of historical data and current market trends.

1. API (American Petroleum Institute) classification of base oils.

2. Excise Duty Act of 6 December 2008.

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THE LOGISTICS MARKET FOR CRUDE OIL AND LIQUID FUELS The feedstock supply pipeline network



The PERN "Przyjazn" SA crude oil pipeline network consists of three sections: Eastern, Western and Pomeranian. The eastern section of the Przyjazn pipeline links the depot in Adamowo, near the border with Belarus, with the crude oil depot in Miszewko Strzalkowskie near Plock. The eastern section transports oil through the Miszewko Strzalkowski depot to PKN ORLEN and indirectly to other clients of the company. The western section connects the Miszewko Strzałkowskie depot to German refineries, TRM and PCK. The Pomeranian section connects the Miszewko Strzalkowskie depot with one in Gdansk. Russian crude flows along this route to the LOTOS Group refinery and for export via NAFTOPORT. The Pomeranian section is reversible, allowing pumping in both directions.

EASTERN SECTION

The eastern section of the Przyjazn pipeline links the Adamowo depot with the one in Miszewko Strzałkowskie using two conduits of route length about 234 km and nominal capacity 43 million tonnes of crude oil per year.

The eastern part of the pipeline network owned by PERN "Przyjazn" SA is a key importance link in the Polish crude oil transport system. In order to increase throughput capacity, a substance is used to reduce flow resistance, which allows temporary increases in capacity of the eastern part of the Przyjazn main feeder from 43 to 50 million tonnes of crude oil per year.

Since 2002, construction of a third conduit is under way on the eastern section. The 82 km Adamowo - Zawady section was put into operation in April 2009, the section from the town of Zawady to the border of the Strachowka and Korytnica districs of 16 km length, was brought into operation in March 2010, the section from Orzechowo to the depot in Miszewko Strzałkowskie of 71.5 km, started operating in July 2009. Currently, the last middle section of the pipeline is being completed from Orzechowo to the border of the Strachowka and Korytnica districts. This investment is intended to increase the capacity of the eastern section, which should facilitate optimisation of the remaining segments of pipelines and allow an increase in the capabilities of crude transit through Poland.

WESTERN SECTION

The western section of the main pipeline feeds crude to the German refineries TRM and PCK. This section of the "Przyjazn" pipeline links the Miszewko Strzałkowskie depot with the PCK refinery in Schwedt and the MVL crude oil depot in Heinersdorf using two strands of pipelines: the length of this route is about 416 km and nominal capacity 27 million tonnes of crude oil per year.

In the section between the Miszewko Strzałkowskie and the Zolwieniec depots, one conduit works in reversible mode allowing crude oil to be pumped in both directions. PKN ORLEN owns the section connecting Zolwieniec with the Underground Oil and Fuel Storage Facility at Gora, belonging to the Inowrocławskie Kopalnie Soli (IKS Solino).

The western section links the Przyjazn pipeline network with PGNiG's storage depots located in the towns of Wierzbno and Debno. The company transports Polish crude extracted in the Debno area.

POMERANIAN SECTION

When working in reverse mode, crude oil flows over the Pomeranian section to LOTOS Group and for export via NAFTOPORT. In conjunction with NAFTOPORT's infrastructure, this arrangement facilitates the export of crude oil transported over the Przyjazn pipeline, as well as the import of feedstock by sea and its further pumping through the pipeline system owned by the company. This section connects the Miszewko Strzałkowskie depot with the Gdansk depot through a single pipe, with route length about 240 km and a nominal capacity of 27 million tonnes and 30 million tonnes of crude oil per year (respectively, in the northerly and southerly direction).

PRODUCT PIPELINES

PERN "Przyjazn" has a network of product pipelines for the transport of petroleum products (petrol, diesel and heating oil) in three directions:

Plock – Nowa Wielka Wies – Rejowiec 207.1 km length, nominal capacity of 2.1

Rys. 53 OLPP'S FUEL DEPOTS

million tonnes and 1.4 million tonnes of fuel per year (respectively, Plock – Nowa Wielka Wies and Nowa Wielka Wies – Rejowiec).

Plock – Mosciska – Emilianow

147.7 km length, nominal capacity of 1 million tons of fuel per year.

Plock – Koluszki – Boronow

261.5 km length, nominal capacity of 3.8 million tonnes and 1.0 million tonnes of fuel per year (respectively, Plock – Koluszki and Koluszki – Boronow).

CRUDE OIL STORAGE TANKS

Oil storage tanks are an integral part of the pipeline network of PERN "Przyjazn". The company has three crude oil storage depots:

Adamowo depot (15 storage tanks of approx. 770,000 m³ total capacity);

Miszewko Strzalkowskie depot

(27 storage tanks of approx. 1,300,000 m³ total capacity);

Gdansk depot (18 storage tanks of approx. 900,000 m³ total capacity).

Feedstock storage depots act as stabilisers in the flow of crude oil. In addition, the company utilises storage capacity to provide a crude oil storage service.

The company has tanks with capacities of 30,000, 32,000, 50,000 and 100,000 m³. The 100,000 m³ capacity tanks are the largest of their kind in Poland.



LIQUID FUELS STORAGE LOGISTICS

OLPP (Liquid Fuels Logistics Operator) is the largest company in the Polish market which offers services including fuel storage, storage of stocks and reserves of petroleum products, blending fuels with biocomponents and refining additives, transshipment of fuels, as well as maintaining obligatory reserves of liquid fuels (stock ticket contract service). OLPP is owns 20 fuel storage depots used to store mainly petrol, diesel oil, light fuel oil and aviation fuel. OLPP's fuel storage depots have a total storage capacity of 1.8 million m³.

The five largest depots: Koluszki, Nowa Wies Wielka, Boronow, Rejowiec Poznanski and Emilianow are located at the ends of long-distance fuel pipelines.



THE MOST IMPORTANT INVESTMENT PRIORITIES IN 2012 WERE

- Construction of two tanks for diesel of 15,000 m³ capacity at BP 01 in Koluszki
- Construction of a 10,000 m³ universal tank at BP 05 in Emilianow
- Sealing of tank trays at BP 14; as part of this investment the reservoir plots were adapted to legal requirements in the regulation of the Minister of the Economy dated 21 November 2005, on the technical conditions to be met by liquid fuels depots, stations and transmission pipelines (Journal of Laws of 2005, No. 243, item 2063),
- Expansion of the railway yard frontage, together installation of equipment at BP 05; as part of this investment, the number of unloading bays was increased and the track layout changed. This allowed an increase in fuel handling efficiency in the railway yard and improved work organisation by reducing shunting on sidings.

UTILISATION OF CAPACITY

OLPP has about 50% of the fuel storage market. OLPP's tanks hold stocks for the state's Material Reserves Agency and, therefore, the company plays an important role in the country's energy security. Due to appropriate adjustments to its mandatory reserves storage product structure and the optimisation of its assets, there is an increase, each year, in the utilization of OLPP's storage capacity.

Rys. 54 UTILISATION OF CAPACITY AT OLPP'S FUEL DEPOTS IN m³



Rys. 55 LOADINGS ONTO ROAD TANKERS AT OLPP'S FUEL DEPOTS IN m³



Rys. 56 BLENDING WITH BIOCOMPONENTS AT OLPP'S FUEL DEPOTS IN m³



LOADING FROM OLPP FUEL DEPOTS ONTO ROAD TANKERS

In 2011, the OLPP reported a record in road tanker loading, which was about 8.3m m³ and was the result of an increase in consumption of liquid fuels in the market. However, in 2012, due to changes in economic conditions, there was reduced fuel consumption in Poland and thus there was a fall in the number of loadings onto road tankers at OLPP's fuel depots.

BLENDING WITH BIOCOMPONENTS

The biocomponents blending service has a key role in creating conditions for businesses to achieve the National Indicative Target (NCW). OLPP tries as much as possible to meet clients' expectations by extending this service to blending petrol with bioethanol. In total, in 2012, nearly 3m m³ of fuels with bio-components, blended at OLPP's depots, left terminals.





THE FUELS SECTOR IN POLAND - RESPONSIBLE BUSINESS

Corporate Social Responsibility (CSR) is a widely-used concept of managing an enterprise, which consists of long-term, conscious and sustainable actions oriented not just on financial profit and economic aspects, but also taking account of broader social and environmental interests in the environment of the company. A socially responsible firm is receptive and listens to its environment, conducting dialogue with different groups of stakeholders, and at the same time, does not relinquish the pursuit of profits. This approach assumes long-term care not just for good business relationships with its customers and its shareholders, but also employees, suppliers, partners and local communities.

The Polish Organisation of Oil Industry and Trade (POPiHN) was established in 1995 as an employers' organisation representing the interests of the largest companies involved in Poland in the production and distribution of liquid fuels, in fuel infrastructure and in production and distribution of lubricating oils. It is also involved in creating a fully competitive, customer-friendly market, while ensuring secure and sustainable development of its affiliated companies and the development of such a legal environment for the fuel industry in Poland and the European Union, which would ensure the creation of a fully competitive and transparent market for the benefit of the Polish economy, and all customers. POPiHN bases its activities on its statute and code of ethics and the "Vision and Mission of POPiHN"

and "Code of Good Practice in the area of Competition Law", adopted in 2012. The aim of the implementation of this code was to sensitise POPiHN's office staff and representatives of member companies to the need to strictly observe the law in this area.

Since 2010, the organisation holds an Information Security Management System ISO/EIC 27001:2005 certificate, together with an application statement and an Information Security System Policy, signed by the director general, which imposes an obligation on it to undertake inspection audits to verify compliance with the management system, own procedures and current legal requirements.

POPiHN engages in dialogue with all stakeholders, shares experience and knowledge of the oil industry with them, provides opinions on draft legislation during public consultations while advocating solutions which are the most favourable for the industry and to end users of fuels: customers of POPiHN's members' fuel stations. The organisation is committed to working for the restoration of transparency to the market and the liquidation of the shadow economy in fuel trading. As part of these activities, POPiHN joined the "Stop Smuggling" campaign organised by the Employers of Poland. The organisation promotes behaviours conducive to responsible use of fuel by vehicle drivers, as part of the "Save More Than Fuel" campaign launched by the European Petroleum Industry Association (EUROPIA),



(www.savemorethanfuel.eu/poland/index.html), which, following European Commission guidelines on reducing CO² emissions and improving energy efficiency, promotes principles of economical driving, contributing to more safe and efficient driving.

POPiHN supports the "Been Drinking – Don't Drive" campaign. POPiHN is also a partner of the Friendly Automotive Industry programme implemented by the Polish Automotive Industry Association, which aims to popularise automotive sector standards of safety, rationality, modernity and environmental responsibility.

As part of efforts to improve road safety, the organisation is supporting a public campaign under the slogan "Fashion for reflectors. Switch on your thinking", organised by the National Road Safety Council and the Ministry of Transport, Construction and Maritime Economy. POPiHN is also a supporting member of the Partnership for Road Safety and actively participates in the work of this unique organisation, which brings together representatives of government, businesses, communities of experts and ordinary citizens for whom road safety issues are important. The organisation is also involved in the work of the Group on Safety in the Refining and Gas Industries established by the Chief Inspector of Labour.

Responsible business in POPiHN member firms

CORPORATE CULTURE

A set of principles and values, describing issues of responsible treatment of employees, responsibility for safety and the natural environment, relations with the public and the local community and of observance of the law and of transparency in relations, which should guide all employees of a firm, constitutes a **Code of Ethics**.

In 2012, the management board of LOTOS Group adopted an updated Social Responsibility Strategy for the group for 2012–2015, which sets out 10 key objectives in specific areas of the company's activities, such as, investing in human resources, strengthening of health and safety, integration with the local environment, managing natural resources in the production process, ethics and combating fraud, partnership with the wider market environment and security in the energy sector and three objectives bringing together the above areas in communicating

changes and providing access to staff and stakeholders to information about the company's activities. Additionally, LOTOS Group defined a clear Policy on the Fight Against Fraud and adopted in place of the existing code of conduct for employees and corporate decalogue, the Code of Ethics of the LOTOS Group, which is in effect from 1 January 2013.

PKN ORLEN established its ethical values in a Code of Ethics already in 2006. Last year the company adopted, however, a new mission statement: "We discover and process natural resources to fuel the future". The concern also identified key values such as RESPONSIBILITY – we respect our customers, shareholders, the environment and local communities; DEVELOPMENT – we seek new opportunities; PEOPLE – our strengths are abilities, cooperation and honesty; ENERGY – we work with enthusiasm; and RELIABILITY – you can rely on us.

The culture of Statoil Fuel & Retail is based on values and high ethical standards contained in the Code of Ethical Conduct and The Statoil Fuel & Retail Book. The current Code of Ethical Conduct sets out the requirements for ethical issues related to the conduct of the company and its employees. The company undertakes to conduct its activities in accordance with applicable laws and regulations, in a socially responsible way and without upsetting the balance of nature, while applying high ethical standards in the course of building relationships with owners, employees, partners, customers and suppliers, and opposing all forms of corruption and taking all measures to prevent them in business.

BP's strategy is to do business based on partnership relationships, both in areas of business, as well as social cooperation. A code of ethics sets out the basic principles to be observed by all BP employees and explains the values that should serve as guides when taking decisions.

The corporate culture at Fuchs Oil Corporation is based on a Code of Ethics, Fuchs Group Antitrust Rules, Fuchs Group Corruption Prevention Rules, System for Managing Rules Compliance and the POPiHN Code of Good Practice for Competition Protection.

PERN "Przyjazn" SA's social responsibility strategy defines objectives, actions, and yardsticks, in such areas as human resource management, in the awareness that success is determined by both employees and the external social environment, which is reflected in a commitment to invest in human resource development, protection of employees' work, or in issues of equalising social opportunities.



BP operates an annual student holiday internship programme organised by the personnel department together with colleges, trainees are regularly taken on, every employee is entitled to a training package that includes internal and external training, and there is an option of training via BP's web learning. In addition, activities are organised aimed at integrating the workforce: joint celebrations of events important to the firm, family trips (ski day), commencing important business and social projects and encouraging employees to involve themselves actively in community activities conducted by BP: a purpose-built programme, the Matching Fund, has been established for this.

The management board of PERN "Przyjazn" focuses on good leadership and growth prospects, taking into account the ability of workers to adapt to new tasks and requirements in an effort to combine individual goals with the objectives of the company, attracting and retaining the best employees in the market and ensuring proper selection of personnel, allowing a harmonious fit of employee competences to strategic objectives and targets. With this aim, training is provided which is obligatory, or optional skill-improving and work experience/student placements are organised. A jury chaired by Prof Stanislaw Dawidziuk, rector of the Warsaw Management Academy, awarded PERN "Przyjazn" SA in 2012, as the only firm in Mazovia, the title of "Reliable Employer of 2011" in recognition of its achievements in human resources management.

All Shell employees are bound by the Code of Conduct, which covers such issues as corporate social responsibility contributing to sustainable development, as



referred to in the context of health and safety, environment and human rights and sustainable development. The company is running an active campaign promoting appropriate behaviour on the road, including mandatory training for all staff (road safety standards, defensive driving training and training for all drivers using company vehicles) and by organising a "Safety Day" when employees receive training on first aid, are shown safe driving rules and the dangers faced by staff at work, during leisure time, and how to prevent them. In addition, at the beginning of 2012, a BE WELL health programme was launched for all Shell Polska employees, which identifies risk factors in the areas of physical activity, healthy eating, mental health, substance abuse, and then offering to staff appropriate, interesting and engaging activities and health promotion initiatives.

PKN ORLEN has provided much training and undertaken initiatives to increase qualifications of workers. They included: courses and training and development programs. The company is systematically expanding its range of activities in this area, which allows employees to develop skills in accordance with their individual development plans. It also offers work experience for individuals, groups or for gaining diplomas, as well as a paid internship programme in collaboration with Employment Offices. It also participates in the "Win an Internship" programme. Since last year, the company has implemented a new form of education in the form of dedicated open learning, in which the e-learning training base is being expanded. Employees of the company participated again in 2012 in the international competition GLOBAL MANAGEMENT CHALLENGE, a strategic game in which each team managed a virtual company and competed with other teams. In addition, the company continued its educational activities aimed at local communities, as part of the "Day of Knowledge with ORLEN" initiative, "Questions about recruitment", namely an Open Day with the Recruitment Team. The company has also consust. academics from the Technical University ដ of Warsaw in Plock.

LOTOS Group, through the opportunity to participate in prioritised internal recruitment processes provides possibilities for horizontal and vertical promotion. An "Adaptation Programme" has been introduced to allow staff to learn quickly about the company. LOTOS cares about improving the qualifications of employees, providing them with the opportunity to participate in training and in regular and newly-created development programmes as part of the "LOTOS Academy". In 2012, it implemented a "Succession Programme" for key positions to ensure continuity of management and to prepare staff with the greatest potential for new tasks. Also a further cycle of training session was organised concerning involvement and responsibility of management for occupational safety. Subsidies are provided for learning foreign languages and higher education. Supervisors and employees plan and implement professional and development goals, in which they are supported by the Periodic Employee Assessment System.

At Fuchs, employee team building is carried out through an internal newsletter, departmental and section meetings and an annual team building meeting of the entire staff.

Statoil Fuel & Retail treats very seriously the safety of its employees in all the





countries in which it operates. It respects and accepts the diversity of its personnel in terms of culture, race and religion. The company gives its employees opportunities to develop and improve their qualifications, such as through training and changing positions. The policy on training follows the principle 70/20/10 - 70% of training is "on the job training", 20% is coaching, and 10% is other formal training. With this approach, each employee can expect all-round development. The company has a web training platform called the Training Administration System (TAS), which brings together the corporate training offer for fuel station employees. Employees have access to modern e-learning training tools, through which they can develop the skills necessary for their current work, and acquire new skills to enable further development. Employees, for whom knowledge of English is an essential tool in the workplace, can benefit from language courses offered by the firm. In recruitment processes which take place at the firm, existing employees are viewed as valuable candidates, therefore over 50% of employees in management positions at stations and nearly 50% of employees in managerial positions in offices, started working for the firm in lower positions. The firm has been guided by a similar principle when organising the Student Internship Programme – in 2012, out of 24 persons participating in the programme, five were invited to continue working with the company. In 2012, as in previous years, employees of the station who stood out in terms of customer service and achieved sales targets had an opportunity to participate in the a foreign training and team building company trip.

SAFETY

As one of the key elements of CSR, safety of POPiHN member firms is achieved by preventing accidents, breakdowns and fires with the use of the best possible technical and procedural safeguards and health protection systems. Certain companies have a functioning and certified Integrated Management System.

At Shell, safety has been recognised as the most important priority, and it receives the most attention and effort, such as through active participation in both global and domestic initiatives (European Road Safety Charter, the Global Road Safety Partnership - a programme run jointly with the Red Cross and Red Crescent). The company operates very strict rules, namely the 12 Life-Saving Rules, some of which relate to road safety, such as wearing a seat belt, not smoking outside designated areas, not walking under suspended loads, taking precautions against falling while working at height, following a set itinerary, not exceeding speed limits and not talking on the phone while driving (according to the principle: ENGINE ON, MOBILE OFF) and taking a break every few hours when travelling by car. In addition, placing a strong emphasis on road safety, the firm has

introduced globally a single standard for truck equipment and accessories, so that all heavy goods vehicles are fitted with IVMS (in-vehicle monitoring system). In addition, a global Specialist Road Safety Centre has been launched, which is responsible for implementing best safety practices, in all markets where the company is present.

High health, safety and environmental standards are overarching values at Statoil Fuel & Retail in Poland: the goal is to achieve zero accidents and damage. Customer safety is as important as the safety of employees and subcontractors. Therefore, risk assessments have been introduced for all projects. Thanks to this, safe places of work have been created, business is conducted in accordance with ethical principles, suppliers are selected based on their commitment and performance, all undertaken actions must take into account reduction of he negative impact on health and the environment, and the results are assessed continually and constantly improved. Subcontractors are required to have and to implement a policy on the environment, in particular, providers of transport services.

Last year, PKN ORLEN inaugurated regular Occupational Safety and Health Days. Their goal is to widen awareness of occupational health and safety (BHP), to draw attention to road hazards, promote a healthy lifestyle, including preventive

care and knowledge of first aid. The company has implemented a regular system for overseeing safety at work of contractors during renovations. The process covers work from the preparatory stage to the completion of the renovation. It includes, among others training, inspections, meetings of departments responsible for the implementation of the work, and a proper preparation of the plant for renovation. Contractors' "BHP declarations" and security measures are checked and works are monitored. At the end, the whole process is evaluated, and the best contractors receive commemorative awards. In addition, contracts with external contractors include an incentive system described in a "safety" clause. "Safety Talks" and the "The Themes of the Month" such as the Occupational Safety Day, which were held with employees, were opportunities to deepen and consolidate knowledge of health and safety. In 2012, the number of accidents decreased decisively: in relation to 2011, the TRR accident rate at the ORLEN Group decreased by about 30%, which is the best result in the company's history. The company is also committed to improving the level of safety in the country, including leading a programme supporting professional and volunteer fire brigades.

In addition to standard safety training (first aid for station and office workers, rules for evacuating petrol stations with real

scenarios - organised in cooperation with local emergency services, concerning crisis behaviours), BP has many safety related initiatives, such as "Healthy Days" during which employees can participate in sessions, lectures and workshops on health, safety and environment ("You Only Have One Heart", "Blood Saves Lives", "A Healthy Back" and others), and a special training program "BP Safety Leader" in the form of a safety knowledge contest, in which about 600 BP employees have been participating every year in the last six years from across Poland. Mindful of drivers' safety, BP is the only fuel company funding safe driving training for drivers of company vehicles: a unique competition "Safe Fleet with BP" for BP PLUS card users. So far, 1,000 drivers have been professionally trained on trucks and buses. Also, BP employees undertake training in safe driving. A series of events under the name "Motorcycle Sunday at BP stations" led to the creation of a virtual educational database for motorcyclists - on the website of the partner, R2 Foundation, (www.rkwadrat.pl), there is a tab "Safe Harbour with BP". BP has, once again, given its support to the "Been Drinking - Don't Drive" campaign running since 2008, and is also in the group of companies which have signed a declaration on road safety and on the introduction of standards for drivers of company vehicles, as part of a larger project called "Safe Fleet".



Strict observance of traffic rules at their plant and of their own safety procedures, are measures which FUCHS OIL CORPO-RATION (PL) uses to ensure safety in the workplace.

LOTOS Group also places a strong emphasis on safety issues, above all on preventive measures and information. The firm runs many voluntary educational, training and prevention programmes. In 2012, these included: specialised first aid training in rescuing children and on proper use of defibrillators, Third Day for Safety and Health at Work during which preventative cardiological tests were carried, and all staff have been involved in participating in monthly campaigns promoting health and safety at work as part of a calendar for safe work and health promotion. LOTOS holds regular initiatives concerning prevention of cancer, diabetes, promoting healthy lifestyles, activity and physical exercise, ergonomics in the office, organisation of the workplace, the safe use of chemicals and the protection of workers from noise. The sessions are supported by publications on related themes.

Domestic and international companies are attentive to the needs of people with disabilities, so both these firms' offices and petrol stations are tailored to them. Architectural barriers have been removed (proper width of drive, automatic sliding doors, specially prepared toilets with safety rails and handles, no curbs in front of main entrances to premises and no steps inside the petrol stations) and station staff are always willing to assist customers with disabilities: pictograms in the stations inform customers of this.

LOCAL COMMUNITY

POPiHN member companies strive to maintain and develop their activities in all areas sustainably, while respecting environmental conditions as specified by law and with observance of good corporate social responsibility.

Since its launch in Poland, BP has been consistently implementing a CSR strategy, introducing its social responsibility program by participating in many programmes and by collaborating with organisations that work for the harmonious development of society. In 2012, one of BP's social partners was the "WIOSNA" association; BP received a Benefactor of the Year 2009 statuette in the category of cooperation of a firm with a non-governmental organisation for a supported project called Academy of the Future and an initiative called NOBLE BOX. In December 2012, a promotion campaign was prepared combined with a social objective: support of the NOBLE BOX campaign. For each BP Supercard purchased during the period from 5 to 21 December 2012, one-third of the profit went towards the campaign. Another partner was the Society of Friends of the Sick "St. Lazarus Hospice". BP is a sponsor of the "Fields of Hope" initiative, maintaining the website www.polanadziei.pl, supports the ongoing operation of the facility by organising charity concerts, selling Christmas cards and also promotes the idea of hospice care. Polish Humanitarian Action organisation (PAH) is also a social partner of BP: customers benefitting from BP's offer in a unique and largest multi-partner PAYBACK programme could redeem accumulated points against a PAH programme for feeding children called PAJACYK (over the years BP, together with its customers, have funded nearly 1.2 million hot meals for children) or the SIEMA-CHA association, which BP provides with fuel cards enabling free refuelling of the foundation's vehicles at the firm's fuel stations. The Tatra Mountains Voluntary Rescue Service (TOPR) is also supported by fuel from BP, and there are also some BP employees among the volunteer rescuers. The total (over 15 years) value of financial aid to TOPR to date is over PLN 900,000. The Wild Bean Cafe network at BP stations, once again, in 2012, supported the "Pajacyk's Christmas Table" campaign, in which the owners of restaurants, pubs and cafes provided a contractual on-tenth of turnover to help malnourished children.

In 2012, Statoil Fuel & Retail Polska cooperated with the United Way Foundation www.unitedway.org.pl. Since 2000, within the framework of the Employee Contributions Programme, the firm's employees transfer a voluntary part of their income to humanitarian purposes, due to which programmes can be realised, such as: "Overcoming Disability", in "Support during Sickness", "Help in a Crisis", "Decent Old Age", "Slice of Bread" and together with the Foundation for Corporate Social Responsibility (FCSR) www.fcsr.pl help to the poorest regions of the country. More than 200 children from selected schools participate in dance and art classes and take part in English language lessons.

PKN ORLEN has, for more than 10 years, been leading an inter-sector partnership programme. The company is the founding donor of the "Grant Fund for Plock" and a partner of the "Good Neighbourliness Grant Fund for Ostrow Wielkopolski". The company actively supports local communities through sponsorship and charitable activities. In 2011 – 2012, the company funded two modern playgrounds for the youngest inhabitants of Plock

and supported the construction of the only modern and safe skate park in the city. Orlen continued to sponsor cultural institutions and events, such as the Audioriver electronic music festival which has become an international showcase of Plock on the cultural map of the world. PKN ORLEN is also an active sponsor of sports, both competitive and amateur. The company supports, among others, the ORLEN Wisla Plock handball team, which was runnerup in last year's Polish championship. ORLEN organises each year a Mini Handball League, in which the children of Plock and the surrounding area compete in handball competitions. The company is also the title sponsor of one of the largest and most modern sports and events halls: the ORLEN Arena. As an active benefactor, the company has been for many years among the top leaders in philanthropy in Poland, undertaking charitable activities independently and through the ORLEN "Dar Serca" Foundation. The flagship programme of the foundation, continued since its inception in 2001, is care for orphanages. Also, scholarship programmes are gaining more and more momentum. Since 2006, the Company has been running its own original, nationwide programme called "ORLEN Safe Roads", which is a social project providing road safety education. In 2012, it had the slogan "Protect Life, Wear Something Reflective". The partners in this campaign were the Road Traffic Bureau of Police Headquarters, the Provincial Police Headquarters and the Roman Catholic parishes of the Mazowsze region. As part of this project, PKN ORLEN distributed 200,000 reflective wristbands and stickers, increasing the safety of pedestrians moving along roadsides, outside towns. The campaign included the rural and the rural-urban districts of the Mazowieckie province.

Shell employees, both in Warsaw and in Zabierzow near Krakow, are actively involved in employee volunteering: together with the local police they have begun a long-term educational program called "Safe Braces", which is aimed at children in primary school classes 1–3 and their parents in the Zabierzow district.

In 2012, LOTOS Group supported a number of initiatives which influenced the development of infrastructure and have had positive effects for local communities, in such areas as the protection and promotion of health, science, education, teaching, environment and ecology, safety, culture and sport. The funds were invested, among others, in medical equipment for public health institutions, in equipment needed for ecological activities, investments aimed at improving the quality of life of residents and educational activities in road safety. An example is the "LOTOS – Safe Journey to School" educational and preventive social programme run for many years in cooperation with the police and road safety experts, whose goal is to educate and promote safe behaviour on roads and thereby prevent road accidents involving early school age children. In the school year 2011/2012 LOTOS provided 14,000 reflectors and the same number of educational kits. Over the last seven years, schoolchildren participating in the programme have received 84,000 reflectors and 64,000 road safety packages. Additionally, the company is committed to levelling social differences and combating exclusion, especially among children and adolescents, to whom it provides scholarship support and educational projects in ecology and upbringing through sports skills training, such as "Skrzydla" realised by Caritas Poland. "Skrzydla" is a long-term programme of support aimed to help children at primary school, junior high and high schools, who, because of poor economic situation of their families are in need of assistance in the form of feeding at school, purchasing of kits and materials for school, funding of school trips, and educational activities. In 2012, the company provided support to 70 pupils. In terms of the envi- 닁 ronment and ecology, LOTOS continued its engagement in the programme "LOTOS helps Baltic nature" and "Protect Nature on Sobieszewo Island" aimed at environmental education and protection of valuable natural areas located in the company's vicinity. In 2012, the company was involved in a further repetition of the Maritime Education Programme. Its main target is pupils of high schools in Gdansk who go on boat trips in the Gulf of Gdansk. The aim is to enrich their knowledge of ecology, sailing and maritime heritage of Gdansk. Every year from May to June and in September about 3,500 pupils take part in the programme. Since 2010, about 10,500 people have participated in the programme.

FUCHS OIL CORPORATION'S (PL) projects with the local community involve sponsoring events, meetings on special occasions, and supporting local initiatives.

PERN "Przyjazn" SA also pursues its business objectives, while taking account of important social goals, focusing its activities on levelling social differences among children and disadvantaged people, especially among the inhabitants of Plock and the neighbourhoods of the company's depots, on educational campaigns targeted primarily at the youngest, supporting youth



sports and eco-friendly activities. Among initiatives in 2012, it is worth mentioning the purchase of a duodenoscope camera to perform ERCP examinations and a surgical gastroscope for patients with digestive system diseases for the Provincial Hospital in Plock, support for the purchase of a neonatal ventilator for the Department of Neonatology at the Swietej Trojcy Hospital, support for the preparation of a per-



manent exhibition of the "Plock Bible" in the Diocesan Museum of the Blessed Archbishop Antoni Julian Nowowiejski, and patronage of the Children's Family Home No. 1 in Plock, where on Children's Day or at Christmas, children receive packets with sweets or can go on holiday. In addition, the firm's employees organise material and financial aid (costs of children's school lunches) to the poorest families in the vicinity of Plock, involve themselves in helping a shelter for homeless animals, and at least twice a year hold disabled artists fairs at the headquarters of PERN "Przyjazn".

POPiHN member companies, Shell Polska and Total Polska are members of the Partnership for Safety Association, which promotes road safety.

ENVIRONMENTAL POLICY

LOTOS Group's mission is innovative and sustainable development pursued in a way that is environmentally friendly. Treating this principle, as vital, in 2012, the company signed the Declaration of the Polish Business for Sustainable Development, initiated by the Ministry of the Economy as part of work on the Vision for Sustainable Development of Polish Business 2050. In keeping with the objectives of Vision 2050, in 2012, LOTOS Group made a very important change regarding protecting the environment, namely the introduction of natural gas as a raw material in the production of hydrogen and as the major energy source in its refinery. Due to this, LOTOS achieved two goals: reduction of emissions of the basic greenhouse gas, carbon dioxide (in 2012, by about 100,000 tonnes) and significant reduction of emissions of other power generation pollutants, including sulphur dioxide (nearly 1,500 tonnes) and dust (150 tonnes).

Last year, along with producers and distributors of safe windscreen washer fluids, BP ran a campaign to raise consumer awareness on the use of windscreen washer fluids containing methanol, so that customers only use safe liquids, read product labels and make informed product choices.

Environmental objectives are an integral part of the "Integrated Management System Policy" in force at PKN ORLEN. Continuous monitoring of emissions into the environment has allowed ongoing monitoring of the utilization of limits granted in permits. In 2012, the "Responsible Care" programme continued to be implemented in accordance with the requirements of the Framework Management System for Responsible Care (RSZ RC) implemented at the company. The company received an assessment of the degree of introduction and implementation of individual components of the system (> 80%), as "full implementation, a process of continuous improvement." For the sixth time, the firm joined in the organisation of an environmental photographic competition titled "Catch a Hare", propagating the beauty of surrounding nature and involving employees of companies taking part in the programme. Additionally, the Company has become involved in competitions proposed by the secretariat of the "OiT" programme: International Noise Threat Awareness Day (25 April), World Water Day (22 March), International Environment Day (5 June), World Quitting Smoking Day (16 November). Improvements have been made to the ENVI website, a tool for exchanging information (internal and external communication) and which is a platform for improving the fundamental processes of document flows and communication and information exchange. ORLEN also ran a project "Analysis of the impact of climate policy for PKN ORLEN Group", which led to the development of recommendations regarding balancing shortages of CO² emission rights and opportunities arising from the Packet in the period 2013-2020.

Due to the nature of its business "Operator Logistyczny Paliw Plynnych" sp. z o. o. (OLPP) focuses on ensuring the safety of the environment and has higher ambitions than mere compliance with the law in this area. Therefore, all activities are carried out with particular emphasis on the environmental impact of pollution prevention. In 2012, OLPP completed a number of environmental investments, such as inserting additional floors in storage tanks, securing storage area trays and increasing productivity and efficiency of the petrol vapour recovery system. Risks of leakage and contamination are constantly analysed. At the same time, reclamation work is being carried out to achieve the status of soil and water as set out in obtained decisions. Evidence of adherence to high standards of environmental quality is demonstrated by the presence of a number of interesting flora and fauna specimens at fuel depots.

The main objective pursued by Statoil Fuel & Retail Polska in the design, construction and operation of fuel stations is the protection of the environment. For this purpose, modern technologies are used to afford maximum protection to the environment (soil, water, air and ground water) and fuel stations are usually surrounded by small architectural forms and greenery. The standard environmental protection solutions adopted at fuel stations include: sloping terrain allowing possible remnants of accidentally spilt fuel to run off into wells linked to hydrocarbon separators and, following treatment, to be fed into the sewage drains; separators to prevent the entry of untreated rainwater run-off from the forecourt area and from car wash water from entering the sewage drains or directly into the ground; double-walled tanks and electronic monitoring of leaks, fuel systems with polyethylene flexible pipes with a special inner plastic lining, forming an impermeable chemical barrier; closed breather system and a "gas pendulum"; securely sealed catchment area made of impermeable concrete, to prevent the possible ingress of spilt fuel into the ground; overfill prevention valve and finally piezometers.

"PERN Przyjazn" is conscious of its impact on the environment and has been, for several years, responsibly and consistently implementing an investment programme aimed at sealing floors and embankments of surrounds of crude oil storage tanks of capacity 30,000 and 50,000 m³, consisting of lining reservoir basins with a geo-membrane which is resistant to oil and oil derivatives, to prevent their ingress into the soil, surface water and groundwater in the event of even a minimal leakage. A new technology has been adopted in newly-

built tanks, consisting of a double jacket, where the outer jacket fulfils a bulwark function and can accept crude oil in the event of oil leaking thorough the inner jacket, due to which their construction uses much less land and four times less water for fire protection. In addition, the company in engaged in extensive measures to reduce the impact of its pipelines on the environment to a minimum, especially at particularly sensitive points, such as river and waterway crossings, where pipes have become exposed as a result of floods or other watercourse changes. Over the next five years PERN "Przyjazn" intends to allot over PLN 3.7m to rebuilding its pipelines in sensitive places, and for the last three years it has been systematically replacing old crossings with new sections laid with the help of the modern technology of horizontal directional drilling (HDD), which allows a pipeline to be routed a dozen or so meters below a river bottom, ensuring total non-susceptibility to external impacts, including river course changes.

FUCHS OIL CORPORATION (PL) carries out its activities with a view to improving its methods of preventing negative impacts on the environment, including by minimising the amount of waste, rational use of raw materials in production, using raw materials and technologies in production which are proven in terms of personal and environmental safety, improving technological processes and modernising equipment, as well as by conserving natural resources by reducing consumption of paper, electricity and fuels, preventing occurrences of environmental damage by continuous monitoring of equipment and installations and the use of appropriate technologies and security systems, caring for the purity of groundwater and the quality of wastewater through their monitoring and the implementation of appropriate treatment facilities. The company is active in organisations involved in protecting the environment. Its employees are informed of environmental initiatives and changes in environmental law through an internal information system and through regular training. Other business partners are also engaged in the information provision and training processes.

In order to protect the environment, POPiHN member companies are developing sales of premium category fuels which optimise combustion in engines and reduce emissions of harmful substances into the atmosphere.

More information on corporate social responsibility related activities can be found in annual reports and on websites of POPiHN member companies.



Established in Warsaw on 8 December 1995;

 Operates under the Employers' Organisations Act of 23 May 1991 (Journal of Laws No. 55, item 235).

OBJECTIVES:

Protection, promotion and representation of common ethical and economic interests of its members, related to their activities in the oil sector;

Fostering a positive image of the oil sector in Polish public opinion and encouraging proper understanding of the organisation's objectives by the general public and government and administrative authorities.

POPiHN MEMBERS

BP Europa SE, FUCHS OIL CORPORATION (PL) Sp. z o.o., GRUPA LOTOS S.A., LUKOIL Polska Sp. z o.o., Neste Polska Sp. z o.o., OLPP Sp. z o.o., PERN "Przyjaźń" S.A., PKN ORLEN S.A., Shell Polska Sp. z o.o., SLOVNAFT POLSKA S.A., Statoil Fuel & Retail Polska Sp. z o.o., TanQuid Polska Sp. z o.o., TOTAL Polska Sp. z o.o.

STRUCTURE:

GENERAL MEETING;

MANAGEMENT BOARD (nine persons) appointed for a two-year term of office by the General Meeting and managing the ongoing activities of the organisation. The current term of office is 2012-2014. OFFICE, managed by the Director General, who reports directly to the management board.

MANAGEMENT BOARD FOR 2012 – 2014; CHAIRMAN – Andrzej Magryś – STATOIL MANAGEMENT BOARD MEMBERS: Sławomir Jędrzejczyk – PKN ORLEN, Maciej Szozda – GRUPA LOTOS, Piotr Dziwok – SHELL, Paweł Mosak – OLPP, Marcin Moskalewicz – PERN, Marc Seminck – TOTAL, Bogdan Kucharski – BP, Robert Nowek – LUKOIL

OFFICE;

Director General – **Leszek Wieciech** Director for Fuels Market Analysis – **Krzysztof Romaniuk** Director for Market Regulation – **Marcin Szponder** Office Manager – **Agnieszka Kwiecińska**

COMMITTEES:

- Oil Committee
- Fuels Trading Committee
- Infrastructure and Refineries Committee
- Corporate Committee

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