

# **ORLEN**. FUELLING THE FUTURE.

# ANNUAL REPORT OF ORLEN GROUP 2016

ANNUAL REPORT OF ORLEN GROUP FOR THE YEAR 2016

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Wojciech Jasiński President & CEO

Ladies and Gentlemen, Dear Sharcholders,

For the ORLEN Group and other companies in the petrochemical and refining industry, a key success factor is the ability to seize the opportunities arising from shifts in the economic and market landscape to maximise profit and further strengthen the company's financial and competitive position. Looking back at this past year, we can safely say that we successfully delivered on all these objectives. Our robust financial performance was also appreciated by the market – on November 21st 2016 PKN ORLEN for the first time topped the list of the most valuable companies on the Warsaw Stock Exchange. In the years ahead we aim to further grow our business in line with the ambitious goals we set ourselves in the ORLEN Group 2017–2021 Strategy that was unveiled in December last year.

The global macroeconomic and market developments had a major influence on our operations and financial performance in 2016. The price of Brent crude averaged just under USD 44 per barrel in 2016, representing a 17% drop on 2015 and a 12-year low. The overall downstream margin also retreated on tighter gasoline and petrochemical margins. Continued low oil prices supported our financial results and created attractive upside opportunities for PKN ORLEN and other oil companies that had managed to diversify their revenue sources sufficiently in advance and could fully exploit the market conditions. The last quarter of 2016 marked a watershed on the domestic fuel market as new legislation helped to significantly curtail grey market in fuels, driving up consumption of diesel oil and enabling businesses engaged in the official trade in fuels to fully leverage their competitive advantage.

2016 LIFO-based EBITDA adjusted for the effect of impairment losses on non-current assets reached a record level of PLN 9.4bn.

Total sales volumes grew 2%, with a record 10 billion litres of fuels sold last year. The fullyear results were adversely impacted by maintenance shutdowns, including the downtime of the steam cracker in Litvínov, the Czech Republic.

In downstream, we moved forward on the major expansion projects aimed at improving efficiency of the Group's production assets. In the Czech Republic, a project to build the new PE3 polyethylene unit was launched in 2016 as one of the ORLEN Group's most-awaited investments, which will help to solidify PKN ORLEN's position on Central Europe's chemical and petrochemical markets. Another of our key petrochemical projects, to build a metathesis unit in Płock, entered the construction phase. Launched in early 2017, the visbreaker project is another major downstream efficiency improvement initiative, expected to increase crude distillate yields and operational availability of the refinery. Last year, progress was made on the construction of Poland's largest CCGT plants: in Włocławek (463 MWe) and Płock (596 MWe). In parallel, we took steps to make our service stations more energy self-sufficient. Pilot photovoltaic solar energy projects implemented at PKN ORLEN facilities delivered promising results, which are now being analysed. The project to deploy wind turbines at petrol stations, which is expected to take our green technology solutions to the next level, was at a preliminary stage.

Polski Koncern Naftowy ORLEN Spółka Akcyjna a Polish company, with its registered office at Chemików 7, 09-411 Płock, Poland entered into the Register of Entrepreneurs kept by the District Court for the Capital City of Warsaw, XIV Commercial Division of the National Court Register under the number KRS 0000028860, NIP 774-00-01-454, share capital/paid-up capital, 534,636,326,25 PLN In 2016, the ORLEN Group maintained its position of the retail market leader in the region. Our retail chain reported 1.4 million transactions daily, contributing to a record EBITDA of PLN 1.8bn. We also broadened our range of non-fuel products and services, with around 1,691 Stop Cafe and Stop Cafe Bistro outlets operating on our home markets, including 1,500 in Poland, 168 in the Czech Republic, and 23 in Lithuania. We made strategic efforts to roll out our food & beverage and on-site convenience store formats. But not only that – we now also strategically target a strong customer orientation and unique purchasing experience, planning to open 130 new-format Stop.Cafe and O!Shop outlets this year.

Our macro environment, and the persistently low oil prices in particular, had a strong bearing on the direction of our activities in upstream. In 2016, total 2P reserves of our production projects increased from 97 million boe to around 114 million boe at the end of 2016. Last year we also carried out further work in our licence areas in Poland: under a letter of intent signed with PGNiG, drilling of an exploration well began in the Poznań region, and ORLEN Upstream independently launched a drilling programme in the Kraków province. Our new corporate strategy announced late last year provides for cautious continuation of upstream projects with the purpose of increasing the output and 2P reserves.

We managed to deliver our expansion plans while maintaining a stable financial position. In 2016, we reduced our debt and the net debt ratio, and managed to further expand the portfolio of available funding sources. During the year, PKN ORLEN, through its subsidiary ORLEN Capital AB, successfully placed a EUR 750m eurobond issue. The largest issue of investment grade corporate eurobonds made its debut on the Catalyst markets of the Warsaw Stock Exchange.

Last year we made efforts to secure reliable feedstock supply sources, enhancing the security of fuel supplies in Poland. We also significantly strengthened our crude oil supplier base by extending the contract with Saudi Aramco for another year. A new contract setting oil transmission rates was signed with MERO, and we entered into a contract with Jadranski Naftovod of Croatia whereby crude oil will be transported to our Czech refineries via the Janaf pipeline. Amendments were signed to contracts with Rosneft and Tatneft for the supply of crude oil to our Czech refineries. Also, natural gas supplies were secured for another five years under a long-term contract with PGNiG.

In the Czech Republic, we brought PE3, our largest petrochemical unit, to the construction phase. The project will increase the utilisation of the ethylene unit and facilitate stronger integration of petrochemical and refining production at the Unipetrol Group.

As part of the process to optimise the ORLEN Group's asset base in the Czech Republic, Benzina and Ceska Rafinerska were merged with Unipetrol RPA, with the latter transaction closed in early 2017. To better respond to the very demanding and competitive market, and to open up to new business challenges, Spolana, previously a part of ANWIL, was incorporated into the Unipetrol Group through an intra-group acquisition.

The ORLEN Lietuva Group delivered very good results last year. Capitalising on the favourable macroeconomic situation, it worked at nearly full capacity and substantially improved efficiency in recent years. Aware of how sensitive the Mažeikiai refinery is to changes in the macroeconomic landscape, we focused on preparing it for leaner times.

The ORLEN Group proceeded with consolidation processes, to more flexibly respond to market challenges. In 2016, we completed the sale of ORLEN Transport. The aim of the process to dispose of non-core assets is to build PKN ORLEN's value in the long run.

Polski Koncern Naftowy ORLEN Spółka Akcyjna

a Polish company, with its registered office at Chemików 7, 09-411 Plock, Poland entered into the Register of Entrepreneurs kept by the District Court for the Capital City of Warsaw, XIV Commercial Division of the National Court Register under the number KRS 0000028860, NIP 774-00-01-454, share capital/paid-up capital: 534,636,326,25 PLN

Throughout 2016 we worked on strengthening our innovation-oriented corporate culture. Initiatives in this area included the launch of 'Innovations, Start-ups', an online cooperation and knowledae sharing platform dedicated to new technology solutions. Also the crowdsourcing contest, closed in 2016, to find solutions for recovery and utilisation of low-temperature heat, attracted keen interest from innovators the world over. Currently, we are working on projects combining power generation and retail, to improve energy selfsufficiency of our petrol stations. We are also running pilot tests of solutions based on such natural elements as bacteria absorbing industrial odours or algea used to produce fuel biocomponents.

PKN ORLEN's strategy, adopted in December 2016, is our response to the major shifts taking place in the economic, social and technological landscape. We identified the strategic directions to follow throughout the next five years and formulated detailed financial objectives for 2017 and 2018. Our plans for profit and capex figures are ambitious but feasible. In 2017 and 2018, PKN ORLEN expects to spend an average of PLN 5.4bn a year on investment projects, of which PLN 3.7bn in Downstream, PLN 0.6bn in Retail, and up to PLN 0.8bn in Upstream. Annual LIFO-based EBITDA in the period is expected to average PLN 8.8bn.

The ORLEN Group enjoys a sound market and financial standing, so its strategy until 2021 does not herald any revolutionary changes but guarantees stable growth.

A key factor contributing to our further steady development is the dedication of our People, one of the pillars of PKN ORLEN's strategy. Our staff's commitment to all their day-to-day duties determines the ORLEN Group's market success. I would like to thank them for their work. My special thanks go to Members of the Supervisory Board for their support in everything we do to meet our strategic objectives and build up PKN ORLEN's strength.

Wojciech Jasiński

President of the Management Board, CEO PKN ORLEN S.A.

Polski Koncern Naftowy ORLEN Spółka Akcyjna a Polish company, with its registered office at Chemików 7, 09-411 Piock, Poland entered into the Register of Entrepreneurs kept by the District Court for the Capital City of Warsaw, XIV Commercial Division of the National Court Register under the number KRS 0000028860, NIP 774-00-01-454, share capital/paid-up capital\_534,636,326.25 PLN



## Polski Koncern Naftowy ORLEN Spółka Akcyjna Group

**Opinion and Report** 

of the Independent Auditor

Financial Year ended

31 December 2016

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## **OPINION OF THE INDEPENDENT AUDITOR**

#### To the General Meeting of Polski Koncern Naftowy ORLEN Spółka Akcyjna

### **Opinion on the Consolidated Financial Statements**

### Opinion

We have audited the accompanying consolidated financial statements of the Group, whose parent entity is Polski Koncern Naftowy ORLEN Spółka Akcyjna with its registered office in Płock, ul. Chemików 7 ("the Group"), which comprise the consolidated statement of financial position as at 31 December 2016, the consolidated statement of profit or loss and other comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended and notes comprising a summary of significant accounting policies and other explanatory information.

In our opinion, the accompanying consolidated financial statements of Polski Koncern Naftowy ORLEN Spółka Akcyjna Group:

- give a true and fair view of the financial position of the Group as at 31 December 2016 and of its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union; and
- comply, in all material respects, with applicable regulations that apply to the consolidated financial statements of the Group.

#### Basis for Opinion

We conducted our audit in accordance with section 7 of the Accounting Act dated 29 September 1994 (Official Journal from 2016, item 1047 with amendments) ("the Accounting Act") and International Standards on Auditing (IAASB) as adopted by the resolution dated 10 February 2015 of the National Council of Certified Auditors as the National Standards on Assurance ("National Standards on Assurance"). We are independent of the Company in accordance with the Code of Ethics for Professional Accountants of the International Ethics Standards Board for Accountants' as adopted by the resolution of National Council of Certified Auditors dated 13 June 2011 ("IESBA Code") and the impartiality and independence requirements as described in Art. 56 points 3 and 4 of the Act on Certified Auditors and their Self-Governance, Audit Firms authorized to Audit Financial Statements and Public Oversight dated 7 May 2009 (Official Journal from 2016, item 1000) and have fulfilled other ethical responsibilities in accordance with these regulations and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

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Spółka zarejestrowana w Sadzie Rejonowym dla m. st. Warszawy, XII Wydzial Gospodarczy Krajowego Rejestru Sądowego. KRS 0000104753 Kapital zakładowy: 125 000 PLN NIP 526-10-24-841 REGON 010939471



## Key Audit Matters

On terms agreed with the Management Board of Polski Koncern Naftowy ORLEN Spółka Akcyjna, our audit work has been undertaken so that we might state to the Company's shareholders key audit matters that we are required to state to them in an auditor's opinion and, in respect of reporting, as if International Standard on Auditing 700 (Revised January 2015) applied.

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on them.

## 1. Impairment of property, plant and equipment and intangible assets

The net carrying amount of property, plant and equipment and intangible assets as at 31 December 2016: PLN 29,048 million; net increase in impairment allowance of property, plant and equipment and intangible assets recognized in 2016: PLN 389 million (including increase of impairment allowance of property, plant and equipment of PLN 381 million and increase of impairment allowance of intangible assets of PLN 8 million); total impairment allowance of property, plant and equipment as at 31 December 2016: PLN 14,957 million (including impairment allowance of intangible assets of PLN 487 million).

We refer to the consolidated financial statements: Note 6.2 "Segments' data- revenues, costs, financial results, investment expenditures", Note 7.1.4 "Other operating income", Note 7.1.5. "Other operating expenses", Note 7.2.1 "Property, plant and equipment", Note 7.2.2. "Intangible assets", Note 7.2.4. "Impairment of property, plant and equipment and intangible assets".

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### Key audit matter

discussed in note 7.2.4. As to the consolidated financial statements, on 15 December 2016 the Management Board and Supervisory Board of PKN ORLEN approved the Strategy for ORLEN Group for the years 2017-2021 ("Strategy"). Changing market environment of ORLEN Group forced the outlining of a new strategy and new financial and operational objectives of the Group for the next five years, together with a need for an update of existing macroeconomic assumptions. Additionally ORLEN Upstream Sp. z o.o. decided to continue further exploration operations only on selected, most promising areas of conventional research.

As a result the Group considered it necessary to update the impairment tests of property, plant and equipment and intangible assets of the Group.

Impairment tests included property, plant and equipment and intangible assets, which have been grouped together the cash generating units to identified by the Group.

Determining the recoverable amounts of the assets requires a number of significant judgements and estimates, especially in respect of the amount of future cash flows and the applied discount rate. In particular this assessment was performed based on projected discounted cash flows the included in the approved Strategy Medium-Term Plan for the years 2017-2021. The projected operating cash flows from refining and petrochemical activities are influenced by long-term macroeconomic assumptions level concerning of refining and petrochemical margins, while cash flows from upstream activities are influenced by assumptions concerning future crude oil and gas prices. These projections are exposed to significant variability due to changing market conditions.

#### Our response

Our audit procedures included among others:

- evaluating the appropriateness of the Group's allocation of assets to cash generating units;
- critical assessment of the Group's assumptions and estimates used to determine the recoverable amount of property, plant and equipment and intangible assets, using our internal valuation specialists. This included:
  - assessing the reasonableness of key macroeconomic assumptions for particular years applied by the Group (including those relating to discount rates, crude oil and gas prices, Ural/Brent differential, refining and petrochemical model margin, exchange rates and fuel consumption) against market data and the results of studies of external experts obtained by the Group;
  - assessment of the discounted cash flows model used by the Group in terms of its compliance with the relevant financial reporting standards, and
  - critical assessment of assumptions applied in determining cash flows and the residual values after the period covered by the Strategy.
- evaluating the Group's analysis of the sensitivity of the results of impairment tests, in particular in respect of the assumptions with the greatest potential effect on the test results, i.e those relating to discount rates and operating earnings before the deduction of depreciation, amortization and impairment allowances;
- evaluating the adequacy of disclosures in respect of impairment.



### 2. Litigation and claims

The carrying amount of provisions for administrative and court proceedings as at 31 December 2016: PLN 192 million.

We refer to the consolidated financial statements: Note 7.2.9.4. "Other provisions", Note 7.4.4. "Contingent assets and liabilities", Note 8 "Information concerning significant proceedings in front of court, body appropriate for arbitration proceedings or in front of public administration bodies".

### Key audit matter

In the normal course of the Group's business, potential exposures may arise from administrative and court proceedings. Whether a liability or contingent liability is recognized or disclosed in the consolidated financial statements is inherently uncertain and is dependent on a number of significant assumptions and judgements. The amounts involved are potentially significant and determining the amount, if any, to be recognized or disclosed in the financial statements, is inherently subjective.

#### **Our response**

Our audit procedures included, among others:

- monitoring external sources to identify actual and potential non-compliance with laws and regulations, both those specific to the Group's business and those relating to the conduct of business generally;
- reviewing legal expenses incurred during the audited year and sending letters to the attorneys providing legal services to the Group, inquiring about litigations and actual or potential claims and disputes;
- assessing responses received to the above inquiries and discussing selected matters with the Group's attorneys, including the disputes with Agrofert Holding a.s. and OBR S.A. (discussed in Note 8.1 of the consolidated financial statements);
- reading minutes of the meetings of the management and supervisory boards of the Group's key entities and also inspecting correspondence with regulators;
- critically assessing the Group's assumptions and estimates (including probability of negative result) in respect of litigations and claims, including the provisions recognized or contingent liabilities disclosed in the consolidated financial statements;
- evaluating the adequacy and completeness of disclosures detailing significant legal and regulatory proceedings.



## 3. Compensation related to accident on installation for ethylene production in subsidiary UNIPETROL RPA s.r.o. that occurred in August 2015

Other operating income for 2016: PLN 1,280 million, Trade receivables and other receivables as at 31 December 2016: PLN 222 million (prepaid insurance recoveries), Contingent assets as at 31 December 2016: PLN 1 billion.

We refer to the consolidated financial statements: Note 7.1.4 "Other operating income", Note 7.2.5.2 "Trade and other receivables", Note 7.4.4. "Contingent assets and liabilities".

#### Key audit matter

#### **Our response**

In August 2015, an accident occurred at the ethylene production plant in Litvinov, Czech Republic. The accident resulted in substantial damage of property, plant and equipment, for which the Group estimated a replacement cost of approximately PLN 0.6 billion as well as loss of profits due to installation shut down, that the Group assessed at approximately PLN 1.7 billion.

The Group's entities are protected by insurance policies with coverage including inter alia the replacement costs of the damaged installations and compensation for lost profits. As at 31 December 2016 the insurers paid out and confirmed payment of a total amount of nearly PLN 1.3 billion as a partial settlement of the loss, that was recognized in profit or loss for 2016 as other operating income. The Group has estimated that further replacement costs and lost profits to be covered by the insurers will amount to approximately PLN 1 billion. That amount was disclosed as a contingent asset as at 31 December 2016.

Under the relevant financial reporting standards, compensation received from third parties is recognized in profit or loss when they are due. The assessment of the above recognition criteria in the consolidated financial statements involves Group's significant judgment. When the receipt of compensation has been assessed as probable but not virtually certain, the Group discloses a contingent asset.

## Our audit procedures, included, among others:

- analyzing the updated report of external loss adjustor to assess the scope of the insurance coverage;
- analyzing the correspondence between the Group, insurers and loss adjustor;
- sending letters of inquiry to the Group's legal department and management and assessing the responses received;
- evaluating the insurer's ability to pay subsequent compensation installments, by assessing i.a. their ratings and financial standing;
- evaluating reasonableness of the Group's estimate of insurance recoveries and their accounting recognition as other operating income or contingent asset;
- evaluating the completeness and adequacy of related disclosures.

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Management's and Supervisory Board's Responsibility for the Consolidated Financial Statements

Management of the Parent Entity is responsible for the preparation of consolidated financial statements that give a true and fair view in accordance with International Financial Reporting Standards as adopted by the European Union and with other applicable regulations. Management of the Parent Entity is also responsible for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management of the parent company is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management of the parent company either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

According to the Accounting Act, Management of the Parent Entity and members of the Supervisory Board are required to ensure that the consolidated financial statements are in compliance with the requirements set forth in the Act.

Members of the Supervisory Board are responsible for overseeing the Group's financial reporting process.

### Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with section 7 of the Accounting Act and International Standards on Auditing as adopted by the resolution dated 10 February 2015 of the National Council of Certified Auditors as National Standards on Assurance. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with National Standards on Assurance, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than the one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management of the parent company and related disclosures.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.



- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities
  or business activities within the Group to express an opinion on the consolidated financial
  statements. We are responsible for the direction, supervision and performance of the group
  audit. We remain solely responsible for our audit opinion.

We communicate with members of the Supervisory Board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide members of the Supervisory Board with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with members of the Supervisory Board, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's opinion unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

#### Specific Comments on Other Legal and Regulatory Requirements

Management Board Report on the activities of ORLEN Group and PKN ORLEN S.A.

Management of the Parent Entity is responsible for the report on the Group's activities.

Our opinion on the consolidated financial statements does not cover the report on the Group's activities.

As required by the Accounting Act, and the Decree of the Ministry of Finance dated 19 February 2009 on current and periodic information provided by issuers of securities and the conditions for recognition as equivalent of information required by the laws of a non-member state (Official Journal from 2014, item 133 with amendments) (the "Decree") we report that the Management Board's report on the activities of ORLEN Group and PKN ORLEN S.A. includes the information required by Art. 49 of the Accounting Act and the Decree and the information is consistent, in all material respects, with the consolidated financial statements. Furthermore, based on our knowledge about the Group and its environment obtained in the audit, we have not identified material misstatements in the report on the Group's activities.



As required by the Accounting Act and the Decree we report that the statement of corporate governance, which is a separate part of the Management Board's report on the activities of ORLEN Group and PKN ORLEN S.A., includes the information required by paragraph 91 subparagraph 5 point 4 letter a, b, j and k of the Decree. Furthermore we report that the information identified in paragraph 91 subparagraph 5 point 4 letter c, d, e, f, h and i of the Decree, included in the statement of corporate governance, in all material respects:

- · has been prepared in accordance with the applicable regulations; and
- is consistent with the information contained in the consolidated financial statements.

On behalf of KPMG Audyt Sp. z o.o. Registration No. 458 ul. Inflancka 4A 00-189 Warsaw

Zbigniew Libera Key Certified Auditor Registration No. 90047 Director

14 March 2017



## Polski Koncern Naftowy ORLEN Spółka Akcyjna Group

Report on the audit

of the consolidated financial statements

**Financial Year ended** 

31 December 2016

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## Polski Koncern Naftowy ORLEN Spółka Akcyjna Group

The report on the audit of the consolidated financial statements for the financial year ended 31 December 2016

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## 1. General

## 1.1. Identification of the Group

## 1.1.1. Name of the Group

Polski Koncern Naftowy ORLEN Spółka Akcyjna Group ("Group")

## 1.1.2. Registered office of the parent company of the Group

ul. Chemików 7 09-411 Płock

## 1.1.3. Registration of the parent company in the register of entrepreneurs of the National Court Register

Registration court:	District Court for the Capital City of Warsaw in Warsaw, XIV Commercial Department of the National Court Register
Date: Registration number: Share capital as at	19 July 2001 KRS 0000028860
the end of reporting period:	PLN 534,636,326.25

## 1.1.4. Management of the parent company

The Management Board is responsible for management of the parent company.

As at 31 December 2016, the Management Board of the parent company was comprised of the following members:

Wojciech Jasiński	<ul> <li>President of the Management Board, Chief Executive Officer,</li> </ul>
Sławomir Jędrzejczyk	<ul> <li>Vice-President of the Management Board, Chief Financial Officer,</li> </ul>
<ul> <li>Mirosław Kochalski</li> </ul>	<ul> <li>Vice-President of the Management Board, Corporate</li> </ul>

- Mirosław Kochalski Affairs,
   Member of the Management Board, Business
- Piotr Chełmiński
   Development/Power and Heat Generation Officer,
- Krystian Pater Member of the Management Board, Production,
- Zbigniew Leszczyński Member of the Management Board, Sales.

According to the resolution of the Supervisory Board dated 8 February 2016, Mr. Marek Podstawa was dismissed from the position of Member of the Management Board, Sales and Mr. Zbigniew Leszczyński was appointed to this position.

According to the resolution of the Supervisory Board dated 8 February 2016, Mr. Mirosław Kochalski was appointed to the position of Vice-President of the Management Board, Corporate Affairs.

## **1.2.** Key Certified Auditor and Audit Firm Information

## 1.2.1. Key Certified Auditor information

Name and surname:	Zbigniew Libera
Registration number:	90047



## 1.2.2. Audit Firm information

Name:	KPMG Audyt Sp. z o.o.
Address of registered office:	ul. Inflancka 4A, 00-189 Warsaw
Registration number:	KRS 0000104753
Registration court:	District Court for the Capital City of Warsaw in Warsaw,
0	XII Commercial Department of the National Court Register
Share capital:	PLN 125,000
NIP number:	526-10-24-841

KPMG Audyt Sp. z o.o. is entered into the register of audit firms, maintained by the National Council of Certified Auditors, under number 458.

## **1.3.** Prior period consolidated financial statements

The consolidated financial statements for the financial year ended 31 December 2015 were audited by KPMG Audyt Sp. z o.o. and received an unmodified opinion.

The consolidated financial statements were approved at the General Meeting of the parent company on 3 June 2016.

The consolidated financial statements were submitted to the Registration Court on 16 June 2016.

## 1.4. Audit scope and responsibilities

The consolidated financial statements were audited in accordance with the contract dated 7 April 2015, concluded on the basis of the resolution of the Supervisory Board dated 25 November 2014 on the appointment of the auditor.

We conducted our audit in accordance with section 7 of the Accounting Act dated 29 September 1994 (Official Journal from 2016, item 1047 with amendments) ("the Accounting Act") and International Standards on Auditing as adopted by the resolution dated 10 February 2015 of the National Council of Certified Auditors as National Standards on Assurance.

We audited the consolidated financial statements at the Group entities during the period from 28 November 2016 to 9 December 2016, from 16 January to 25 January 2017 and from 6 February 2017 to 14 March 2017. The audit was proceeded by the quarterly reviews.

Management of the parent company is responsible for the preparation of consolidated financial statements that give a true and fair view in accordance with International Financial Reporting Standards as adopted by the European Union and with other applicable regulations. Management of the parent company is also responsible for the report on the Group's activities.

Our responsibility is to express an opinion and to prepare a report on the audit of the financial statements.

The Management Board of the parent company submitted a statement, dated as at the same date as this report, as to the preparation of the consolidated financial statements that give a true and fair view, which confirmed that there were no undisclosed matters which could significantly influence the information presented in the consolidated financial statements.

All required statements, explanations and information were provided to us by Management of the Group and all our requests for additional documents and information necessary for expressing our opinion and preparing the report have been fulfilled.



The scope of the work planned and performed has not been limited in any way. The method and scope of our audit is detailed in working papers prepared by us and retained in the offices of the Audit Firm.

The Key Certified Auditor and the Audit Firm are independent of the entities within the Group in accordance with the Code of Ethics for Professional Accountants of the International Ethics Standards Board for Accountants' as adopted by the resolution of National Council of Certified Auditors dated 13 June 2011 ("IESBA Code") and the impartiality and independence requirements as described in Art. 56 points 3 and 4 of the Act on Certified Auditors and their Self-Governance, Audit Firms authorized to Audit Financial Statements and Public Oversight dated 7 May 2009 (Official Journal from 2016, item 1000 with amendments) and have fulfilled other ethical responsibilities in accordance with these regulations and the IESBA Code.



## 2. Financial analysis of the ORLEN Group

## 2.1. Summary analysis of the consolidated financial statements

## 2.1.1. Consolidated statement of financial position

ASSETS	31.12.2016 PLN million	% of total assets	31.12.2015 PLN million	% of total assets
Non-current assets				
Property, plant and equipment	27,671	49.8	24,536	51.0
Intangible assets	1,377	2.5	1,298	2.7
Investments accounted for under equity method	763	1.4	774	1.6
Deferred tax assets	167	0.3	365	0.7
Embedded derivatives and hedging instruments	66	0.1	135	0.3
Other assets	<u> </u>	0.5 54.6	254 27.362	0.5
Current assets	00,021	04.0	21,002	00.0
Inventories	11,182	20.1	10,715	22.3
Trade and other receivables	8,553	• 15.4	6,597	13.7
Current tax assets	121	0.2	44	0.1
Cash and cash equivalents	5.072	9.1	2,348	4.9
Non-current assets classified as held for sale	61	0.1	2,340	0.2
Embedded derivatives and hedging instruments	97	0.2	806	1.7
Other assets	152	0.2	168	0.3
	25,238	45.4	20,775	43.2
TOTAL ASSETS	55,559	100.0	48,137	100.0
EQUITY AND LIABILITIES	31.12.2016 PLN million	% of total assets	31.12.2015 PLN million	% of total assets
Equity				
Share capital	1,058	1.9	1,058	2.2
Share premium	1,000	2.2	1,000	2.6
Hedging reserve	(355)	(0.6)	(80)	(0.2)
Revaluation reserve	(333)	(0.0)	(00)	(0.2)
	946	1.7	507	
Exchange differences on translation of foreign operations Retained earnings			537	1.1
Total equity attributable to equity holders	23,882	43.0	19,431	40.4
of the parent	26,763	48.2	22,173	46.1
Non-controlling interest	-	4.5	•	
-	2,522		2,071	4.3
Total equity	29,285	52.7	24,244	50.4
Liabilities				
Non-current liabilities				
Loans, borrowings and bonds	7,446	13.4	8,131	16.9
Provisions	828	1.5	710	1.4
Deferred tax liabilities	809	1.5	674	1.4
Embedded derivatives and hedging instruments	280	0.5	239	0.5
Other liabilities	289	0.5	473	1.0
	9,652	17.4	10,227	21.2
Current liabilities				
Trade and other liabilities	13,591	24.4	10,658	22.2
Les en el sin el la supervisión de la s	989	1.8	1,027	2.1
Loans and borrowings	909	1.0		
Loans and borrowings Provisions	666	1.2	749	1.6
			749 162	1.6 0.3
Provisions	666	1.2		
Provisions Current tax liabilities	666 659	1.2 1.2	162	0.3
Provisions Current tax liabilities Embedded derivatives and hedging instruments	666 659 403	1.2 1.2 0.7	162 767	0.3 1.6
Provisions Current tax liabilities Embedded derivatives and hedging instruments	666 659 403 314	1.2 1.2 0.7 0.6	162 767 303	0.3 1.6 0.6



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Polski Koncern Naftowy ORLEN Spółka Akcyjna Group The report on the audit of the consolidated financial statements for the financial year ended 31 December 2016 *TRANSLATION* 

## 2.1.2. Consolidated statement of profit or loss and other comprehensive income

	1.01.2016 - 31.12.2016 PLN million	sales	1.01.2015 - 31.12.2015 PLN million	% of total sales revenues
Sales revenues Cost of sales	79,553 (68,223)	100.0 (85.8)	88,336 (77,792)	100.0 (88.1)
Gross profit on sales	11,330	14.2	10,544	11.9
Distribution expenses Administrative expenses	(4,125) (1,426)	(5.1) (1.8)	• • •	(4.5) (1.8)
Other operating income Other operating expenses Share in profit from investments	2,163 (707)	(110) 2.7 (0.9)	420	0.5 (1.5)
accounted for under equity method Profit from operations	297 <b>7,532</b>	0.4 <b>9.5</b>	253 <b>4,340</b>	0.3 <b>4.9</b>
Finance income Finance costs	. 248 (893)	0.3 (1.1)		0.4 (1.1)
Net financial income and costs	(645)	(0.8)	. ,	(0.7)
Profit before tax	6,887	8.7	3,698	4.2
Tax expense	(1,147)	(1.5)	(465)	(0.5)
Net profit	5,740	7.2	3,233	3.7
which will not be reclassified into profit or loss Fair value measurement of investment property as at the date of reclassification	( <b>4</b> ) 6	-	3	-
Actuarial gains and losses Deferred tax	(10)	-	- 4 (1)	-
which will be reclassified into profit of loss Hedging instruments Exchange differences on translating foreign operations	<b>221</b> (396)	<b>0.3</b> (0.5)	<b>1,327</b> 1,530	<b>1.5</b> 1.7
Deferred tax	542 75	0.7 0.1	88 (291)	0.1 0.3
	217	0.1	1,330	1.5
Total net comprehensive income	5,957	7.5	4,563	5.2
Net profit attributable to equity owners of the parent	<b>5,740</b> 5,261		3,233	
non-controlling interest	479		2,837 396	
Total net comprehensive income attributable to	5,957		4,563	
equity owners of the parent non-controlling interest	5,445 512		4,107 456	
Net profit and diluted net profit per share attributable to quity owners of the parent (in PLN per share)	12.30		6.63	



## 2.2. Selected financial ratios

.

		2016	2015	2014
1.	Return on sales			
	<u>net profit x 100%</u> sales revenues	7.2%	3.7%	negative value
2.	Return on equity			
	<u>net profit x 100%</u> equity - net profit	24.4%	15.4%	negative value
3.	Debtors' days			
	<u>average trade receivables (gross) x 365 days</u> sales revenues	31 days	24 days	23 days
4.	Debt ratio			
	liabilities x 100% equity and liabilities	47.3%	49.6%	56.4%
5.	Current ratio			
	<u>current assets</u> current liabilities	1.5	1.5	1.6

• Revenue includes revenue from sales of finished products, merchandise and raw materials.

• Average trade receivables represent the average of trade receivables at the beginning and at the end of the period, with no deduction made for allowances.

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## 3. Detailed report

## 3.1. Accounting principles

The parent company maintains current documentation describing the accounting principles applied by the ORLEN Group and adopted by the Management Board of the parent company.

The accounting principles are described in the notes to the consolidated financial statements to the extent required by International Financial Reporting Standards as adopted by the European Union.

Entities included in the ORLEN Group apply common accounting principles consistent with the accounting principles applied by the parent company.

The financial statements of the entities included in the consolidated financial statements were prepared at the end of the same reporting period as the financial statements of the parent company.

## 3.2. Basis of preparation of the consolidated financial statements

The consolidated financial statements of the ORLEN Group were prepared in accordance with International Financial Reporting Standards as adopted by the European Union and with other applicable regulations.

The consolidated financial statements were prepared on the basis of the consolidation documentation prepared in accordance with the requirements the Decree of the Ministry of Finance dated 25 September 2009 on principles for the preparation of consolidated financial statements of a capital group by companies other than banks and insurance companies (Official Journal from 2009 No. 169, item 1327 with amendments).

## 3.3. Method of consolidation

The method of consolidation is described in note 9.1 of the notes to the consolidated financial statements.

## 3.4. Consolidation of equity and calculation of non-controlling interest

The share capital of the Group is equal to the share capital of the parent company.

Other equity items of the Group are determined by adding the equity balances of subsidiaries included in the consolidated financial statements in the proportion reflecting the parent company's share in the subsidiaries' equity as at the end of the reporting period to the corresponding positions of the equity of the parent company.

Only equity of subsidiaries arising after the parent company obtained control of the subsidiary is included in the equity of the Group.

Non-controlling interests in subsidiaries included in the consolidated financial statements were determined based on the non-controlling interests' share in the subsidiaries' equity as at the end of the reporting period.



## 3.5. Consolidation eliminations

Intercompany balances within the Group were eliminated on consolidation.

Sales between entities and other intercompany operating revenues and expenses and financial revenues and expenses were eliminated on consolidation.

The consolidation eliminations were based on the accounting records of Polski Koncern Naftowy ORLEN Spółka Akcyjna or its subsidiaries and agreed with information received from the subsidiaries.

On behalf of KPMG Audyt Sp. z o.o. Registration No. 458 ul. Inflancka 4A 00-189 Warsaw

Zbigniew Libera Key Certified Auditor Registration No. 90047 Director

14 March 2017

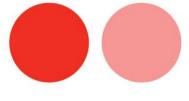
## SELECTED FINANCIAL DATA OF THE ORLEN GROUP

	PLN n	nillion	EUR	million
	2016	2015	2016	2015
Sales revenues	79 553	88 336	18 181	20 188
Profit from operations increased by depreciation and amortisation (EBITDA)	9 642	6 235	2 204	1 425
EBITDA before net impairment allowances *	9 497	7 228	2 170	1 652
Profit from operations (EBIT)	7 532	4 340	1 721	992
Profit before tax	6 887	3 698	1 574	845
Net profit attributable to equity owners of the parent	5 261	2 837	1 202	648
Net profit	5 740	3 233	1 312	739
Total net comprehensive income attributable to equity owners of the parent	5 445	4 107	1 244	939
Total net comprehensive income	5 957	4 563	1 361	1 043
Net cash from operating activities	9 331	5 354	2 133	1 224
Net cash (used) in investing activities	(4 436)	(4 096)	(1 014)	(936)
Net cash (used) in financing activities	(2 210)	(2 866)	(505)	(655)
Net increase/(decrease) in cash and cash	2 685	(1 608)	614	(367)
equivalents	2 005	(1000)	014	(307)
Net profit and diluted net profit per share attributable to equity owners of the parent (in				
PLN/EUR per share)	12.30	6.63	2.81	1.52
	31/12/2016	31/12/2015	31/12/2016	31/12/2015
Non-current assets	30 321	27 362	6 854	6 185
Current assets	25 238	20 775	5 705	4 696
Total assets	55 559	48 137	12 559	10 881
Share capital	1 058	1 058	239	239
Equity attributable to owners of the parent	26 763	22 173	6 050	5 012
Total equity	29 285	24 244	6 620	5 480
Non-current liabilities	9 652	10 227	2 182	2 312
Current liabilities	16 622	13 666	3 757	3 089
Number of shares	427 709 061	427 709 061	427 709 061	427 709 061
Carrying amount and diluted carrying amount per share attributable to equity owners of the				
parent (in PLN/EUR per share)	62.57	51.84	14.14	11.72

The above data for 2016 and 2015 was translated into EUR using the following exchange rates:
- items in the statement of profit or loss and other comprehensive income and the statement of cash flows - by the arithmetic average of average exchange rates published by the National Bank of Poland as of the last day of the month during the reporting period: from 1 January to 31 December 2016 – 4.3757 EUR/PLN;
- items of assets, equity and liabilities – by the average exchange rate published by the National Bank of Poland as at 31 December 2016 –4.4240 EUR/PLN.

\* Net impairment allowances of property, plant and equipment and intangible assets in 2016: PLN 145 million – mainly PLN 315 million Unipetrol Group, PLN (73) million ORLEN Upstream Group, PLN (55) million ORLEN Oil, in 2015: PLN (993) million mainly - PLN (852) million ORLEN Upstream Group and PLN (93) million Unipetrol Group;





2016

## CONSOLIDATED FINANCIAL STATEMENTS OF ORLEN GROUP FOR THE YEAR ENDED 31 DECEMBER 2016

PREPARED IN ACCORDANCE WITH INTERNATIONAL FINANCIAL REPORTING STANDARDS AS ADOPTED BY EUROPEAN UNION

## **SELECTED DATA FOR 2016**

## **ORLEN GROUP**

- EBITDA PLN 9,642 million
- EBITDA before net impairment allowances\* PLN 9,497 million
- EBIT PLN 7,532 million
- Net profit PLN 5,740 million
- Assets PLN 55,559 million
- CAPEX PLN 4,673 million

- Total equity PLN 29,285 million
- Number of shares 427,709,061
- Total equity attributable to equity owners of the parent PLN 62.57 per share
- Dividend payment: PLN 0.9 billion / PLN 2 per share
- Net debt PLN 3,363 million
- Net financial gearing 11.5%

## DOWNSTREAM



- Sales revenues PLN 49,202 million
- EBITDA PLN 8,410 million
- EBIT PLN 7,093 million
- Assets PLN 38,770 million
- CAPEX PLN 3,533 million

## RETAIL



- Sales revenues PLN 29.841 million
- EBITDA PLN 1,794 million
- EBIT PLN 1,402 million
- Assets PLN 6,139 million
- CAPEX PLN 479 million

## **UPSTREAM**



- Sales revenues PLN 442 million
- EBITDA PLN 182 million
- EBIT PLN (119) million
- Assets PLN 3,840 million
- CAPEX PLN 525 million



EBIT - profit/(loss) from operations

EBITDA - profit/(loss) from operations increased by depreciation and amortization CAPEX - increase of property, plant and equipment, intangible assets, investment property and perpetual usufruct of land together with the capitalisation of borrowing costs Net debt: non-current loans, borrowings and bonds + current loans and borrowings – cash and cash equivalents Net financial gearing: net debt/equity (calculated as at the end of the period) x 100%

\*net impairment allowances - reversal/recognition of impairment allowances of property, plant and equipment and intangible assets

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## 1. CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

	2016	2015	change (y/	
NOTE			value	
Sales revenues 6.2, 7.1.1, 7.1.2	79 553	88 336	(8 783)	(9.
revenues from sales of finished goods and services	57 775	68 768	(10 993)	(16
revenues from sales of merchandise and raw materials Cost of sales 7.1.3	21 778	19 568	2 210	1 12
Cost of sales 7.1.3 cost of finished goods and services sold	(68 223) (47 976)	(77 792)	9 569 11 513	1
cost of merchandise and raw materials sold	(20 247)	(59 489) (18 303)	(1 944)	(10
Gross profit on sales	11 330	10 544	786	7
Distribution expenses	(4 125)	(3 971)	(154)	(3
Administrative expenses	(1 426)	(1 552)	126	(0
Other operating income 7.1.4	2 163	420	1 743	41
Other operating expenses 7.1.5	(707)	(1 354)	647	4
Share in profit from investments accounted for under equity method 9.3	297	253	44	1
Profit from operations	7 532	4 340	3 192	73
Finance income 7.1.6.1	248	390	(142)	(36
Finance costs 7.1.6.2	(893)	(1 032)	139	13
Net finance income and costs	(645)	(642)	(3)	(0.
Profit before tax	6 887	3 698	3 189	86
Fax expense 7.1.7	(1 147)	(465)	(682)	(146.
current tax	(751)	(310)	(441)	(142
deferred tax	(396)	(155)	(241)	(155
Other comprehensive income:	5 740	3 233	2 507	77
Net profit Other comprehensive income: which will not be reclassified into profit or loss			2 507	77
Net profit Other comprehensive income: which will not be reclassified into profit or loss fair value measurement of investment property	5 740	3 233		77
Net profit Other comprehensive income: which will not be reclassified into profit or loss	5 740	3 233	(7)	77
Net profit Other comprehensive income: which will not be reclassified into profit or loss fair value measurement of investment property as at the date of reclassification	<b>5 740</b> (4) 6	3 233	<b>(7)</b> 6	77
Net profit Other comprehensive income: which will not be reclassified into profit or loss fair value measurement of investment property as at the date of reclassification actuarial gains and losses	<b>5 740</b> (4) 6	3 233 3 4	(7) 6 (14)	
Net profit Dther comprehensive income: which will not be reclassified into profit or loss fair value measurement of investment property as at the date of reclassification actuarial gains and losses deferred tax	<b>5 740</b> (4) 6 (10)	3 233 3 - 4 (1)	(7) 6 (14) 1	
Net profit  Other comprehensive income: which will not be reclassified into profit or loss fair value measurement of investment property as at the date of reclassification actuarial gains and losses deferred tax which will be reclassified into profit or loss hedging instruments exchange differences on translating foreign operations	<b>(4)</b> 6 (10) - <b>221</b> (396) 542	3 233 3 4 (1) 1 327 1 530 88	(7) 6 (14) 1 (1 106) (1 926) 454	(83.
Net profit Other comprehensive income: which will not be reclassified into profit or loss fair value measurement of investment property as at the date of reclassification actuarial gains and losses deferred tax which will be reclassified into profit or loss hedging instruments 7.2.7.3	<b>(4)</b> 6 (10) - <b>221</b> (396) 542 75	3 233 3 - 4 (1) 1 327 1 530 88 (291)	(7) 6 (14) 1 (1 106) (1 926) 454 366	<b>(83</b> . 51.
Net profit  Other comprehensive income: which will not be reclassified into profit or loss fair value measurement of investment property as at the date of reclassification actuarial gains and losses deferred tax which will be reclassified into profit or loss hedging instruments exchange differences on translating foreign operations	<b>(4)</b> 6 (10) - <b>221</b> (396) 542	3 233 3 4 (1) 1 327 1 530 88	(7) 6 (14) 1 (1 106) (1 926) 454	<b>(83</b> . 51.
Net profit  Other comprehensive income: which will not be reclassified into profit or loss fair value measurement of investment property as at the date of reclassification actuarial gains and losses deferred tax which will be reclassified into profit or loss hedging instruments exchange differences on translating foreign operations	<b>(4)</b> 6 (10) - <b>221</b> (396) 542 75	3 233 3 - 4 (1) 1 327 1 530 88 (291)	(7) 6 (14) 1 (1 106) (1 926) 454 366	(83. 51) (83. 30)
Net profit         Other comprehensive income:         which will not be reclassified into profit or loss         fair value measurement of investment property         as at the date of reclassification         actuarial gains and losses         deferred tax         which will be reclassified into profit or loss         hedging instruments       7.2.7.3         exchange differences on translating foreign operations       7.1.7.2, 7.2.7.3         Total net comprehensive income	5 740 (4) 6 (10) 221 (396) 542 75 217 5 957	3 233 3 4 (1) 1 327 1 530 88 (291) 1 330 4 563	(7) 6 (14) 1 (1 106) (1 926) 454 366 (1 113) 1 394	(83. 51 (83. 30
Net profit Other comprehensive income: which will not be reclassified into profit or loss fair value measurement of investment property as at the date of reclassification actuarial gains and losses deferred tax which will be reclassified into profit or loss hedging instruments r.2.7.3 exchange differences on translating foreign operations deferred tax T.1.7.2, 7.2.7.3 Fotal net comprehensive income Net profit attributable to	5 740 (4) 6 (10) - 221 (396) 542 75 217 5 957 5 740	3 233 3 4 (1) 1 327 1 530 88 (291) 1 330 4 563 3 233	(7) 6 (14) 1 (1 106) (1 926) 454 366 (1 113) 1 394 2 507	(83 51 (83 30 77
Net profit         Other comprehensive income:         which will not be reclassified into profit or loss         fair value measurement of investment property         as at the date of reclassification         actuarial gains and losses         deferred tax         which will be reclassified into profit or loss         hedging instruments       7.2.7.3         exchange differences on translating foreign operations         deferred tax       7.1.7.2, 7.2.7.3         Total net comprehensive income         Net profit attributable to         equity owners of the parent	5 740 (4) 6 (10) - 221 (396) 542 75 217 5 957 5 740 5 261	3 233 3 4 (1) 1 327 1 530 88 (291) 1 330 4 563 3 233 2 837	(7) 6 (14) 1 (1 106) (1 926) 454 366 (1 113) 1 394 2 507 2 424	(83. 51 (83. 30 77 8
Net profit         Other comprehensive income:         which will not be reclassified into profit or loss         fair value measurement of investment property         as at the date of reclassification         actuarial gains and losses         deferred tax         which will be reclassified into profit or loss         hedging instruments       7.27.3         exchange differences on translating foreign operations         deferred tax         Total net comprehensive income         Net profit attributable to         equity owners of the parent         non-controlling interest	5 740 (4) 6 (10) - 221 (396) 542 75 217 5 957 5 740 5 261 479	3 233 3 4 (1) 1 327 1 530 88 (291) 1 330 4 563 3 233 2 837 396	(7) 6 (14) 1 (1 106) (1 926) 454 366 (1 113) 1 394 2 507 2 424 83	(83 51 (83 30 77 8 2
Net profit         Other comprehensive income:         which will not be reclassified into profit or loss         fair value measurement of investment property         as at the date of reclassification         actuarial gains and losses         deferred tax         which will be reclassified into profit or loss         hedging instruments       7.27.3         exchange differences on translating foreign operations         deferred tax         Total net comprehensive income         Net profit attributable to         equity owners of the parent         non-controlling interest         Fotal net comprehensive income attributable to	5 740 (4) 6 (10) 221 (396) 542 75 217 5 957 5 740 5 261 479 5 957	3 233 3 4 (1) 1 327 1 530 88 (291) 1 330 4 563 3 233 2 837 396 4 563	(7) 6 (14) 1 (1 106) (1 926) 454 366 (1 113) 1 394 2 507 2 424 83 1 394	(83 51 (83 30 77 8 2 30
Vet profit         Dther comprehensive income:         vhich will not be reclassified into profit or loss         fair value measurement of investment property         as at the date of reclassification         actuarial gains and losses         deferred tax         vhich will be reclassified into profit or loss         hedging instruments       7.2.7.3         exchange differences on translating foreign operations       7.1.7.2, 7.2.7.3         Fotal net comprehensive income         Vet profit attributable to         equity owners of the parent         non-controlling interest         Fotal net comprehensive income attributable to         equity owners of the parent         non-controlling interest	5 740 (4) 6 (10) - 221 (396) 542 75 217 5 957 5 740 5 261 479 5 957 5 445	3 233 3 4 (1) 1 327 1 530 88 (291) 1 330 4 563 2 837 396 4 563 4 107	(7) 6 (14) 1 (1 106) (1 926) 454 366 (1 113) 1 394 2 507 2 424 83 1 394 1 338	(83 51 (83 3) 77 8 2 30 3 3 3 3
Net profit         Other comprehensive income:         which will not be reclassified into profit or loss         fair value measurement of investment property         as at the date of reclassification         actuarial gains and losses         deferred tax         which will be reclassified into profit or loss         hedging instruments       7.27.3         exchange differences on translating foreign operations         deferred tax         Total net comprehensive income         Net profit attributable to         equity owners of the parent         non-controlling interest         Fotal net comprehensive income attributable to	5 740 (4) 6 (10) 221 (396) 542 75 217 5 957 5 740 5 261 479 5 957	3 233 3 4 (1) 1 327 1 530 88 (291) 1 330 4 563 3 233 2 837 396 4 563	(7) 6 (14) 1 (1 106) (1 926) 454 366 (1 113) 1 394 2 507 2 424 83 1 394	(83 51 (83 3( 77 8 2 3( 3) 3 3 3 3
Net profit         Dther comprehensive income:         which will not be reclassified into profit or loss         fair value measurement of investment property         as at the date of reclassification         actuarial gains and losses         deferred tax         which will be reclassified into profit or loss         hedging instruments       7.2.7.3         exchange differences on translating foreign operations         deferred tax       7.1.7.2, 7.2.7.3         Total net comprehensive income         Net profit attributable to         equity owners of the parent         non-controlling interest         Fotal net comprehensive income attributable to         equity owners of the parent         non-controlling interest	5 740 (4) 6 (10) - 221 (396) 542 75 217 5 957 5 740 5 261 479 5 957 5 445	3 233 3 4 (1) 1 327 1 530 88 (291) 1 330 4 563 2 837 396 4 563 4 107	(7) 6 (14) 1 (1 106) (1 926) 454 366 (1 113) 1 394 2 507 2 424 83 1 394 1 338	(83. 51 (83.

Total sales volume amounted to 39.5 million tons in 2016 and was higher by 2.0% (y/y). Lower sales revenues by (9.9)% (y/y) resulted from cheaper crude oil and the effect listing of the Group products.

Positive change in the balance of other net operating activities amounted to PLN 1,456 million and mainly related to the recognition of compensation from insurers due to the steam cracker unit accident in Unipetrol Group in the amount of PLN 1,280 million, and positive impact of net reversal of impairment allowances of property, plant and equipment and intangible assets in the amount PLN 145 million.

Detailed information is presented in note 7.1.4, 7.1.5 and 7.2.4.

Net finance costs for 2016 amounted to PLN (645) million and include mainly PLN (542) million net foreign exchange losses. Detailed information is presented in <u>note 7.1.6</u>.

### 2. CONSOLIDATED STATEMENT OF FINANCIAL POSITION

2. CONSOLIDATED STATEMENT OF FINANCIAL POSITIO		31/12/2016	31/12/2015	change (y/y	
100770	NOTE			value	%
ASSETS					
Non-current assets		07 07 4	0.4 500	0.405	
Property, plant and equipment	7.2.1	27 671	24 536	3 135	12.8
Intangible assets	7.2.2	1 377	1 298	79	6.1
Investments accounted for under equity method	9.3	763	774	(11)	(1.4)
Deferred tax assets	7.1.7.2 7.2.8	167 66	365 135	(198)	(54.2)
Embedded derivatives and hedging instruments	7.2.8	277	254	(69) 23	(51.1) 9.1
Other assets	1.2.0	30 321	<u> </u>	23	10.8
Current assets					
Inventories	7.2.5.1	11 182	10 715	467	4.4
Trade and other receivables	7.2.5.2	8 553	6 597	1 956	29.7
Current tax assets		121	44	77	175.0
Cash and cash equivalents		5 072	2 348	2 724	116.0
Non-current assets classified as held for sale		61	97	(36)	(37.1)
Embedded derivatives and hedging instruments	7.2.8	97	806	(709)	(88.0)
Other assets	7.2.8	152	168	(16)	(9.5)
		25 238	20 775	4 463	21.5
Total assets		55 559	48 137	7 422	15.4
EQUITY AND LIABILITIES					
EQUITY					
Share capital	7.2.7.1	1 058	1 058	_	
Share premium	7.2.7.2	1 227	1 227		
Hedging reserve	7.2.7.3	(355)	(80)	(275)	343.8
Revaluation reserve	1121110	5	(00)	(2.10)	
Exchange differences on translating foreign operations		946	537	409	76.2
Retained earnings	7.2.7.4	23 882	19 431	4 451	22.9
Equity attributable to owners of the parent		26 763	22 173	4 590	20.7
Non-controlling interests	7.2.7.5	2 522	2 071	451	21.8
Total equity		29 285	24 244	5 041	20.8
LIABILITIES Non-current liabilities					
Loans, borrowings and bonds	7.2.6.1	7 446	8 131	(685)	(8.4)
Provisions	7.2.9	828	710	118	16.6
Deferred tax liabilities	7.1.7.2	809	674	135	20.0
Embedded derivatives and hedging instruments	7.2.8	280	239	41	17.2
Other liabilities	7.2.8	289	473	(184)	(38.9)
		9 652	10 227	(575)	(5.6)
Current liabilities					
Trade and other liabilities	7.2.5.3	13 591	10 658	2 933	27.5
Loans and borrowings	7.2.6.1	989	1 027	(38)	(3.7)
Provisions	7.2.9	666	749	(83)	(11.1)
Current tax liabilities		659	162	497	306.8
Embedded derivatives and hedging instruments	7.2.8	403	767	(364)	(47.5)
Other liabilities	7.2.8	314	303	11	3.6
		16 622	13 666	2 956	21.6
Total liabilities		26 274	23 893	2 381	10.0
		55 559	48 137	7 422	15.4

As at 31 December 2016, the value of non-current assets was higher by PLN 2,959 million (y/y) mainly due to increase of property, plant and equipment and intangible assets in the amount of PLN 3,214 million, which includes mainly investment expenditures in the amount of PLN 4,673 million, depreciation and amortization in the amount of PLN (2,110) million, the positive impact of decrease of net impairment allowances of assets in the amount of PLN 145 million and exchange differences from recalculation of balances of foreign entities of the Group in the amount of PLN 481 million.

As at 31 December 2016 current assets increased by PLN 4,463 million (y/y), mainly as result of an increase in the balance of cash and cash equivalents by PLN 2,724 million as well as trade and other receivables in the amount of PLN

1,956 million and changes by PLN (709) million of valuation of cash flows hedging instruments.

As at 31 December 2016, total equity amounted to PLN 29,285 million and was higher by PLN 5,041 million (y/y), mainly as a result of net profit for 2016 in the amount of PLN 5,740 million and the distribution of the net profit for 2015, and the allocation of the dividend for the shareholders of the Parent Company in the amount of PLN (855) million.

As at 31 December 2016, net debt of ORLEN Group amounted to PLN 3,363 million and was lower by PLN (3,447) (y/y). Detailed information included in note 7.2.6.

## 3. CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

	Equity attributable to owners of the parent							
	Share capital and share premium	Hedging reserve	Revaluation reserve	Exchange differences on translating foreign operations	Retained earnings	Total	Non-controlling interests	Total equity
NOTE	7.2.7.1, 7.2.7.2	7.2.7.3			7.2.7.4		7.2.7.5	
01/01/2016	2 285	(80)	-	537	19 431	22 173	2 071	24 244
Net profit	-	-	-	-	5 261	5 261	479	5 740
Items of other comprehensive income	-	(275)	5	463	(9)	184	33	217
Total net comprehensive income	•	(275)	5	463	5 252	5 445	512	5 957
Change in structure	-	-	-	(54)	54	-	(1)	(1)
purchase of non-controlling interest	-	-	-	-	(1)	(1)	(1)	(2)
merger/sale of related parties	-	-	-	(54)	55	1		1
Dividends	-	-	-	-	(855)	(855)	(60)	(915)
31/12/2016	2 285	(355)	5	946	23 882	26 763	2 522	29 285
01/01/2015	2 285	(1 319)	-	509	17 296	18 771	1 615	20 386
Net profit	-	-	-	-	2 837	2 837	396	3 233
Items of other comprehensive income	-	1 239	-	28	3	1 270	60	1 330
Total net comprehensive income	-	1 239	-	28	2 840	4 107	456	4 563
Change in the structure of non- controlling interest	-	-	-	-	1	1	-	1
Dividends	-	-	-	-	(706)	(706)	-	(706)
31/12/2015	2 285	(80)	-	537	19 431	22 173	2 071	24 244

## 4. CONSOLIDATED STATEMENT OF CASH FLOWS

		2016	2015	change (y/	
	NOTE			value	%
Cash flows from operating activities					
Profit before tax		6 887	3 698	3 189	86.2
Adjustments for:					
Share in profit from investments accounted for under	9.3	(297)	(253)	(44)	(17.4
equity method	7.4.0			. ,	•
Depreciation and amortisation	7.1.3	2 110	1 895	215	11.4
Foreign exchange loss	7.1.6.4	287	24	263	1 095.
Interest, net	7.1.6.3	219	199	20	10.
Dividends		(5)	(2)	(3)	(150.0
(Profit)/Loss on investing activities, incl.:		(299)	1 106	(1 405)	
recognition/(reversal) of impairment allowances of property, plant and equipment and intangible assets	7.1.4, 7.1.5, 7.2.4	(145)	993	(1 138)	
Change in provisions	7.2.9	330	463	(133)	(28.7
Change in working capital	7.2.5	816	(1 320)	2 136	(20.7
inventories	7.2.0	(287)	(655)	368	56.
receivables		(1 679)	1 258	(2 937)	00.
liabilities		2 782	(1 923)	4 705	
Other adjustments, incl.:		(381)	(252)	(129)	(51.2
compensation from insurers due to Unipetrol Group	7.2.5.2	(222)	-	(222)	( <sup>2</sup>
Income tax (paid)	7.1.7.3	(336)	(204)	(132)	(64.7
Net cash from operating activities		9 331	5 354	3 977	74.
Cash flows from investing activities					
Acquisition of property, plant and equipment,					
intangible assets and perpetual usufruct of land		(5 033)	(3 079)	(1 954)	(63.5
Acquisition of shares adjusted for received cash		(2)	(1 195)	1 193	99.8
Disposal of property, plant and equipment,					
intangible assets and perpetual usufruct of land		141	131	10	7.
Sale of subsidiary		77	-	77	
Dividends received		317	192	125	65.1
Other		64	(145)	209	
Net cash (used) in investing activities		(4 436)	(4 096)	(340)	(8.3
Cash flows from financing activities					
Proceeds from loans and borrowings received		3 586	1 896	1 690	89.1
Bonds issued		3 258	1000	3 258	00.
Repayments of loans and borrowings		(7 943)	(3 771)	(4 172)	(110.6
Interest paid	7.1.6.3	(223)	(258)	35	13.0
•	7.1.0.3	· · ·	. ,		
Dividends paid equity owners of the parent	7.2.7.7	(912) (855)	(706) (706)	(206) (149)	(29.2 (21.1
non-controlling interest	1.2.1.1	(57)	(700)	(57)	(21.1
Payments of liabilities under finance lease agreements		(28)	(28)	-	
Other		52	(20)	51	5 100.0
		(2 210)	(2 866)	656	22.9
Net cash (used) in financing activities			/		
Net cash (used) in financing activities Net increase/(decrease) in cash and cash equivalents		2 685	(1.608)	4 293	
· · · ·		<b>2 685</b> 39	<b>(1 608)</b> 19	<b>4 293</b>	105 :
Net increase/(decrease) in cash and cash equivalents		<b>2 685</b> 39 2 348	(1 608) 19 3 937	4 293 20 (1 589)	105.3

Proceeds of net cash from operating activities for 2016 amounted to PLN 9,331 million and comprised mainly profit from operations increased by depreciation and amortisation in the amount of PLN 9,642 million and the positive impact of decrease in a net working capital of PLN 816 million decreased by share in financial result from investments accounted for under equity method of PLN (297) million, impairment allowance of property, plant and equipment and intangible assets in the amount of PLN (145) million and paid income taxes in the amount of PLN (336) million and other adjustments in the amount of PLN (381) million.

Net cash used in investing activities for 2016 amounted to PLN (4,436) million and comprised mainly net expenses for the acquisition of property, plant and equipment, intangible assets and perpetual usufruct of land of PLN (4,892) million and inflows from the received dividends and sale of ORLEN Transport in the amount of PLN 317 million and of PLN 74 million, respectively.

Net expenses of cash used in financing activities for 2016 amounted to PLN (2,210) million and comprised mainly the net repayment of loans and borrowings of PLN (4,357) million, proceeds of the bond issue in the amount of PLN 3,258 million, paid dividends in the amount of PLN (912) million including amount for equity owners of the Parent Company of PLN (855) million and interest paid in the amount of PLN (223) million.

### 5. BASIC INFORMATION

5.1. Principal activity of the ORLEN Group

- 5.2. Principles of preparation of financial statements
- 5.3. Functional currency and presentation currency of financial statements and methods applied to translation of financial data for consolidation purposes

5.4. Accounting principles 5.5. Impact of IFRS amendments and interpretations on consolidated financial statements of the ORLEN Group

5.5. Impact of IFRS amendments and interpretations on consolidated financial statements of the ORLEN Group

### 5.1. PRINCIPAL ACTIVITY OF THE ORLEN GROUP

Polski Koncern Naftowy ORLEN Spółka Akcyjna seated in Płock, 7 Chemików Street ("Company", "PKN ORLEN", "Issuer", "Parent Company") was founded by incorporation of Petrochemia Płock S.A. with Centrala Produktów Naftowych S.A., on 7 September 1999.

PKN ORLEN along with the entities forming the Capital Group of Polski Koncern Naftowy ORLEN S.A. ("ORLEN Group", "Group") is one of the biggest and most modern fuel and power companies in Central Europe, operating on the Polish, Lithuanian, Czech and German market. The Group also possesses entities located in Malta, Sweden, the Netherlands, Slovakia, Hungary, Estonia, Latvia, USA and Canada.

The core business of the ORLEN Group is crude oil processing, production of fuel, petrochemical and chemical goods, as well as, retail and wholesale of fuel products. The ORLEN Group conducts also exploration, recognition and extraction of hydrocarbons, and generates, distributes and trades of electricity and heat. The activity of the ORLEN Group companies is also service-related activity: storage of crude oil and fuels, transportation, maintenance and overhaul services, laboratory, security, design, administrative, insurance and financial services. Additional information is presented in note 9.1.

Since 26 November 1999 PKN ORLEN shares are quoted on the main market of the Warsaw Stock Exchange (WSE) in the continuous trading system. One of the subsidiaries of PKN ORLEN – Unipetrol a.s. is also present on the capital market. The shares are listed on the Stock Exchange in Prague.

#### 5.2. PRINCIPLES OF PREPARATION OF FINANCIAL STATEMENTS

The consolidated financial statements have been prepared in accordance with accounting principles contained in the International Financial Reporting Standards (IFRS), comprising International Accounting Standards (IAS) as well as Interpretations of Standing Interpretation Committee (SIC) and the International Financial Reporting Standards Interpretations Committee (IFRIC), which were adopted by the European Union (EU) and entered in force till the end 2016. The Group adopted all IASs and IFRSs in accordance with their effective date.

The consolidated financial statements have been prepared on a historical cost basis, except derivatives, financial assets available for sale and investment properties, which have been measured at fair value. The foregoing financial statements have been prepared using the accrual basis of accounting except from the consolidated financial statement of cash flows.

The scope of consolidated financial statements is compliant with Minister of Finance Regulation of 19 February 2009 on current and periodic information provided by issuers of securities and conditions for recognition as equivalent information required by the law of a non-Member state (uniform text: Official Journal 2014, item 133, as amended Official Journal 2016, item 860) ("Regulation")and covers the annual period from 1 January to 31 December 2016 and the comparative period from 1 January to 31 December 2015.

Presented consolidated financial statements present a true and fair view of the ORLEN Group's financial position as at 31 December 2016, results of its operations and cash flows for the year ended 31 December 2016.

The consolidated financial statements have been prepared assuming that the ORLEN Group will continue to operate as a going concern in the foreseeable future. As at the date of approval of these consolidated financial statements, there is no evidence indicating that the ORLEN Group will not be able to continue its operations as a going concern. Duration of the Parent Company and the entities comprising the ORLEN Group is unlimited.

#### 5.3. FUNCTIONAL CURRENCY AND PRESENTATION CURRENCY OF FINANCIAL STATEMENTS AND METHODS APPLIED TO TRANSLATION OF FINANCIAL DATA FOR CONSOLIDATION PURPOSES

The functional currency of the Parent Company and presentation currency of the foregoing consolidated financial statements is Polish Zloty (PLN). The data in the consolidated financial statements is presented in PLN million, unless is stated differently.

Translation in to PLN of financial statements of foreign entities, for consolidation purposes:

particular assets and liabilities – at spot exchange rate as at the end of the reporting period,

- items in the statement of profit or loss and other comprehensive income and the statement of cash flows are translated at the average exchange rate.

Foreign exchange differences resulting from the above recalculations are recognized in equity as foreign exchange differences on translating foreign operations.

CURRENCY	Average exc for the repor		Exchange rate as at the end of the reporting period		
	2016	2015	31/12/2016	31/12/2015	
EUR/PLN	4.3648	4.1841	4.4240	4.2615	
USD/PLN	3.9459	3.7717	4.1793	3.9011	
CZK/PLN	0.1614	0.1534	0.1637	0.1577	
CAD/PLN	2.9772	2.9532	3.0995	2.8102	

#### 5.4. ACCOUNTING PRINCIPLES

Significant accounting principles and significant values based on judgements and estimates are presented as a part of the specific explanatory notes to the consolidated financial statements. The Group applied the accounting principles consistently to all presented reporting periods.

The preparation of consolidated financial statements in accordance with IFRSs requires that the Management Board makes expert estimates and assumptions that affect the presented amounts. The estimates and related assumptions are based on historical expertise and other factors regarded as reliable in given circumstances and their effects provide grounds for professional judgment of the carrying amount of assets and liabilities which is not based directly on any other factors.

In the matters of considerable weight, the Management Board might base its judgments, estimates or assumptions on opinions of independent experts. The judgments, estimates and related assumptions are verified on a regular basis.

Selected accounting principles	Note	Page
Dperating segments	6.1.	<u>10</u>
ales revenues	7.1.1	11
Costs	7.1.3	12
ncome tax expenses (tax expense)	7.1.7	13
Property, plant and equipment	7.2.1	<u>14-15</u>
xploration and extraction of mineral resources	7.2.1	14-15
ntangible assets	7.2.2	10 11 12 13 14-15 14-15 16 17-18 20 21 22 22 22 22 24 27-28 28-29 30 37 38 42
mpairment of property, plant and equipment and intangible assets	7.2.4	17-18
nventories	7.2.5.1	<u>20</u>
rade and other receivables	7.2.5.2	<u>21</u>
rade and other liabilities	7.2.5.3	22
let debt	7.2.6	22
iquity	7.2.7	<u>24</u>
Irovisions	7.2.9	<u>27-28</u>
inancial instruments	7.3	<u>28-29</u>
air value measurement	7.3	<u>30</u>
ease	7.4.2	<u>37</u>
Contingent assets and liabilities	7.4.4	38
nvestments in subsidiaries, jointly controlled entities and associates	9.1	42

## 5.5. IMPACT OF IFRS AMENDMENTS ON CONSOLIDATED FINANCIAL STATEMENTS OF THE ORLEN GROUP

IFRSs announced and adopted by the European Union, not yet effective

## IFRS 9 - Financial instruments

The Group has performed an initial analysis of the impact of the Expected Credit Loss model for credit risk assessment for undue receivables on 31 December 2016, and for historical data. Based on the results of the analysis, Group does not expect that the new standard will have a significant impact on its consolidated financial statements.

#### IFRS 15 - Revenue from contracts with customers

Group started the assessment process of the impact of the application of major assumptions of IFRS 15 "Revenue from contracts with customers" on the consolidated financial statements and has performed the initial analysis of a five-step model to determine when to recognize revenue. The model specifies that revenue should be recognized when (or as) an entity transfers control of goods or services to a customer at the amount to which the entity expects to be entitled. Depending on whether certain criteria are met, revenue is recognized over time, in a manner that depicts the entity's performance or at a point in time, when control of the goods or services is transferred to the customer.

Initial analysis aim to identify significant contracts concluded in the framework of: wholesale, retail and mining activities, which could potentially contain elements affecting the timing of revenue recognition and their amount in the reporting period, in particular with regard to: long term contracts, multiple-element and combining contracts, significant elements of financing, variable consideration, discounts, applied penalties or bonuses in contracts.

In 2017 analysis of the impact of IFRS 15 will be extended to other types of contracts. The Group expects that the results of the full analysis of the impact of IFRS 15 on the Group data will be available in the second half in 2017.

Group, based on performed initial analysis, assesses that at initial application, i.e. for a period beginning on 1st January 2018, IFRS 15 may not have a significant impact on timing and amount of revenue recognized by the Group in its consolidated financial statements.

Standards adopted by International Accounting Standards Board (IASB), waiting for approval of EU

#### IFRS 16 - Lease

Bringing operating leases in consolidated statement of financial position will result in recognizing a new asset – the right to use the underlying asset – and a new liability – the obligation to make lease payments. The right-of-use asset will be depreciated and the liability accrues interest.

It is expected that the standard, when initially applied, may have a significant impact on the amounts of non-current assets and lease liabilities reported in the Group's financial statements, in particular in respect of operating lease arrangements (rental) related mainly to petrol stations, means of transport and computer equipment as presented in the note 7.4.2.1. As at 31 December 2016 the Group does not have a reliable estimates of the influence of IFRS 16 on the consolidated financial statements, as it is during its analysis.

The Group intends to adopt new standards IFRSs listed above that are published by the International Accounting Standards Board, but not effective as at the date of publication of these financial statements, in accordance with their effective date.

## Standards and Interpretations adopted by International Accounting Standards Board (IASB), waiting for approval of EU, which according to expectations will have no material impact on consolidated financial statements of the ORLEN Group

- Amendments to IFRS 2 Share-based Payment
- Amendments to IFRS 4 Insurance contracts
- Amendments to IFRS 10 Consolidated Financial Statements and IAS 28 Investments in Associates: Sale or Contribution of Assets between an Investor and its Associate or Joint Venture
- IFRS 14 Regulatory Deferral Accounts
- Amendments to IAS 7 Statement of Cash Flows Disclosure initiative
- Amendments to IAS 12 Income Taxes Recognition of Deferred Tax Assets for Unrealized Losses
- Amendments to IAS 40 Investment Property
- Amendments to IFRS 2014-2016
- IFRIC 22 Foreign Currency Transactions and Advance Consideration.

#### **SEGMENTS' DATA** 6.

6.1. Operating segments 6.2. Revenues, costs, financial results, investment expenditures

#### 6.1. OPERATING SEGMENTS

The operations of the Group is conducted in:

the Downstream segment, which includes integrated areas of refining, petrochemical production and sales and operations in the energy production activity, the Retail segment, which includes activity carried out at the petrol stations,

the Upstream segment, which include the activity related to exploration and extraction of mineral resources,

and Corporate Functions, which include activities related to management, administration and remaining activities not allocated to separate operating segments i.e. reconciling items.

#### SELECTED ACCOUNTING PRINCIPLES

Assessments of the segments' financial results and decisions on allocation of resources are performed mainly on the basis of EBITDA. EBITDA is one of a measure of the efficiency of the activity, which is not defined in IFRS. The ORLEN Group defines EBITDA as net profit/(loss) for the reporting period before taking into account the impact of the income tax, effects of financing activities and depreciation costs.

Revenues from transactions with external customers and transactions with other segments are carried out on an arm's length basis.

#### 6.2. REVENUES, COSTS, FINANCIAL RESULTS, INVESTMENTS EXPENDITURES

#### 2016

	NOTE	Downstream Segment	Retail Segment	Upstream Segment	Corporate Functions	Adjustments	Total
External revenues	7.1.1., 7.1.2	49 202	29 841	442	68	-	79 553
Inter-segment revenues		10 892	280	-	283	(11 455)	-
Sales revenues		60 094	30 121	442	351	(11 455)	79 553
Operating expenses		(54 939)	(28 681)	(537)	(1 072)	11 455	(73 774)
Other operating income	7.1.4	1 964	87	60	53	(1)	2 163
Other operating expenses	7.1.5	(324)	(125)	(83)	(176)	1	(707)
Net operating income and expenses, incl.: recognition/reversal of impairment allowances		1 640	(38)	(23)	(123)	-	1 456
of property, plant and equipment and intangible assets	7.2.4	218	(7)	(73)	7	-	145
Share in profit from investments accounted for under							
equity method	9.3	298	-	(1)	-		297
Profit/(Loss) from operations		7 093	1 402	(119)	(844)		7 532
Net finance income and costs	7.1.6.1, 7.1.6.2						(645)
Profit before tax							6 887
Tax expense							(1 147)
Net profit							5 740
Depreciation and amortisation	7.1.3	1 317	392	301	100	-	2 110
EBITDA		8 410	1 794	182	(744)	-	9 642
CAPEX		3 533	479	525	136	-	4 673

2015

	NOTE	Downstream Segment	Retail Segment	Upstream Segment	Corporate Functions	Adjustments	Total
External revenues	7.1.1., 7.1.2	56 987	31 052	215	82		88 336
Inter-segment revenues		12 624	70	-	206	(12 900)	-
Sales revenues		69 611	31 122	215	288	(12 900)	88 336
Operating expenses		(64 963)	(29 934)	(347)	(971)	12 900	(83 315)
Other operating income	7.1.4	276	50	3	91	-	420
Other operating expenses	7.1.5	(316)	(67)	(852)	(119)	-	(1 354)
Net operating income and expenses, incl.: recognition/reversal of impairment allowances		(40)	(17)	(849)	(28)	-	(934)
of property, plant and equipment and intangible assets	7.2.4	(136)	-	(852)	(5)	-	(993)
Share in profit from investments accounted for under							
equity method	9.3	253	-	-	-	-	253
Profit/(Loss) from operations		4 861	1 171	(981)	(711)		4 340
Net finance income and costs	7.1.6.1, 7.1.6.2						(642)
Profit before tax							3 698
Tax expense							(465)
Net profit							3 233
Depreciation and amortisation	7.1.3	1 269	368	173	85		1 895
EBITDA		6 130	1 539	(808)	(626)	-	6 235
CAPEX		2 242	448	288	205	-	3 183

CAPEX - increase of property, plant and equipment, intangible assets, investment property and perpetual usufruct of land together with the capitalisation of borrowing costs

#### EXPLANATORY NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 7.

- 7.1. Explanatory notes to the statement of profit or loss and other comprehensive income
- 7.2. Explanatory notes to the statement of pront of loss and other co 7.3. Explanatory notes to the statement of financial position 7.3. Explanatory notes to the financial instruments and financial risk
- 7.4. Other explanatory notes

#### 7.1. EXPLANATORY NOTES TO THE STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

#### 7.1.1. Sales revenues by assortments

#### SELECTED ACCOUNTING PRINCIPLES

#### Sales revenues

Sales revenues of goods and services are recognized, when the significant risks and rewards of ownership are transferred to the buyer and when the Group is no longer permanently involved in managing sold goods to the extent, that such function is usually carried out in relation to goods, to which there is right of ownership, and it does not exercise effective control over them. Revenues include received and due payments for delivered finished goods, merchandise, raw materials and services, decreased by the amount of any trade discounts and value added tax (VAT), excise tax and fuel charges. Revenues are measured at the fair value of the payment received or due. Revenues from the sale of finished goods, merchandise, raw materials and services are adjusted for profits or losses from settlement of cash flows hedging instruments related to the above mentioned revenues.

Revenues and costs from services, which beginning and end fall within different reporting periods, are recognized by reference to the stage of completion of the service, when the outcome of a contract can be valuated reliably, in other cases, revenues are recognized only to the extent of costs incurred to the date, but not higher than the costs that the Group expects to recover

	2016	2015	% shar	are	
			2016	2015	
Downstream Segment					
Medium distillates	22 714	25 062	28.6%	28.4%	
Light distillates	10 513	11 528	13.2%	13.1%	
Heavy fractions	3 786	4 610	4.8%	5.2%	
Monomers	2 025	2 978	2.5%	3.4%	
Polymers	1 135	2 341	1.4%	2.7%	
PTA	1 571	1 532	2.0%	1.7%	
Plastics	1 218	1 492	1.5%	1.7%	
Fertilizers	821	1 057	1.0%	1.2%	
Aromas	625	930	0.8%	1.1%	
Other	4 794	5 457	6.0%	6.0%	
	49 202	56 987	61.8%	64.5%	
Retail Segment					
Medium distillates	14 305	15 567	18.0%	17.6%	
Light distillates	11 838	12 084	14.9%	13.7%	
Other	3 698	3 401	4.6%	3.9%	
	29 841	31 052	37.5%	35.2%	
Upstream Segment					
Liquid hydrocarbons	270	147	0.4%	0.1%	
Natural Gas	172	68	0.2%	0.1%	
	442	215	0.6%	0.2%	
Corporate Functions	68	82	0.1%	0.1%	
	79 553	88 336	100.0%	100.0%	

In 2016 and 2015 no leading customers were identified in the Group, for which turnover individually would exceeded 10% of total revenues from sale of the ORLEN Group.

#### 7.1.2. Sales revenues geographical division - disclosed by customer's premises countries

	2016	2015	% share	•	
			2016	2015	
Poland	33 731	36 223	42.4%	41.0%	
Germany	15 781	17 073	19.8%	19.3%	
Czech Republic	9 861	10 671	12.4%	12.1%	
Lithuania, Latvia, Estonia	6 216	6 886	7.8%	7.8%	
Other countries	13 964	17 483	17.6%	19.8%	
	79 553	88 336	100.0%	100.0%	

The line "Other countries" comprises mainly sales to customers from Switzerland, Ukraine, Hungary, Slovakia, Great Britain, the Netherlands, Canada and Austria.

#### 7.1.3. Cost by nature

### SELECTED ACCOUNTING PRINCIPLES

#### Costs

Cost of sales include costs of finished goods, merchandise, services and raw materials sold and adjustments related to inventories written down to net realizable value. Costs are adjusted for profits or losses from settlement of cash flow hedging instruments related to the above mentioned costs. Distribution expenses include selling brokerage expenses, trading expenses, advertising and promotion expenses as well as distribution expenses. Administrative expenses include expenses relating to management and administration of the Group as a whole.

	2016	2015	% share	9
			2016	2015
Materials and energy	(43 512)	(54 542)	59.0%	65.8%
Cost of merchandise and raw materials sold	(20 247)	(18 303)	27.4%	22.1%
External services	(4 073)	(4 352)	5.5%	5.3%
Employee benefits, incl.:	(2 206)	(2 110)	3,0%	2.5%
payroll expenses	(1 740)	(1 700)	2.3%	2.0%
social security expenses	(377)	(354)	0.5%	0.3%
Depreciation and amortisation	(2 110)	(1 895)	2.9%	2.3%
Taxes and charges	(1 129)	(1 152)	1.5%	1.4%
Other	(529)	(481)	0.7%	0.6%
	(73 806)	(82 835)	100.0%	100.0%
Change in inventories	(232)	(693)		
Cost of products and services for own use	264	213		
Operating expenses	(73 774)	(83 315)		
Distribution expenses	4 125	3 971		
Administrative expenses	1 426	1 552		
Cost of sales	(68 223)	(77 792)		

#### 7.1.4. Other operating income

NOTE	2016	2015
Profit on sale of subsidiaries	63	-
Profit on sale of non-current non-financial assets	60	59
Reversal of provisions	25	32
Reversal of receivables impairment allowances	13	17
Reversal of impairment allowances of property, plant and equipment 7.2.4 and intangible assets	366	36
Penalties and compensation	1 449	74
Other	187	202
	2 163	420

The line penalties and compensation in 2016 includes mainly the amount of partial compensation received from insurers related to the steam cracker unit accident in Unipetrol Group in August 2015 in the amount of PLN 1,280 million. Detailed information is presented in note 7.4.4.

#### 7.1.5. Other operating expenses

	NOTE	2016	2015
Loss on sale of non-current non-financial assets		(39)	(38)
Recognition of provisions		(178)	(101)
Recognition of receivables impairment allowances		(25)	(47)
Recognition of impairment allowances of property, plant and equipment and intangible assets	7.2.4	(221)	(1 029)
Penalties, damages and compensation		(133)	(53)
Other		(111)	(86)
		(707)	(1 354)

#### Finance income and costs 7.1.6.

#### 7.1.6.1. Finance income

	2016	2015
Interest	59	82
Dividends	5	2
Settlement and valuation of derivative financial instruments	156	270
Reversal of receivables impairment allowances	2	7
Other	26	29
	248	390

### 7.1.6.2. Finance costs

Other	(35)	(59) (1 032)
Settlement and valuation of derivative financial instruments Recognition of receivables impairment allowances	(98) (2)	(447)
Foreign exchange loss, net	(542)	(317)
Interest	(216)	(205)
	2016	2015

# 7.1.6.3. Interest, net

	2016	2015
Finance income and costs of net interest presented in statement of profit or loss and other comprehensive income	(157)	(123)
Adjustments to net profit of net interest presented in statement of cash flows	219	199
interest paid concerning financing activities	223	258
accrued interest concerning investing and financing activities	(4)	(59)
Net interest concerning operating activities not correcting profit before tax	(62)	(76)

### 7.1.6.4. Foreign exchange loss

	2016	2015
Foreign exchange (loss) surplus presented in statement of profit or loss and other comprehensive income	(542)	(317)
Adjustments to net profit of foreign exchange differences presented in statement of cash flows realized foreign exchange differences concerning investing and financing activities	<b>287</b> 355	<b>24</b> 72
unrealized foreign exchange differences concerning investing and financing activities foreign exchange differences on cash	(59) (9)	(29) (19)
Foreign exchange differences concerning operating activities not correcting profit before tax	(255)	(293)

### 7.1.7. Tax expense

### SELECTED ACCOUNTING PRINCIPLES

#### Income tax expenses (tax expense)

Income tax expenses (tax expense) include of current tax and deferred tax. Current tax expense is determined in accordance with the relevant tax law based on the taxable profit for a given period and is recognized as a liability, in the amount which has not been paid or receivable, if the amount of the current and prior periods income tax paid exceeds the amount due the excess is recognized.

Deferred tax assets and liabilities are accounted as non-current and are not discounted and are offset on the level of particular financial statements of the Group companies when there is a legally enforceable right to set off the recognized amounts.

### 7.1.7.1. The differences between tax expense recognized in profit or loss and the amount calculated based on the rate from profit before tax

	2016	2015
Profit before tax	6 887	3 698
Tax expense for 2016 and 2015 by the valid tax rate in Poland (19%)	(1 309)	(703)
Differences between tax rates	22	57
Lithuania (15%)	39	34
Germany (29%)	(19)	(14)
Canada (26%)	2	37
Tax losses	213	135
Impairment allowances of property, plant and equipment and intangible assets	(90)	-
Investments accounted for under equity method	56	48
Other	(39)	(2)
Tax expense	(1 147)	(465)
Effective tax rate	17%	13%

As at 31 December 2016 and as at 31 December 2015, the Group had unsettled tax losses mainly relating to the ORLEN Lietuva Group, the Unipetrol Group and the Anwil Group of PLN 410 million and PLN 1,155 million respectively, for which no deferred tax asset was recognized due to the lack of certainty regarding the possibility of their realization in the future.

#### 7.1.7.2. Deferred tax

	31/12/2015	Deferred tax recognized in profit or loss	Deferred tax recognized in other comprehensive income	Exchange differences on translating foreign operations	31/12/2016
Deferred tax assets					
Impairment allowances	779	(286)	-	2	495
Provisions and accruals	306	(85)	-	1	222
Tax losses	189	304	-	-	493
Valuation of financial instruments	10	(7)	75	-	78
Other	138	(168)	-	-	(30)
	1 422	(242)	75	3	1 258
Deferred tax liabilities					
Temporary differences related to non-current assets	1 542	223	-	7	1 772
Other	189	(69)	-	8	128
	1 731	154	•	15	1 900
	(309)	(396)	75	(12)	(642)

As at 31 December 2016 deferred tax assets and liabilities amounted to PLN 167 million and PLN 809 million, respectively.

#### 7.1.7.3. Income tax (paid)

	NOTE	2016	2015
Tax expense on profit before tax	7.1.7.1	(1 147)	(465)
Change in deferred tax asset and liabilities		333	619
Change in current tax receivables and liabilities		420	111
Deferred tax recognized in other comprehensive income	7.1.7.2	75	(292)
Acquisition of subsidiary		-	(166)
Foreign exchange differences		(17)	(11)
		(336)	(204)

### 7.2. EXPLANATORY NOTES TO THE STATEMENT OF FINANCIAL POSITION

#### 7.2.1. Property, plant and equipment

#### SELECTED ACCOUNTING PRINCIPLES

#### Property, plant and equipment

Property, plant and equipment are initially measured at cost, including grants related to assets. Property, plant and equipment are stated in the statement of financial position prepared at the end of the reporting period at the net book value which is the amount at which an asset is initially recognized (cost) less accumulated depreciation and any accumulated impairment losses, as well as received grants for assets.

The costs of significant repairs and regular maintenance programs are recognized as property, plant and equipment.

Fixed assets are depreciated with straight-line method and in justified cases units of production method of depreciation (catalysts, assets arising from development and extraction of mineral resources).

Each part of an item of property, plant and equipment with a cost that is significant in relation to the total cost of the item is depreciated separately over the period reflecting its useful lives.

The following standard useful lives are used for property, plant and equipment:

Buildings and constructions 10-40 years

- Machinery and equipment 4-35 years 2-20 years
- Vehicles and other

The method of depreciation, residual value and useful life of an asset are reviewed at least at the end of each year. When it is necessary adjustments of depreciation are carried out in subsequent periods (prospectively).

#### Grants

Grants are recognized if there is reasonable assurance that the grants will be received and the entity will comply with the conditions attaching to them. Grants related to assets are recognized as a decrease of a carrying amount of an asset and as a result a decrease of depreciation and amortisation charges over the useful life of the asset.

#### Exploration and extraction of mineral resources

Within the framework of exploration and extraction of mineral resources, the following classification of stage was made:

### Stage of exploration and assessment of mineral resources include:

- acquisition of rights to explore and extract, exploration and recognition of resources are recognized according to the successful efforts method,
- expenditures for exploratory.
- other expenditures which are directly attributable to the phase of exploration and recognition and are subject for capitalization.

The Group shall review annually expenditures incurred in the stage of exploration and recognition of mineral resources in order to confirm the intention of further work. If the work is unsuccessful, the cost previously recognized as an asset are recognized as cost of a current period.

Expenditure incurred in the exploration and recognition of resources are recognized as assets related to development and extraction of mineral resources within property, plant and equipment at the moment of the conclusion of their technical feasibility and economic viability of mining.

#### Stage of site planning and of extraction of mineral resources

Expenditures incurred for mineral resource sites planning and extraction of resources are capitalized and amortised by unit of production method calculated proportionally to the amount of extraction of hydrocarbons based on unit of installation. The Group calculates the depreciation of all assets related to sites planning and extraction of mineral resources (including their significant components) based on proved plus probable reserves.

In case of significant change in estimated mineral resources, at the reporting date potential impairment allowances are recognized or reversed. In case of performance of exploratory drillings on already extracted resource, the Group analyses, if costs incurred enable rising new boreholes. If not, the expenditures are recognized in costs of the current period.

### PROFESSIONAL JUDGEMENTS

#### Expenditures for exploration and evaluation of mineral resources

Application of the Group's accounting policy for expenditures for exploration and evaluation of mineral resources requires an assessment, whether future economic benefits resulting from extraction or sale are possible or if indications allowing to estimate the resources does not yet exist. When estimating the resources, the Group assesses future events and circumstances, including the assessment whether the extraction will be economically feasible.

#### **ESTIMATES**

#### Estimated useful lives of property, plant and equipment

The Group verifies useful lives of property, plant and equipment once at year end with effect from the beginning of next year. Should the economic useful lives of properties, plant and equipment from 2015 be applied in 2016, the depreciation expense would be higher by PLN 40 million.

#### Exploration and evaluation of mineral resources

The Group estimates resources based on interpretation of available geological data and verifies then on a the current basis, based on effects of further drills, trial exploitation, actual extraction and economic factors such as: hydrocarbons' prices, contractual terms or investment plans. At the end of each reporting period the Group analyses cost of removal of wells and supporting infrastructure.

### Remediation of land - water environment

The Group estimates the level of capitalized provisions related to non-current assets, which to a significant probability are needed for land – water environment remediation of the territory of petrol stations, fuel depots and areas of production plants.

	Land	Buildings and constructions	Machinery and equipment	Vehicles and other	Construction in progress	Exploration and evaluation of mineral resource assets	Assets related to development and extraction of mineral resources	Total
Net carrying amount at 01/01/2016								
Gross carrying amount	1 128	20 546	36 947	2 018	2 819	762	4 293	68 513
Accumulated depreciation	(12)	(8 500)	(19 593)	(1 186)		(3)	(420)	(29 714)
Impairment allowances	(33)	(2 564)	(10 045)	(165)	(154)	(423)	(705)	(14 089)
Grants	()	(51)	(116)	(6)	(1)	()	()	(174)
	1 083	9 431	7 193	661	2 664	336	3 168	24 536
increases/(decreases), net		•					0.00	2.000
Investment expenditures	-	74	130	59	3 736	175	340	4 514
Depreciation	(1)	(595)	(967)	(172)	-	(24)	(288)	(2 047)
Borrowing costs	-	-	1	1	56	9	-	67
Impairment allowances *	-	101	249	25	14	(72)	-	317
Reclassifications	13	431	1 348	120	(1 935)	-	29	6
Grants	-	(1)	(1)	1	-	-	-	(1)
Foreign exchange differences, incl.:	23	77	142	17	39	5	245	548
foreign exchange differences of impairment allowances	(4)	(68)	(542)	(5)	(6)	-	(73)	(698)
Other	(3)	(69)	(182)	(35)	(14)	35	(1)	(269)
	1 115	9 449	7 913	677	4 560	464	3 493	27 671
Net carrying amount at 31/12/2016								
Gross carrying amount	1 164	20 837	37 950	2 110	4 707	986	5 307	73 061
Accumulated depreciation	(12)	(8 805)	(19 582)	(1 283)	4 /0/	(27)	(1 036)	(30 745)
Impairment allowances	(12)	, ,	(19 338)	(1263)	(146)	(495)	, ,	(14 470)
Grants	(37)	(2 531) (52)	(10 338) (117)	(143)	(140)	(495)	(778)	(14 470) (175)
Giants	1 115	9 449	7 913	677	4 560	464	3 493	27 671
	1 113	9 449	7913	077	4 300	404	3 493	2/0/1
Net carrying amount at 01/01/2015								
Gross carrying amount	1 113	19 030	32 937	2 147	2 374	883	2 363	60 847
Accumulated depreciation	(10)	(7 766)	(17 331)	(1 259)	(1)	-	(255)	(26 622)
Impairment allowances	(42)	(2 087)	(8 611)	(157)	(155)	(93)	(315)	(11 460)
Grants	-	(23)	(71)	(2)	(25)	-	-	(121)
	1 061	9 154	6 924	729	2 193	790	1 793	22 644
increases/(decreases), net		07	00	0.4	0.504	400	450	2.020
Investment expenditures	-	87 (588)	89 (894)	84 (162)	2 501	126	152 (184)	3 039 (1 831)
Depreciation	(1)	· · · ·	. ,	, ,	-	(2)	. ,	( )
Borrowing costs	-	14 3	17 2	1	21	10 79	- 1 696	63 1 782
Acquisition of subsidiary Impairment allowances *	- 9	(28)	(74)	21	- 31	(333)	(423)	(797)
Reclassifications	9	(20) 826	(74) 1 142	85		(229)	(423)	(797) (38)
Grants	1	(28)	(45)	oo (4)	(2 105) 24	(229)	230	(50)
Sale of subsidiary	-	(20)	(45)	(4)	- 24	(86)	-	(86)
Foreign exchange differences, incl.:	- 8	- 29	- 72	- 11	- 12	(8)	(102)	(80)
foreign exchange differences of impairment allowances	0	(449)	(1 360)	(29)	(30)	(0)	(102)	(1 832)
Other	(1)	(38)	(40)	(106)	(13)	(11)	-	(209)
Net carrying amount at 31/12/2015	1 083	9 431	7 193	661	2 664	336	3 168	24 536

\* Increases/(Decreases) net of impairment allowances include recognition, reversal, usage, reclassifications.

In 2016 and 2015, net increases/(decreases) of impairment allowances covers respectively: recognition and reversal, net in the amount of PLN 148 million and PLN (993) million, usage due to sale/liquidation in the amount of PLN 157 million and PLN 57 million and reclassifications to assets classified as held for sale and due to changes the Group structure in the amount of PLN 12 million and PLN 139 million.

In 2016 and 2015 the capitalization rate used to calculate borrowing costs amounted to 1.14% and 1.44%, respectively.

The gross carrying amount of all fully depreciated property, plant and equipment still in use as at 31 December 2016 and as at 31 December 2015 amounted to PLN 5,086 million and PLN 4,711 million, respectively.

Information regarding property, plant and equipment that were pledged for loans of the Group is presented in note 7.2.6.1.1.

#### 7.2.2. Intangible assets

### SELECTED ACCOUNTING PRINCIPLES

#### Intangible assets

An intangible asset shall be measured initially at acquisition or production cost and shall be presented in the financial statements in its net carrying amount, including grants.

Intangible assets with the finite useful life are amortised using straight-line method. Amortization shall begin when the asset is available for use.

Standard useful lives of intangible assets are from 2 to 10 for software and from 2 to 15 years for concessions, licenses, patents and similar.

The amortization method and useful life of intangible asset item are verified at least at the end of each year.

#### Goodwill

Goodwill acquired in a business combination shall, from the acquisition date, be allocated to each of the acquirer's cash-generating units (CGU), that is expected to benefit from the synergies of the combination.

After combination the acquirer shall measure goodwill in the amount recognized at the acquisition date less any accumulated impairment allowances. A cash-generating unit to which goodwill has been allocated shall be tested for impairment annually, and whenever there is an indication that the unit may be impaired. An impairment loss recognized for goodwill shall not be reversed in a subsequent period.

#### Rights

The main item of rights is CO<sub>2</sub> emission rights, not amortised, tested for impairment.

Granted emission allowances are presented as intangible assets in correspondence with deferred income at fair value as at the date of registration. Purchased allowances are presented at purchase price.

For the estimated CO<sub>2</sub> emission during the reporting period, a provision is created (taxes and charges).

Grants are recognized on a systematic basis to ensure proportionality with the related costs which the grants are intended to compensate. Outgoing of allowances is recognized using FIFO method (First In, First Out) within the individual types of rights (EUA, CER).

Rights also include energy certificates.

### ESTIMATES

### Estimated useful lives of intangible assets

The Group verifies useful lives of intangible assets once at year end with effect from the beginning of next year. Should the economic useful lives of intangible assets from 2015 be applied in 2016, the depreciation expense would not change significantly.

As at 31 December 2016 and as at 31 December 2015 internally generated intangible assets amounted to PLN 108 million and PLN 67 million, respectively.

#### The changes in other intangible assets

	Patents, trade marks and licenses	Goodwill	Rights	Other	Total
Net carrying amount at 01/01/2016					
Gross carrying amount	1 395	374	840	132	2 741
Accumulated amortisation	(944)	(18)	(1)	(65)	(1 028)
Impairment allowances	(98)	(315)	(59)	(7)	(479)
Grants	(3)	-	-	-	(3)
	350	41	780	60	1 231
increases/(decreases), net					
Investment expenditures	45	8			53
Amortisation	(69)	-	-	2	(67)
Impairment allowances *	(6)	-	-		(6)
Foreign exchange differences, incl.:	5	1	-	1	7
foreign exchange differences of impairment allowances	(3)	-	-	1	(2)
Other **	31	-	47	(27)	51
	356	50	827	36	1 269
Net carrying amount at 31/12/2016					
Gross carrying amount	1 521	384	886	101	2 892
Accumulated amortisation	(1 055)	(19)		(59)	(1 133)
Impairment allowances	(107)	(315)	(59)	(6)	(487)
Grants	(3)	-	-	-	(3)
	356	50	827	36	1 269

	Patents, trade marks and licenses	Goodwill	Rights	Other	Total
Net carrying amount at 01/01/2015					
Gross carrying amount	1 219	374	256	111	1 960
Accumulated amortisation	(830)	(18)	(1)	(11)	(860)
Impairment allowances	(84)	(318)	(66)	-	(468)
Grants	(3)	-	-	-	(3)
	302	38	189	100	629
increases/(decreases), net					
Investment expenditures	48	6	-	1	55
Amortisation	(60)	-	-	(7)	(67)
Acquisition of subsidiary	1	-	9	-	10
Impairment allowances *	(2)	3	7	(6)	2
Sale of subsidiary	-	(3)	-	12	9
Foreign exchange differences, incl.:	-	(3)	(2)	-	(5)
foreign exchange differences of impairment allowances	(12)	-	-	(1)	(13)
Other **	61		577	(40)	598
Net carrying amount at 31/12/2015	350	41	780	60	1 231

\* Increases/(Decreases) net of impairment allowances include recognition, reversal, usage, reclassifications.

\*\* Other increases/(decreases) of property rights in the net book value consist mainly of forward transactions settlement, granted free of charge and settlement of rights for 2015 and 2014.

The gross carrying amount of all fully amortised intangible assets still in use as at 31 December 2016 and as at 31 December 2015 amounted to PLN 586 million and PLN 506 million, respectively.

#### 7.2.2.1. Rights

### Change in owned CO2 emission rights in 2016

	Quantity (in thous. tonnes)	Value
01/01/2016	28 861	770
Granted free of charge	8 488	188
Emission settlement for 2015	(13 636)	(375)
Forward transactions settlement	4 450	103
Purchase/(Sale), net	6 358	130
	34 521	816
CO <sub>2</sub> emission in 2016	12 906	353

As at 31 December 2016 the market value of one EUA amounted to PLN 28.93 (representing EUR 6.54 at exchange rate as at 31 December 2016) (source: www.theice.com).

As at 31 December 2016 and as at 31 December 2015 the Group recognized the rights to colourful energy in the amount PLN 11 million and PLN 10 million, respectively. In 2016 the Group granted free of charge rights to colourful energy in the amount of PLN 95 million.

Additionally, as at 31 December 2016 and as at 31 December 2015 the Group recognized CO2 emission rights in the amount PLN 11 million and PLN 18 million, respectively and rights to colourful energy in the amount PLN 3 million and PLN 32 million, respectively (note 7.2.5.2) in trade and other receivables.

#### 7.2.3. Assets by operating segments and non-current assets by geographical allocation

	31/12/2016	31/12/2015
Downstream Segment	38 770	34 282
Retail Segment	6 139	5 683
Upstream Segment	3 840	3 380
Segment assets	48 749	43 345
Corporate Functions	6 943	4 995
Adjustments	(133)	(203)
	55 559	48 137

Operating segments include all assets except for financial assets, tax assets and cash. Assets used jointly by the operating segments are allocated based on revenues generated by individual operating segments.

	31/12/2016	31/12/2015	% share	
			2016	2015
Poland	19 631	18 755	67.1%	72.0%
Germany	966	915	3.3%	3.5%
Czech Republic	5 216	3 343	17.8%	12.8%
Lithuania, Latvia, Estonia	708	638	2.4%	2.5%
Canada	2 731	2 385	9.3%	9.2%
	29 252	26 036	100.0%	100.0%

Non-current assets by geographical allocation include property, plant and equipment (note 7.2.1), inlangible assets (note 7.2.2), investment property and perpetual usufruct of land (note 7.2.8).

### 7.2.4. Impairment of property, plant and equipment and intangible assets

### SELECTED ACCOUNTING PRINCIPLES

### Impairment of property, plant and equipment and intangible assets

At the end of the reporting period, the Group assesses whether there are indicators that an asset or cash-generating unit (CGU) may be impaired or any indicators that the previously recognized impairment should be reversed.

Assets that do not generate the independent cash flows are grouped on the lowest level on which cash flows, independent from cash flows from other assets, are generated (CGU). If such case occurs, the recoverable amount is determined on the CGU level, to which the asset belongs.

Recognition and reversal of impairment allowances of property, plant and equipment and intangible assets is recognized in other operating activity.

#### **ESTIMATES**

#### Impairment of property, plant and equipment and intangible assets

The Management Board assesses whether there is any indicator for impairment of an asset or cash generating unit. If there is any indicator for impairment, the estimation of recoverable amount of an asset is made.

### Net impairment allowances of property, plant and equipment and intangible assets

	NOTE	2016	2015
ORLEN Upstream Canada		-	(423)
ORLEN Upstream		(73)	(429)
Unipetrol Group		300	(111)
ORLEN Oil Group		(55)	-
		172	(963)
Other impairment allowances		(27)	(30)
	7.1.4, 7.1.5	145	(993)

As at 31 December 2016, an impairment indicators were identified in the ORLEN Group in accordance with IAS 36 "Impairment allowances of assets" related to the approval on 15 December 2016 Strategy of the ORLEN Group for the years 2017-2021 ("Strategy") by the Management Board and the Supervisory Board of PKN ORLEN.

Assumptions of the ORLEN Group Strategy include among others, economic growth in key markets activity of the ORLEN Group, the increase of crude oil prices resulting from the need to replace natural decreases in extractions by productions from more expensive sources and restrictions on investment in recent years, the stabilization of downstream margin at a lower level than that observed in the last 2 years and a further increase in regulatory pressure, especially in the field of low carbon economy and environmental protection. Macroeconomic assumptions were developed on the basis of commercially available sources of knowledge of industry analitical agencies, forecasts of bank analysts, expert knowledge of the ORLEN Group.

Due to the lack of a basis for a reliable estimate of the price, at which would have taken place potential transaction to sale the assets of the Group as the recoverable value of its individual assets is its value in use, according to IAS 36.20.

The tests were performed on the basis of assets of the ORLEN Group as at 31 December 2016 and net cash flows projected in the approved within the Strategy the Mid-term Plan, discounted to their present value using the discount rates which reflect the current market value of money and the specific risks to the valued assets.

Discount rates were calculated as the weighted average cost of engaged equity and debt. Sources of macroeconomic indicators necessary to determine the discount rate were published by prof. Aswath Damodaran (source: <u>http://pages.stern.nyu.edu</u>), government bonds quotation and government agencies available as at 31 December 2016.

### The discount rate structure used in the impairment tests of assets by cash-generating unit of ORLEN Group as at 31 December 2016

	Poland				Czech Republic		Lithuania		Canada	Germany	
	Refining	Petrochemical	Retail	Upstream	Refining	Petrochemical	Retail	Refining	Retail	Upstream	Retail
Cost of equity	15.40%	14.70%	17.65%	15.13%	11.88%	11.21%	14.07%	15.26%	17.83%	8.91%	11.10%
Cost of debt after tax	2.37%	2.37%	2.37%	2.37%	1.56%	1.56%	1.56%	4.27%	4.27%	1.70%	0.88%
Capital structure	0.60	0.29	1.12	1.24	0.60	0.29	1.12	0.60	1.12	0.47	1.12
Nominal discount rate	10.50%	11.93%	9.57%	8.06%	8.00%	9.04%	7.45%	11.13%	10.65%	6.60%	5.69%
Long-term rate of inflation	1.38%	1.38%	1.38%	1.38%	1.98%	1.98%	1.98%	1.84%	1.84%	1.78%	1.50%

At the same time, ORLEN Upstream Sp. z o.o. evaluated the validity of continuing exploration work on the concession areas located in the Mazowieckie, Lubelskie, Łódzkie and Małopolskie province and decided to continue further exploration work on these concessions only in selected, the most promising areas of conventional research.

As a result in the 4<sup>th</sup> quarter of 2016 recognized effects of reversal of impairment allowance of refinery assets of Unipetrol Group in the amount of PLN 315 million and recognition of impairment allowance of exploration assets of ORLEN Upstream Group in Poland in the amount of PLN (72) million and assets of ORLEN Oil in the amount of PLN (55) million.

As a part of above tests discount rates of 8% were applied for the Unipetrol Group refining assets and 9.57% for the ORLEN Oil assets.

	PLN million		EBITDA	
ш	change	-5%	0%	5%
NT RATE	- 0.5 p.p.	decrease of reversal (81)	increase of reversal 112	increase of reversal 305
DISCOUN	0.0 p.p.	decrease of reversal (185)	-	increase of reversal 185
DIG	+ 0.5 p.p.	decrease of reversal (279)	decrease of reversal (102)	increase of reversal <b>75</b>

### Sensitivity analysis of the Unipetrol Group refining assets value in use within an impairment test performed as at 31 December 2016

#### Sensitivity analysis of the ORLEN Oil assets value in use within an impairment test performed as at 31 December 2016

	PLN million		EBITDA	
	change	-5%	0%	5%
T RATE	- 0.5 p.p.	increase in allowance (1)	decrease in allowance 8	decrease in allowance 15
DISCOUN	0.0 p.p.	increase in allowance (8)	-	decrease in allowance 8
DIG	+ 0.5 p.p.	increase in allowance (14)	increase in allowance (7)	decrease in allowance 1

### Impairment allowances of property, plant and equipment and intangible assets in 2015

In the 4<sup>th</sup> quarter of 2015 an impairment allowance of evaluation and extraction of mineral resources assets in ORLEN Upstream Canada within ORLEN Upstream Group of PLN (423) million was recognized.

As at 31 December 2015 the fair value of evaluation and extraction of mineral resources assets in Canada was based on the estimated crude oil prices and reserves evaluation prepared by an independent company engaged in the evaluation of the reserves in accordance with professional standards for the Canadian market. Estimated net cash flow used to forecast the fair value of assets were discounted to their present value using a base discount rate which reflects the current market value of money and the specific risks to the assets on the Canadian market, which amounted to 9%.

### Sensitivity analysis of the ORLEN Upstream Canada assets value in use within an impairment test performed as at 31 December 2015

	PLN million	HYDROCARBONS PRICES				
	change	-5%	0%	5%		
T RATE	- 0.5 p.p.	increase in allowance (14)	decrease in allowance 34	decrease in allowance 81		
DISCOUNT	0.0 p.p.	increase in allowance (46)	-	decrease in allowance 46		
DIG	+ 0.5 p.p.	increase in allowance (76)	increase in allowance (32)	decrease in allowance 12		

In the 2<sup>nd</sup> quarter of 2015 ORLEN Upstream Group has determined, based on the gathered data of previous work, the most promising areas for further exploration of hydrocarbon in Poland. Narrowing the search area influenced the partial impairment of assets related to exploration and recognition of mineral resources in the amount of PLN (429) million.

The fair value of assets due to exploration and evaluation of mineral resources has been established basing on the analysis of future cash flows, which take into account the current and forecasted hydrocarbon prices, expected changes in the regulatory environment, probability of success/failure and long-term production forecasts. Net cash flow projections used for the purposes of estimating the fair value of the assets were discounted to their present value using a discount rate at 8.99%, which reflects current market assessment of the time value of money and the risks specific to the respective assets on the Polish market.

#### Sensitivity analysis of the ORLEN Upstream assets value in use within an impairment test performed as at 30 June 2015

	PLN million	HYDROCARBONS PRICES				
	change	-5%	0%	5%		
T RATE	- 0.5 p.p.	increase in allowance (25)	decrease in allowance 12	decrease in allowance 51		
DISCOUNT	0.0 p.p.	increase in allowance (25)	-	decrease in allowance 37		
DIG	+ 0.5 p.p.	increase in allowance (25)	increase in allowance (11)	decrease in allowance 24		

While lowering prices by 5% the entire value of the tested assets is impaired, with each of the analysed discount rates.

As a consequence of the steam cracker unit accident in Litvinov (Unipetrol Group) in August 2015, impairment of property, plant and equipment of PLN (93) million translated using the exchange rate as at 30 September 2015 (representing approximately CZK (597) million) was recognized in the 3rd quarter of 2015.

### 7.2.5. Working capital

	NOTE	Inventories	Trade and other receivables	Trade and other liabilities	Working capital*
31/12/2015		10 715	6 597	10 658	6 654
31/12/2016		11 182	8 553	13 591	6 144
Change in working capital in the statement of financial position		(467)	(1 956)	2 933	510
Adjustments		180	277	(151)	306
Reclassification		25	-	-	25
Change in rights and advances for non-financial non-current assets	7.2.5.2	-	(77)	-	(77)
Change in investment liabilities	7.2.5.3	-	-	110	110
Change in compensations' receivables	7.2.5.2	-	222	-	222
Foreign exchange differences		153	133	(235)	51
Other		2	(1)	(26)	(25)
Change in working capital in the statement of cash flows		(287)	(1 679)	2 782	816

\* Working capital = Inventories +Trade and other receivables - Trade and other liabilities

### 7.2.5.1. Inventories

#### SELECTED ACCOUNTING PRINCIPLES

#### Inventories

Inventories, including mandatory reserves comprise products, semi-finished products and work in progress, merchandise and materials.

Finished goods, semi-finished products and work in progress are measured initially at production cost. Production costs include costs of materials and costs of conversion for the production period. Costs of production also include a systematic allocation of fixed and variable production overheads estimated for normal production level.

Finished goods, semi-finished products and work in progress shall be measured at the end of the reporting period at the lower of cost or net realizable value.

Outgoings of finished goods, semi-finished products and work in progress are determined based on the weighted average cost of production.

Merchandise and materials are measured initially at acquisition cost, while as at the end of the reporting period merchandise and raw materials are measured at the lower of cost or net realizable value. Outgoings of merchandise and raw materials are determined based on the weighted average acquisition cost.

The initial value of inventories is adjusted for profits or losses from settlement of cash flow hedging instruments related to the above mentioned.

Impairment tests for specific items of inventories are carried out on a current basis during a reporting period. Write-down to net realizable value concerns inventories that are damaged or obsolete and the selling price have fallen. Raw materials held for use in the production are not written down below acquisition or production cost if the products in which they will be incorporated are expected to be sold at or above cost.

However, when a decline in the price of materials indicates that the cost of the products exceeds net realizable value, the materials are written down to net realizable value. Recognition and reversal of impairment allowances of inventories is recognized in cost of sales.

### ESTIMATES

#### Net realizable values from sale of inventories

The inventory allowances required estimation of the net realizable value based on the most recent sales prices at the moment of estimations.

	31/12/2016	31/12/2015
Raw materials	6 367	5 869
Work in progress	1 154	883
Finished goods	3 139	3 547
Merchandise	522	416
Inventories, net	11 182	10 715
Impairment allowances of inventories to net realisable value	158	288
Inventories, gross	11 340	11 003

As at 31 December 2016 and as at 31 December 2015 the value of mandatory reserves presented in consolidated financial statement amounted to PLN 4,109 million and PLN 4,534 million, respectively.

### Change in impairment allowances of inventories to net realizable value

	2016	2015
At the beginning of the period	288	949
Recognition	153	238
Reversal	(98)	(67)
Usage	(191)	(858)
Foreign exchange differences	6	26
	158	288

In 2016 and in 2015 the recognition and reversal of impairment allowances of inventories to net realizable value related mainly to the downstream segment and amounted to PLN (42) million and PLN (170) million, respectively.

### 7.2.5.2. Trade and other receivables

# SELECTED ACCOUNTING PRINCIPLES

#### Receivables

Receivables, including trade receivables, are recognized initially at a fair value and subsequently, at amortised cost using the effective interest method less impairment allowances.

Impairment allowances of receivables are based on the individual analysis of the value of held collaterals, and based on the possible compensation of debts. Recognition and reversal of impairment allowances of receivables are recognized in other operating activity in relation to principal amount and in financial activities in relation to interest for delayed payments.

### ESTIMATES

### Impairment of trade and other receivables

The Management Board assesses whether there is any indicator for impairment of trade and other receivables taking into account the adopted internal procedures as individual assessment of each customer with regard to credit risk.

NOTE	31/12/2016	31/12/2015
Trade receivables	7 161	5 397
Other	281	24
Financial assets	7 442	5 421
Excise tax and fuel charge	123	151
Other taxation, duties, social security and other benefits	181	187
Advances for non-current non-financial assets	503	544
Rights	14	50
Advances for deliveries	31	26
Prepayments	259	218
Non-financial assets	1 111	1 176
Receivables, net	8 553	6 597
Receivables impairment allowance 7.2.5.2.2	479	477
Receivables, gross	9 032	7 074

\*Position other includes compensation from insurers due to Unipetrol Group as at 31 December 2016 in the amount PLN 222 million.

Division of financial assets denominated in foreign currencies is presented in note 7.3.5.2. Division of receivables from related parties is presented in note 7.4.6.

### 7.2.5.2.1. The ageing analysis of receivables

Based on the analysis of balances of receivables the customers were divided into two groups:

- Group I customers with very good or good history of cooperation in the current year;
- Group II other customers.

### The division of not past due receivables

	31/12/2016	31/12/2015
Group I	6 205	3 952
Group I Group II	895	1 103
	7 100	5 055

### The division of past due receivables, but not impaired as at the end of the reporting period

	31/12/2016	31/12/2015
up to 1 month	304	275
above 1 to 3 months	26	51
above 3 to 6 months	4	12
above 6 to 12 months	6	16
above 1 year	34	24
	374	378

### 7.2.5.2.2. Change in impairment allowances of trade and other receivables

	NOTE	2016	2015
At the beginning of the period		477	509
Recognition	7.3.2	27	51
Reversal	7.3.2	(15)	(24)
Usage		(20)	(67)
Foreign exchange differences		10	8
		479	477

### 7.2.5.3. Trade and other liabilities

### SELECTED ACCOUNTING PRINCIPLES

#### Liabilities

Liabilities, including trade liabilities, are initially measured at fair value and subsequently, at amortised cost using the effective interest rate method.

	31/12/2016	31/12/2015
Trade liabilities	7 549	5 430
Investment liabilities	1 398	1 508
Finance lease	29	26
Other	113	175
Financial liabilities	9 089	7 139
Payroll liabilities	260	250
Excise tax and fuel charge	2 585	1 947
Value added tax	1 333	915
Other taxation, duties, social security and other benefits	161	262
Holiday pay accruals	71	63
Other	92	82
Non-financial liabilities	4 502	3 519
	13 591	10 658

Division of financial liabilities denominated in foreign currencies is presented in note 7.3.5.2. Division of liabilities from related parties is presented in note 7.4.6.

As at 31 December 2016 and as at 31 December 2015 in the Group were no material overdue liabilities.

### 7.2.6. Net debt and equity management

#### SELECTED ACCOUNTING PRINCIPLES

### Net debt

The Group defined net debt as: non-current and current loans, borrowings and bonds lower by cash and cash equivalents.

Cash comprises cash on hand and in a bank accounts. Cash equivalents are short-term, highly liquid investments (of initial maturity up to three months), that are readily convertible to known amounts of cash and which are subject to an insignificant risk of change in value. Valuation and outflows of cash and cash equivalents in foreign currencies are based on FIFO (First In First Out) method.

The Group to assess the level of debt used ratios: net financial gearing (net debt / equity (calculated as at the end of the period) x 100%) and net debt / EBITDA before net impairment allowances.

### Changes in net debt

	31/12/2016	31/12/2015
At the beginning of the period	6 810	6 720
loans, borrowings and bonds cash and cash equivalents	9 158 (2 348)	10 657 (3 937)
Cash changes in net debt	(3 456)	(225)
net increase/(decrease) in cash and cash equivalents drawings/(repayments) of net loans, borrowings and bonds realized foreign exchange differences in statement of profit or loss	(2 685) (1 099) 328	1 608 (1 875) 42
Non-cash changes in net debt	9	315
unrealized exchange differences recognized in profit or loss	(102)	13
exchange differences on translating foreign operations recognized in equity	11	(64)
valuation of debt and settlement of loans hedging instruments acquisition of subsidiary	100 -	(9) 375
	3 363	6 810
Net financial gearing	11.5%	28.1%
Net debt / EBITDA before net impairment allowances	0.35	0.94

#### 7.2.6.1. Loans, borrowings and bonds

	Nor	Non-current		Current		Total	
	31/12/2016	31/12/2015	31/12/2016	31/12/2015	31/12/2016	31/12/2015	
Loans	653	3 975	286	1 025	939	5 000	
Borrowings	-	1	1	2	1	3	
Bonds	6 793	4 155	702	-	7 495	4 155	
	7 446	8 131	989	1 027	8 435	9 158	

The ORLEN Group bases its financing on fixed and floating interest rates. Depending on the currency of financing these are relevant interbank rates increased by margin. The margin reflects risk connected with financing of the Group and in case of some long-term contracts depends on net debt/EBITDA ratio. On 10 March 2017 PKN ORLEN early repaid the long-term credit in the amount of PLN 763 million with interest due, under the agreement the maturity falling in 2025. The credit agreement allowed the early repayment at the request of the borrower .

### 7.2.6.1.1. Loans

### - by currency (translated into PLN)/ by interest rate

	31/12/2016	31/12/2015
PLN - WIBOR	758	975
EUR - EURIBOR	71	2 859
USD - LIBOR USD	-	605
CAD - LIBOR CAD	110	561
	939	5 000

As at 31 December 2016 unused credit lines (note 7.3.5.4) increased by trade and other receivables (note 7.2.5.2) and cash and cash equivalents exceeded trade and other liabilities (note 7.2.5.3) by PLN 11,144 million. The Group hedges partially cash flows related to interest payments regarding external financing in EUR and USD, by using interest rate swaps (IRS).

In the period covered by the foregoing consolidated financial statements as well as after the reporting date there were no cases of violations of loans or interests repayment.

As at 31 December 2016 there were no property, plant and equipment pledged as collateral for loans of the Group. As at 31 December 2015 pledge on property, plant and equipment as security for loans amounted to PLN 997 million and loans secured by these assets amounted to PLN 361 million.

### 7.2.6.1.2. Bonds

### - by currency (translated into PLN)

	31/12/2016	31/12/201\5
PLN	2 017	2 017
EUR	5 478	2 138
	7 495	4 155

### - by interest rate

	Fixed rate bonds		Floating rate bonds		Total	
	31/12/2016	31/12/201\5	31/12/2016	31/12/201\5	31/12/2016	31/12/2015
Nominal value	5 549	2 231	1 900	1 900	7 449	4 131
Carrying amount	5 579	2 239	1 916	1 916	7 495	4 155

	Nominal value		Subscription	Maturity	Base rate	Margin	Rating
	PLN	EUR	date	date			
A Series	200	-	28.05.2013	28.05.2017	6M WIBOR	1.50%	A - (pol)
B Series	200	-	03.06.2013	03.06.2017	6M WIBOR	1.50%	A - (pol)
C Series	200	-	06.11.2013	06.11.2017	6M WIBOR	1.40%	A - (pol)
D Series	100	-	14.11.2013	14.11.2017	6M WIBOR	1.30%	A - (pol)
E Series	200	-	02.04.2014	02.04.2018	6M WIBOR	1.30%	A - (pol)
F Series	100	-	09.04.2014	09.04.2020	Fixed interest rate	e 5%	A - (pol)
Retail bonds	1 000						
Corporate bonds	1 000		27.02.2012	27.02.2019	6M WIBOR	1.60%	-
Eurobonds	2 131 *	500	30.06.2014	30.06.2021	Fixed interest rate 2	.5%	BBB-, Baa3
Eurobonds	3 318 **	750	07.06.2016	07.06.2023	Fixed interest rate 2	.5%	BBB-, Baa3
Eurobonds	5 449	1 250					
	7 449	1 250					

\*translated into PLN using the exchange rate as at 31 December 2014 \*\* translated into PLN using the exchange rate as at 31 December 2016

The difference between the nominal value and carrying amount of bonds results from measurement of bonds according to amortized cost using the effective interest method.

### 7.2.6.2. Equity management policy

Equity management is performed on the Group level in order to protect the Group's ability to continue its operations as a going concern while maximizing returns for shareholders.

The Management Board monitors the following ratios:

- net financial gearing of the Group as at 31 December 2016 and as at 31 December 2015 amounted to 11.5% and 28.1%, respectively;
- dividend per ordinary shares depends on financial position of the Group. In 2016 and in 2015 the dividend of PLN 2 per share and PLN 1.65 per share was paid, respectively.

### 7.2.7. Equity

### SELECTED ACCOUNTING PRINCIPLES

### Share capital

Equity paid by shareholders and stated at nominal value in accordance with the Parent Company's of association and the entry in the Commercial Register. Share capital as at 31 December 1996, in accordance with IAS 29, § 24 and 25, was revalued based on monthly price indices of consumer goods and services.

#### Share premium

Created by the surplus of the issuance value in excess of the nominal value of shares decreased by issuance costs. Capital from issue of shares above their nominal value as at 31 December 1996, in accordance with IAS 29, § 24 and 25, was revalued based on monthly price indices of consumer goods and services.

#### Hedging reserve

Relates to valuation and settlement of hedging instruments that meet the criteria of cash flow hedge accounting.

### Exchange differences on translating foreign operations

Result mainly from translation of the financial statements of the foreign companies into PLN under consolidation procedures.

### Retained earnings

include:

- reserve capital created and used in accordance with the Commercial Companies Code,
- actuarial gains and losses from post-employment benefits,
- the current reporting period profit/loss,
- other capitals created and used according to the rules prescribed by law.

### 7.2.7.1. Share capital

	31/12/2016	31/12/2015
Share capital	535	535
Share capital revaluation adjustment	523	523
	1 058	1 058

In accordance with the Polish Commercial Register, the share capital of Polski Koncern Naftowy ORLEN S.A. as at 31 December 2016 and as at 31 December 2015 amounted to PLN 535 million and is divided into 427,709,061 ordinary shares with nominal value of PLN 1.25 each.

Number of shares issued					
A S	eries B So	eries C Series	D Series	Total	
336 000	0 000 6 971	1 496 77 205 641	7 531 924	427 709 061	

In Poland, each new issue of shares is labelled as a new series of shares. All of the above series have the exact same rights.

### Shareholders' structure

	Number of shares / voting rights	Nominal value of shares (in PLN)	Share in share capital
State Treasury	117 710 196	147 137 745	27.52%
Nationale-Nederlanden OFE*	35 590 112	44 487 640	8.32%
Aviva OFE*	30 000 000	37 500 000	7.01%
Other	244 408 753	305 510 941	57.15%
	427 709 061	534 636 326	100.00%

\* Shareholders holding directly or indirectly via related parties, at least 5% of total votes at the Extraordinary Shareholders Meeting of PKN ORLEN S.A. held on 24 January 2017

# 7.2.7.2. Share premium

	31/12/2016	31/12/201\5
Nominal share premium	1 058	1 058
Share premium revaluation adjustment	169	169
	1 227	1 227

# 7.2.7.3. Hedging reserve

	2016	2015
At the beginning of the period	(80)	(1 319)
gross value	(99)	(1 629)
deferred tax	19	310
Items of other comprehensive income	(396)	1 530
settlement of hedging instruments,gross, incl.:	129	1 623
sales revenues	(67)	(226)
cost of sales	105	(120)
inventories	31	1 999
valuation of hedging instruments, gross	(586)	(93)
settlement of instruments - no hedged item	61	-
Deferred tax from hedging instruments valuation and settlement	75	(291)
Items of other comprehensive income attributable to non-controlling interest	46	-
	(355)	(80)
gross value	440	(99)
deferred tax	85	19

On 30 June 2016 repayment of the loan tranche took place, for which interest flows hedge accounting was applied. Therefore, further evaluation of instruments is recognized in profit or loss, and a part of the effective valuation at date of repayment was recognized in equity in the amount PLN (106) million. At the time of the expected cash flows, this amount will be settled for as an adjustment to interest expenses.

### 7.2.7.4. Retained earnings

	31/12/2016	31/12/2015
Reserve capital	17 756	15 720
Other capital	884	884
Actuarial gains and losses	(19)	(10)
Net profit for the period attributable to equity owners of the parent	5 261	2 837
	23 882	19 431

# 7.2.7.5. Equity attributable to non-controlling interest

	31/12/2016	31/12/2015
Unipetrol Group Other	2 511	2 055
Other	11	16
	2 522	2 071

	31/12/2016	31/12/2015
At the beginning of the period	2 071	1 615
Share in profit net, incl.:	479	396
Unipetrol Group	481	397
Share in items of other comprehensive income	33	60
hedging reserve, net	(46)	-
exchange differences on translating foreign operations	79	60
Change in the structure of non-controlling interest	(1)	-
Paid and declared dividends	(60)	-
	2 522	2 071

	31/12/2016	31/12/2015
Non-current assets	5 259	3 542
Current assets	5 965	5 034
cash	480	929
other current assets	5 485	4 105
Total assets	11 224	8 576
Total equity	6 799	5 571
Non-current liabilities	328	271
Current liabilities, incl.:	4 097	2 734
trade and other liabilities	3 762	2 476
loans and borrowings	3	-
Total liabilities	4 425	3 005
Total equity and liabilities	11 224	8 576
Net debt	(477)	(929)

	2016	2015
Sales revenues	14 179	16 669
Cost of sales, incl.:	(13 438)	(14 726)
depreciation and amortisation	(316)	(284)
Gross profit on sales	741	1 943
Distribution expenses	(401)	(316)
Administrative expenses	(237)	(200)
Net other operating income and expenses, incl.:	1 512	(96)
reversal / recognition of impairment allowances of property, plant and equipment and intangible assets	300	(111)
penalties and compensations earned	1 194	(15)
Profit from operations	1 615	1 331
Net finance income and costs	21	(7)
Profit) before tax	1 636	1 324
Tax expense	(337)	(252)
Net profit	1 299	1 072
Items of other comprehensive income	92	162
Total net comprehensive income	1 391	1 234

In 2016 and in 2015, there were no significant restrictions in entities with significant non-controlling interest resulting from credit agreements, regulatory requirements and other contractual arrangements that restrict access to assets and settlement of liabilities of the Group.

### 7.2.7.6. Proposal to distribution of the Parent Company's profit for 2016

Dividend policy of the Group assumes a gradual increase in the level of dividend per share by taking into account the implementation of strategic financial objectives and forecasts of the macroeconomic situation. This method does not relate the rate of dividend to net profit, which in the ORLEN Group's area of operations is subject to high fluctuations and can include non-cash items, such as revaluation of assets, inventories or loans, distorting the view of the current financial situation of the Group.

The Management Board of PKN ORLEN, after considering the liquidity situation and achievement of strategic financial objectives, proposes to distribute the net profit of PKN ORLEN for the year 2016 in the amount of PLN 5,364,455,552.64 as follows: PLN 1,283,127,183 will be allocated as a dividend payment (PLN 3 per 1 share) and the remaining amount of PLN 4,081,328,369.64 as reserve capital. The Management Board of PKN ORLEN recommends 14 July 2017 as the dividend date and 4 August 2017 as the dividend payment date. This recommendation of the Management Board will be presented to the General Shareholders' Meeting of PKN ORLEN, which will make a conclusive decision in this matter.

### 7.2.7.7. Distribution of the Parent Company's profit for 2015

Pursuant to article 395 § 2 point 2 of the Commercial Code and § 7 sec. 7 point 3 of the Parent Company's Articles of Association, the Ordinary General Shareholders' Meeting of PKN ORLEN S.A. on 3 June 2016, having analysed the motion of the Management Board, decided to distribute the net profit of PKN ORLEN for the year 2015 of PLN 1,047,519,491.84 as follows: the amount of PLN 855,418,122 for dividend payment (PLN 2 per 1 share) and the remaining amount of net profit of PLN 192,101,369.84 as reserve capital.

### 7.2.8. Embedded derivatives and hedging instruments and other assets and liabilities

Embedded derivatives and hedging instruments and other assets

	Non	-current	C	Current	To	otal
	31/12/2016	31/12/2015	31/12/2016	31/12/2015	31/12/2016	31/12/2015
Cash flows hedging instruments	66	135	92	797	158	932
currency forwards commodity swaps	12 54	45 90	32 60	78 719	44 114	123 809
Derivatives not designated as hedge accounting	-	-	5	8	5	8
currency forwards commodity swaps Embedded derivatives			5 - -	2 6 1	5 - -	2 6 1
currency swaps	-		-	1	-	1
Embedded derivatives and hedging instruments	66	135	97	806	163	941
Other financial assets	33	12	152	168	185	180
receivables on cash flows settled hedging instruments		-	149	159	149	159
other	33	12	3	9	36	21
Other non-financial assets	244	242	-	-	244	242
investment property	97	103	-	-	97	103
perpetual usufruct of land financial assets available for sale	107	99	-	-	107	99
	40	40	-	-	40	40
Other assets	277	254	152	168	429	422

Embedded derivatives and hedging instruments and other liabilities

	Non-c	urrent	C	urrent	Tota	al
	31/12/2016	31/12/2015	31/12/2016	31/12/2015	31/12/2016	31/12/2015
Cash flows hedging instruments	190	239	376	764	566	1 003
currency forwards interest rate swaps	42	- 92	117	11	159	11 92
commodity swaps currency interest rate swaps	28 120	48 99	228 31	753	256 151	801 99
Derivatives not designated as hedge accounting	90	-	25	1	115	1
currency forwards commodity swaps interest rate swaps	- - 90	-	4 21	1	4 21 90	1 - -
Embedded derivatives currency swaps	-	-	2	2	2	2
Embedded derivatives and hedging instruments	280	239	403	767	683	1 006
Other financial liabilities	280	465	169	103	449	568
liabilities on cash flows settled hedging instruments		-	169	103	169	103
investment liabilities finance lease other	111 141 28	300 140 25	-	-	111 141 28	300 140 25
Other non-financial liabilities deferred income	9 9	8 8	145 <i>14</i> 5	200 128	154 154	208 136
liabilities directly associated with assets classified as held for sale	-	-	-	72	-	72
Other liabilities	289	473	314	303	603	776

### 7.2.9. Provisions

#### SELECTED ACCOUNTING PRINCIPLES

#### Provisions

The amount recognized as a provision is the best estimate of the expenditure required to settle the present obligation at the end of the reporting period.

#### Environmental provision

The Group creates provisions for future liabilities due to reclamation of contaminated land or water or elimination of harmful substances if there is such a legal or constructive obligation. Environmental provision for reclamation is periodically reviewed on the basis of contaminated assessment. Changes in the value of provision increase or decrease in the current period the value of assets to reclamation. In case of increase of provision is higher than carrying amount of the asset, the amount of that excess is recognized in profit or loss.

### Jubilee bonuses and post-employment benefits

Under the remuneration plans employees of the Group are entitled to jubilee bonuses, paid to employees after an elapse of a defined number of years in service as well as retirement and pension benefits, paid once at retirement or pension. The amount of above benefits and jubilee bonuses depends on the number of years in service and an employee's average remuneration.

The jubilee bonuses are other long-term employee benefits, whereas retirement and pension benefits are classified as post-employment defined benefit plans. Provisions are determined by an independent actuary and revalued if there are any indications impacting their value, taking into account the staff turnover and planned growth of wages. Actuarial gains and losses from post-employment benefits are recognized in components of other comprehensive income and from other employment benefits are recognized in profit or loss.

### CO2 emissions, energy certificates

The Group recognizes the estimated  $CO_2$  emissions costs during the reporting period in operating activity costs (taxes and charges). Provision is recognized based on the value of allowances taking into account the principle of FIFO. In case of a shortage of allowances, the provision is created based on the purchase price of allowance concluded in forward contracts or market quotations at the reporting date.

During the reporting period the Group recognizes provision for the estimated volume of energy rights and energy efficiency certificates for depreciation, which is recognized as a reduction of revenues from sales of energy.

#### Other provisions

Other provisions include mainly provisions for legal proceedings and are recognized after consideration of all available information, including the opinions of independent experts.

The Group recognizes provisions if at the end of the reporting period the Group is an obligation arising from past events that can be reliably estimated and it is probable that fulfilment of this obligation will cause an outflow of resources embodying economic benefits.

#### **ESTIMATES**

Recognition of provisions requires estimates of the probable outflow of resources embodying economic benefits and defining the best estimate of the expenditure required to settle the present obligation at the end of the reporting period. Provisions are recognized when the probability of outflow of resources embodying economic benefits is higher than 50%.

	Non-current		Current		Total	
	31/12/2016	31/12/2015	31/12/2016	31/12/2015	31/12/2016	31/12/2015
Environmental	570	450	38	39	608	489
Jubilee bonuses and post-employment benefits	212	217	33	36	245	253
CO <sub>2</sub> emissions, energy certificates	-	-	365	466	365	466
Other	46	43	230	208	276	251
	828	710	666	749	1 494	1 459

### Changes in provisions

	Environmental provision	Jubilee bonuses and post-employment benefits provision	CO₂ emissions, energy certificates	Other provisions	Total
01/01/2016	489	253	466	251	1 459
Recognition	154	10	354	118	636
Reversal	(4)	-	(63)	(140)	(207)
Usage	(44)	(20)	(397)	(61)	(522)
Sale of subsidiary	(8)	-	-	-	(8)
Foreign exchange differences	21	2	5	108	136
	608	245	365	276	1 494
01/01/2015	451	284	343	279	1 357
Recognition	62	6	461	64	593
Reversal	(9)	-	2	(24)	(31)
Usage	(38)	(37)	(367)	(56)	(498)
Acquisition of subsidiary	27	-	-	-	27
Foreign exchange differences	(4)	-	27	(12)	11
	489	253	466	251	1 459

	2016	2015
Change in provisions presented in the statement of financial position	35	102
Usage of prior year provision for CO <sub>2</sub> emissions, energy certificates	392	367
Capitalization of environmental provision	(55)	-
Foreign exchange differences	(28)	21
Other	(14)	(27)
Change in provisions in the statement of cash flows	330	463

### 7.2.9.1. Environmental provision

The Group has legal obligation to clean contaminated land – water environment in the area of production plants, fuel stations, fuel terminals and warehouses. The Management Board estimated the provision for environmental risks based on analyses provided by independent experts or based on current and expected costs of removal of contaminants.

In the Czech Republic, the Government is responsible for liabilities arising from contamination of land-water environment before date of entity's privatization. In case of new contamination that arose after this date the Group is responsible for those liabilities. In 2016, due to the planned in 2017 cease of production of chlorine using mercury electrolysis in Spolana a.s, Unipetrol Group recognized provision for the

In 2016, due to the planned in 2017 cease of production of chlorine using mercury electrolysis in Spolana a.s. Unipetrol Group recognized provision for the estimated costs of plant for the production of chlorine using the mercury electrolysis liquidation in the amount of approximately PLN 21 million.

As at 31 December 2016 the balance of provision for liquidation and contaminations clean up costs in the plant amounted to PLN 27 million translated using the exchange rate as at 31 December 2016 (representing CZK 163 million).

Moreover, at the stage of development and extraction of mineral resources the Group recognizes provisions for the cost of removal of drillings and supporting infrastructure.

Increase in the provision results from the updating of present value estimates of investment expenditures required to settle the present obligation at the reporting date.

### 7.2.9.2. Provision for jubilee bonuses and post-employment benefits

### Change in employee benefits obligations

	Jubilee bon	Jubilee bonuses provision		Post-employment benefits		Total	
ИОТ	E 31/12/2016	31/12/2015	31/12/2016	31/12/2015	31/12/2016	31/12/2015	
At the beginning of the period	150	163	103	121	253	284	
Current service costs	6	7	3	3	9	10	
Interest expenses	5	4	3	3	8	7	
Actuarial gains and losses arising from changes in assumptions:	(16)	4	10	(4)	(6)	-	
demographic	(19)	2	3	2	(16)	4	
financial	(4)	(7)	(2)	(7)	(6)	(14)	
other	7	9	9	1	16	10	
Past employment costs	(4)	(7)	5	(8)	1	(15)	
Payments under program	(15)	(16)	(4)	(10)	(19)	(26)	
Other	11	(5)	(12)	(2)	(1)	(7)	
7.2.	9 137	150	108	103	245	253	

The carrying amount of employee benefits liabilities is identical to their present value as at 31 December 2016 and 31 December 2015.

### Employee benefits liabilities divided into active and retired employees

	Active en	Active employees		Retired employees		Total	
	31/12/2016	31/12/2015	31/12/2016	31/12/2015	31/12/2016	31/12/2015	
Poland	189	196	32	34	221	230	
Czech Republic	17	14	-	-	17	14	
Lithuania, Latvia, Estonia	7	9	-	-	7	9	
	213	219	32	34	245	253	

	Jubilee bonuses provision		Post-employment benefits		Total	
	31/12/2016	31/12/2015	31/12/2016	31/12/2015	31/12/2016	31/12/2015
Employee benefits liabilities divided into geographical structure						
Poland	132	147	89	83	221	230
Czech Republic	5	3	12	12	17	15
Lithuania, Latvia, Estonia	-	-	7	8	7	8
	137	150	108	103	245	253
Maturity of employee benefits analysis						
up to 1 year	16	24	17	12	33	36
above 1 to 5 years	51	45	13	15	64	60
above 5 years	70	81	78	76	148	157
	137	150	108	103	245	253
Employee benefits payments analysis						
up to 1 year	15	24	16	12	31	36
above 1 to 5 years	59	60	22	17	81	77
above 5 years	264	322	515	527	779	849
	338	406	553	556	891	962

The weighted average duration of liabilities for post-employment benefits in 2016 and in 2015 amounted to: Poland 9 and 11 years, Czech Republic 10 in both years and Lithuania, Latvia, Estonia 10 and 14 years, respectively.

In 2016 the amount of provision for employee benefits changed as the result of update of assumptions, mainly in relation to discount rate, projected inflation and expected remuneration increase ratio. Should the 2015 assumptions be used, the provision for the employee benefits would be lower by PLN (22) million.

### Sensitivity analysis to changes in actuarial assumptions

As at 31 December 2016, the Group used the following actuarial assumptions that had an impact on the level of actuarial provisions for the Polish entities: discount rate 3.5%, expected inflation 1.3% in 2017, 1.5% in 2018 and 2.5% in subsequent years the remuneration increase rate: 0% in years 2017-2018 and 2.5% in subsequent years. In the Group's foreign entities the main impact had: value of discount rate: from 0.56% to 0.85%.

The Group analysed the impact of the financial and demographic assumptions and calculated that the changes of ratios: remuneration ratio by +/- 1 p.p., the discount rate by +/- 0.5 p.p. and the rate of turnover by +/- 0.5 p.p. in Poland, Czech, Lithuania, Latvia and Estonia are no higher than PLN 8 million. Therefore, the Group does not present any detailed information.

The Group carries out the employee benefit payments from current resources. As at 31 December 2015 there were no funded plans and the Group paid no contributions to fund liabilities.

### 7.2.9.3. Provision for CO<sub>2</sub> emissions, energy certificates

Provision for CO<sub>2</sub> emissions, energy certificates comprises mainly recognition of the provisions for estimated in the reporting period, the cost of CO<sub>2</sub> emissions. As at 31 December 2016 and as at 31 December 2015 the value of the provision amounted to PLN 353 million and PLN 440 million, respectively.

### 7.2.9.4. Other provisions

As at 31 December 2016 and as at 31 December 2015 other provisions comprise mainly provisions for the risk of unfavourable decisions of pending administrative or court proceedings of PLN 192 million and PLN 170 million, respectively.

#### 7.3. EXPLANATORY NOTES TO THE FINANCIAL INSTRUMENTS AND FINANCIAL RISK

#### SELECTED ACCOUNTING PRINCIPLES

#### Financial instruments

#### Measurement of financial assets and liabilities

At initial recognition, the Group measures financial assets and liabilities at their fair value plus, in the case of a financial asset or a financial liability not at fair value through profit or loss (i.e. held for trading), transaction costs that are directly attributable to the acquisition or issue of the financial asset or financial liability. The Group does not classify instruments as measured at fair value through profit or loss upon initial recognition, i.e. does not apply the fair value options.

At the end of the reporting period, the Group measures item of financial assets and liabilities at amortised cost using effective interest rate method, except for derivatives, which are measured at fair value.

Gains and losses resulting from changes in fair value of derivatives, for which hedge accounting is not applicable, are recognized in the current year profit or loss.

#### Hedge accounting

Derivatives designated as hedging instruments whose cash flows are expected to offset changes in the cash flows of a hedged item are accounted for in accordance with the cash flow hedge accounting.

The Group assess effectiveness of cash flow hedge at the inception of the hedge and later, at minimum, at reporting date. In case of cash flow hedge accounting, the Group recognizes in other comprehensive income part of profits and losses connected with the effective part of the hedge, whereas profits or losses connected with the ineffective part - under profit or loss.

The Group uses statistical methods, in particular regression analysis, to assess effectiveness of the hedge.

If a hedge of a forecast transaction subsequently results in the recognition of a financial asset or a financial liability, the associated gains or losses that were recognized in other comprehensive income are reclassified to profit or loss of the reporting period in the same period or periods during which the asset acquired, or liability assumed, affects profit or loss.

However, if the Group expects that all or a portion of a loss recognized in other comprehensive income will not be recovered in one or more future periods, it reclassifies the amount that is not expected to be recovered to profit or loss.

If a hedge of a forecast transaction subsequently results in the recognition of a non-financial asset or a non-financial liability, or a forecast transaction for a non-financial asset or non-financial liability becomes a firm commitment for which fair value hedge accounting is applied, the Group removes the associated gains and losses that were recognized in the other comprehensive income and includes them in the initial cost or other carrying amount of the asset or liability.

If a hedge of a forecast transaction results in the recognition of revenue from sales of products, merchandise, materials or services, the Group removes the associated gains or losses that were recognized in the other comprehensive income and adjusts these revenues.

#### Fair value measurement

The Group maximizes the use of relevant observable inputs and minimizes the use of unobservable inputs to meet the objective of fair value measurement, which is to estimate the price at which an orderly transaction to transfer the liability or equity instrument would take place between market participants as at the measurement date under current market conditions.

The Group measures derivatives at fair value using valuation models for financial instruments based on generally available exchange rates, interest rates, forward and volatility curves, for currencies and commodities quoted on active markets.

The fair value of derivatives is based on discounted future flows related to contracted transactions as the difference between term price and transaction price.

Forward exchange rates are not modelled as a separate risk factor, but derives from the spot rate and the respective forward interest rate for foreign currency in relation to PLN.

Derivative instruments are presented as assets, when their valuation is positive and as liabilities, when their valuation is negative.

#### **PROFESSIONAL JUDGEMENTS**

#### Financial instruments

The Management Board assesses the classification of financial instruments, nature and extent of risk related to financial instruments and application of the cash flow hedge accounting. The financial instruments are classified into different categories depending on the purpose of the purchase and nature of acquired assets.

# 7.3.1. Financial instruments by category and class

Financial instruments by class	NOTE	31/12/2016	31/12/2015	Financial instruments by category
ASSETS				
Unquoted shares	7.2.8	40	40	Available for sale
Embedded derivatives and derivatives not designated as hedge accounting	7.2.8	5	9	At fair value through profit or loss
Hedging instruments	7.2.8	158	932	Hedging financial instruments
		12 699	7 949	Loans and receivables
Trade receivables	7.2.5.2	7 161	5 397	Loans and receivables
Cash and cash equivalents		5 072	2 348	Loans and receivables
Receivables on cash flows settled hedging instruments	7.2.8	149	159	Loans and receivables
Other	7.2.5.2, 7.2.8	317	45	Loans and receivables
		12 902	8 930	
LIABILITIES				
Embedded derivatives and derivatives not designated as hedge accounting	7.2.8	117	3	At fair value through profit or loss
Hedging instruments	7.2.8	566	1 003	Hedging financial instruments
Finance lease	7.2.5.3, 7.2.8	170	166	Excluded from the scope of IAS 39
		17 803	16 699	Measured at amortised cost
Loans	7.2.6.1.1	939	5 000	Measured at amortised cost
Borrowings	7.2.6.1	1	3	Measured at amortised cost
Bonds	7.2.6.1.2	7 495	4 155	Measured at amortised cost
Trade liabilities	7.2.5.3	7 549	5 430	Measured at amortised cost
Investment liabilities	7.2.5.3, 7.2.8	1 509	1 808	Measured at amortised cost
Liabilities on cash flows settled hedge instruments	7.2.8	169	103	Measured at amortised cost
Other	7.2.5.3, 7.2.8	141	200	Measured at amortised cost
		18 656	17 871	

# 7.3.2. Income, expense, profit and loss in the consolidated statement of profit or loss and other comprehensive income

		2016	2015	Financial instruments by category
	NOTE			
Interest income	7.1.6.1	59	82	Loans and receivables
Interest costs	7.1.6.2	(216)	(205)	-
		(211)	(194)	Measured at amortised cost
		4	(4)	Hedging financial instruments (ineffective part)
		(9)	(7)	Excluded from the scope of IAS 39
Recognition/reversal of receivables impairment allowances		(12)	(27)	Loans and receivables
other operating income/expenses	7.1.4, 7.1.5	(12)	(30)	Loans and receivables
finance income/costs	7.1.6.1, 7.1.6.2	-	3	Loans and receivables
Financial instruments gains/(losses)		(484)	(518)	
		209	186	Loans and receivables
		(756)	(529)	Measured at amortised cost
		48	(175)	At fair value through profit or loss
		10	(2)	Hedging financial instruments (ineffective part)
		5	2	Available for sale
		(653)	(668)	
other, excluded from the scope of IFRS 7		(4)	(4)	

# 7.3.3. Fair value measurement

# 31/12/2016

				Fair value hierarchy		
	NOTE	Carrying amount	Fair value	Level 1	Level 2	
Financial assets						
Embedded derivatives and hedging instruments	7.2.8	163	163	-	163	
		163	163	-	163	
Financial liabilities						
Loans	7.2.6.1.1	939	941	-	941	
Borrowings	7.2.6.1	1	1	-	1	
Bonds	7.2.6.1.2	7 495	7 811	7 811	-	
Finance lease	7.2.5.3, 7.2.8	170	182	-	182	
Embedded derivatives and hedging instruments	7.2.8	683	683	-	683	
		9 288	9 618	7 811	1 807	

### 31/12/2015

				Fair value hierar	chy
		Carrying	Fair	Level 1	Level 2
	NOTE	amount	value		
Financial assets					
Embedded derivatives and hedging instruments	7.2.8	941	941	-	941
		941	941	-	941
Financial liabilities					
Loans	7.2.6.1.1	5 000	5 003	-	5 003
Borrowings	7.2.6.1	3	3	-	3
Bonds	7.2.6.1.2	4 155	4 193	4 193	-
Finance lease	7.2.5.3, 7.2.8	166	180	-	180
Embedded derivatives and hedging instruments	7.2.8	1 006	1 006	-	1 006
		10 330	10 385	4 193	6 192

For other classes of financial assets and liabilities fair value represents their carrying amount.

## 7.3.3.1. Methods applied in determining fair value (fair value hierarchy)

Financial liabilities due to loans, bonds, finance lease and liabilities and receivables for borrowings are measured at fair value using discounted cash flows method. Discount rates are calculated based on market interest rates according to quotations of 1- month, 3-months and 6-months interest rates increased by proper margins for particular financial instruments.

As at 31 December 2016 and as at 31 December 2015 the Group held unquoted shares in entities, for which fair value cannot be reliably measured, due to the fact that there are no active markets for these entities and no comparable transactions in the same type of instruments were noted. The value of shares of these entities was recognized in the consolidated statement of financial position as at 31 December 2016 and as at 31 December 2015 of PLN 40 million at acquisition cost less impairment allowances. As at 31 December 2016 and as at 31 December 2015 the Group did not intend to sell financial instruments classified as available for sale, for which it is not possible to determine fair value.

During the reporting period and comparative period there were no reclassifications of financial instruments in Group between Level 1 and 2 of fair value hierarchy.

### 7.3.4. Hedge accounting

### Net carrying amount of cash flows hedging instruments

NOTE	31/12/2016	31/12/2015	
Type of instruments / type of risk			Hedging strategies
currency forwards / risk of exchange rates changes	(115)	112	operating and investing activity; sales of products and purchase of crude oil;
commodity swaps / commodity risk	(142)	8	operational inventories, refining margin, time mismatch occurring on purchases of crude oil, risk of crude oil prices on arbitrage transactions cash & carry, offers for which price formulas are based on fixed price;
currency interest rate swaps / risk of interest rates changes	(151)	(99)	interest payments;
interest rate swaps / risk of interest rates changes	-	(92)	interest payments
7.2.8	(408)	(71)	

Planned realization date of hedged cash flows which will be recognized in the profit or loss

	31/12/2016	31/12/2015
Currency operating exposure	2017-2018	2016-2018
Finance currency exposure	2017	2016-2017
Interest rate exposure	2017-2019	2016-2020
Commodity risk exposure	2017-2018	2016-2017

### 7.3.5. Risk identification

Risk management is mainly focused on the unpredictability of markets and aims to minimize any potential negative impacts on the Group's financial results.

Type of risk	Exposure	Measurement of exposure	Management/Hedging
Commodity	<ul> <li>risk of changes in refining and petrochemical margins on sale of products and Ural/Brent differential fluctuations;</li> <li>risk of changes in crude oil and products prices related to the time mismatch;</li> <li>risk of changes in CO<sub>2</sub> emission rights prices;</li> <li>risk of changes in crude oil and refinery product prices related to the obligation to maintain mandatory reserves of crude oil and fuels;</li> <li>risk of changes in commodity prices on arbitrage transactions cash &amp; carry involving acquisition of crude oil or products for stock in order to sell them or process them at a later date</li> </ul>	Based on planned cash flows.	Market risk management policy and hedging strategies, which define principles of
Exchange rates changes	<ul> <li>economic currency exposure resulting from inflows decrease by expenses indexed to or denominated in other than the functional currency;</li> <li>currency exposure resulting from investment or probable liabilities and receivables in foreign currencies;</li> <li>balance sheet exposure resulting from assets and liabilities denominated in foreign currency</li> </ul>	Based on planned cash flows. Based on analysis of balance sheet positions.	measurement of individual exposure, parameters and the time horizon of risk hedging and hedging instruments.
Interest rates changes	Exposure resulting from owned assets and liabilities for which interest gains or losses are dependent on floating interest rates.	Based on total gross debt to positions for which interest costs are dependent on floating interest rate.	
Liquidity	Risk of unforeseen shortage of cash or lack of access to financing sources, both in the horizon of short and long-term borrowing, leading to temporary or permanent loss of ability to pay financial liabilities or imposing the need to obtain funds on unfavourable terms.	Based on planned cash flows in short and long-term horizon.	Short-term liquidity risk management policy, which defines rules of reporting and consolidation of liquidity of PKN ORLEN and ORLEN Group entities. Group carries out a policy of its financing sources diversification and uses range of tools for effective liquidity management.
Losing cash and deposits	Risk of bankruptcy of domestic or foreign banks, in which accounts are kept or in which cash is invested for a short time.	Short-term credit rating of bank.	Management based on principles of surplus cash management, which determine possibility of granting quotas for individual banks made on the basis of, among others, ratings of investment and reporting data.
Credit	Risk of unsettled receivables for delivered products and services by customers. Credit risk is also related to the creditability of customers with whom sales transactions are concluded.	Analysis of creditability and solvency of customers.	Management based on procedures and policies adopted for management of trade credit and debt recovery.

The ORLEN Group applies a consistent financial risk hedging policy based on market risk management policy supported and supervised by the Financial Risk Committee, the Management Board and the Supervisory Board.

### 7.3.5.1. Commodity risk

### The impact of commodity hedging instruments on the Group's financial statements

Type of hedged raw material/product	Unit of measure	31/12/2016	31/12/2015
Crude oil	bbl	16 574 715	9 160 200
Gas	gj	7 300 000	15 000
Other	t	400 710	1 351 801

The net carrying amount of hedging instruments for commodity risk as at 31 December 2016 and as at 31 December 2015 amounted to PLN (142) million and PLN 8 million, respectively.

### Sensitivity analysis for changes in prices of products and raw materials

Analysis of the influence of changes in the carrying amount of financial instruments on hedging reserve to a hypothetical change in prices of products and raw materials:

	2016 Increase of prices	2016 Total influence	2015 Increase of prices	2015 Total influence
Crude oil USD/bbl; CAD/bbl	45%	(817)	19%	(92)
Diesel USD/t	42%	(28)	17%	(38)
Gasoline USD/t	41%	(8)	21%	(62)
Naphta USD/t		· · · ·	21%	(9)
Heating oil USD/t	53%	33	20%	11
JET fuel USD/t		-	16%	4
Gas CAD/Gj	42%	(31)	-	
		(851)		(186)

At decrease in prices in 2016 and 2015, respectively by the same percentage, sensitivity analysis assumes values with the opposite sign in comparison to the table above.

Applied for the sensitivity analysis of commodity risk hedging instruments variations of crude oil and products prices were calculated based on volatility and available analysts' forecasts.

The influence of changes of prices was presented on annual basis. In case of derivatives, the influence of crude oil, and products prices variations on fair value were examined at constant level of currency rates.

#### 7.3.5.2. The risk of exchange rates changes

### Currency structure of financial instruments as at 31 December 2016

Financial instruments by class	EUR	USD	CZK	CAD	Other currencies after translation to PLN	Total after translation to PLN
Financial assets						
Trade receivables	466	150	6 337	15	18	3 790
Embedded derivatives and hedging instruments	4	31	-	5	-	163
Cash and cash equivalents	679	76	2 657	-	19	3 775
Receivables on cash flows settled hedging instruments	-	36	-	-	-	149
Other	4	1	182	8	-	75
	1 153	294	9 176	28	37	7 952
Financial liabilities						
Loans	16	-	-	36	-	181
Bonds	1 238	-	-	-	-	5 478
Trade liabilities	333	1 069	2 650	4	4	6 390
Investment liabilities	146	9	839	26	-	901
Embedded derivatives and	76	77	_	8		683
hedging instruments	10			0		
Liabilities on cash flows settled hedging instruments	-	40	-	-	-	169
Other	1	1	232	-	-	47
	1 810	1 196	3 721	74	4	13 849

# Currency structure of financial instruments as at 31 December 2015

Financial instruments by class	EUR	USD	СZК	CAD	Other currencies after translation to PLN	Total after translation to PLN
Financial assets						
Trade receivables	396	91	5 487	17	17	2 973
Embedded derivatives and hedging instruments	19	218	30	2	-	941
Cash and cash equivalents	53	68	5 689	-	-	1 388
Receivables on cash flows settled hedging instruments	-	41	-	-	-	159
Other	3	2	38	3	-	35
	471	420	11 244	22	17	5 496
Financial liabilities						
Loans	671	155	-	200	-	4 025
Bonds	502	-	-	-	-	2 138
Trade liabilities	248	570	3 151	17	-	3 826
Investment liabilities	193	19	933	30	-	1 129
Embedded derivatives and hedging instruments	44	210	-	-	-	1 006
Liabilities on cash flows settled hedging instruments	-	26	-	-	-	103
Other	6	8	371	-	-	115
	1 664	988	4 455	247	-	12 342

## Sensitivity analysis for changes in the exchange rates

	EUR /	PLN	USD .	/ PLN	CZK	/ PLN	CAD /	PLN	To	tal
	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015
				vari	ation of excha	ange rates +15	%			
Influence on result before tax (A)	(423)	(758)	(339)	(196)	(68)	(142)	(18)	(12)	(847)	(1 108)
Influence on hedging reserve (B)	(1 863)	(574)	(146)	2	-	-	(97)	-	(2 106)	(572)
Influence on foreign exchange differences on subsidiaries from consolidation ( C )	14	6	(63)	10	136	168	-	(83)	87	101
Total influence (A+B+C)	(2 272)	(1 326)	(548)	(184)	68	26	(114)	(95)	(2 866)	(1 579)
Sensitivity of net investment in foreign operations including hedging reserve (D)	93	72	274	207	1 019	836	274	246	1 660	1 361
Total influence on profit or loss and other comprehensive income (A+B+D)	(2 193)	(1 260)	(211)	13	951	694	160	234	(1 293)	(319)

At variation of currency rates by (-)15%, sensitivity analysis assumes the same value as in the table above only with the opposite sign. Variations of currency rates described above were calculated based on average volatility of particular currency rates and analysts' forecasts. The influence of currency rate variations on fair value of derivative instruments was examined at constant level of interest rates.

### 7.3.5.3. The risk of interest rates changes

### Structure of financial instruments subject to risk of interest rates changes as at 31 December 2016

Financial instruments by class		WIBOR	EURIBOR	LIBOR USD	LIBOR CAD	Total
	NOTE					
Financial assets						
Hedging instruments	7.2.8	-	18	130	15	163
			18	130	15	163
Financial liabilities						
Loans	7.2.6.1.1	758	71	-	110	939
Borrowings	7.2.6.1	1	-	-		1
Bonds	7.2.6.1.2	1 916	-	-		1 916
Hedging instruments	7.2.8	151*	334*	321	26	681**
		2 826	405	321	136	3 537**

<sup>1</sup>In financial liabilities - hedging instruments, cross interest rate swaps (CIRS) valuated at the amount of PLN 151 million was recognized, which are sensitive to both WIBOR and EURIBOR interest rates changes. \*\*Total includes CIRS valuation of PLN 151 million.

### Structure of financial instruments subject to risk of interest rates changes as at 31 December 2015

Financial instruments by class		WIBOR	EURIBOR	LIBOR USD	PRIBOR	LIBOR CAD	Total
	NOTE						
Financial assets							
Hedging instruments	7.2.8	-	80	849	5	6	940
			80	849	5	6	940
Financial liabilities							
Loans	7.2.6.1.1	975	2 859	605	-	561	5 000
Borrowings	7.2.6.1	3	-	-	-	-	3
Bonds	7.2.6.1.2	1 916	-	-	-	-	1 916
Hedging instruments	7.2.8	99*	186*	818	-	-	1 004**
		2 993	3 045	1 423		561	7 923**

\*In financial liabilities - hedging instruments, cross interest rate swaps (CIRS) valuated at the amount of PLN 99 million was recognized, which are sensitive to both WIBOR and EURIBOR interest rates changes. \*\*Total includes CIRS valuation of PLN 99 million.

### Sensitivity analysis for the interest rates changes

Interest rate	Assumed variations		Influence on result	Influence on result before tax		edging reserve	1	Total	
	31/12/2016	31/12/2015	2016	2015	2016	2015	2016	2015	
WIBOR	+0.5p.p.	+0.5p.p.	(13)	(14)	13	(44)	-	(58)	
LIBOR USD	+0.5p.p.	+0.5p.p.	11	(3)	-	13	11	10	
EURIBOR	+0.5p.p.	+0.5p.p.	24	(14)	3	95	27	81	
			22	(31)	16	64	38	33	
WIBOR	-0.5p.p.	-0.5p.p.	13	14	(13)	45	-	59	
LIBOR USD	-0.5p.p.		(11)		-	-	(11)	-	
EURIBOR	-0.5p.p.	-	(24)	-	-	-	(24)	-	
			(22)	14	(13)	45	(35)	59	

The above interest rates variations were calculated based on observations of average interest rates fluctuations.

The Group at the end of 2016 and 2015 does not consider in the sensitivity analysis change of PRIBOR and LIBOR CAD due to their insignificant impact. Low interest rates of EURIBOR and LIBOR USD at the end of 2015 and market forecasts for further periods caused that the Group did not take the further decrease in the sensitivity analysis into consideration. The influence of interest rates changes was presented on annual basis.

For derivatives in sensitivity analysis for the risk of interest rates changes interest rate curve displacement due to potential reference rate change was used, provided that other risk factors remain constant.

### 7.3.5.4. Liquidity and credit risk

### Liquidity risk

### Maturity analysis for financial liabilities as at 31 December 2016

		up to 1 year	above 1 to 3 years	above 3 to 5 years	above 5 years	Total	Carrying amount
	NOTE						
Loans - undiscounted value	7.2.6.1.1	288	204	194	358	1 044	939
Bonds	7.2.6.1.2	761	1 264	103	5 479	7 607	7 495
floating-rate bonds - undiscounted value		756	1 254	-		2 010	1 916
fixed rate bonds - undiscounted value		5	10	103	5 479	5 597	5 579
Trade liabilities	7.2.5.3	7 549	-	-		7 549	7 549
Investment liabilities	7.2.5.3, 7.2.8	1 398	14	14	83	1 509	1 509
Embedded derivatives and	, -						
hedging instruments- undiscounted value	7.2.8	421	189	13		623	683
gross exchange amounts, incl.:		114	66	-		180	244
currency forwards	7.2.8	87	-	-		87	91
currency interest rate swaps	7.2.8	25	66	-		91	151
net exchange amounts		307	123	13		443	439
currency forwards	7.2.8	30	44	-		74	72
interest rate swaps	7.2.8	27	50	13		90	90
commodity swaps	7.2.8	250	29	-		279	277
Other	7.2.5.3, 7.2.8	340	36	24	81	481	481
		10 757	1 707	348	6 001	18 813	18 656

### Maturity analysis for financial liabilities as at 31 December 2015

		up to 1 year	above 1 to 3 years	above 3 to 5 years	above 5 years	Total	Carrying amount
	NOTE						
Loans - undiscounted value	7.2.6.1.1	1 053	1 019	2 720	435	5 227	5 000
Bonds	7.2.6.1.2	68	1 003	1 125	2 138	4 334	4 155
floating-rate bonds - undiscounted value fixed rate bonds - undiscounted value		63 5	993 10	1 017 108	- 2 138	2 073 2 261	1 916 2 239
Trade liabilities	7.2.5.3	5 430	-	-	-	5 430	5 430
Investment liabilities Embedded derivatives and	7.2.5.3, 7.2.8	1 508	196	14	90	1 808	1 808
hedging instruments- undiscounted value	7.2.8	693	205	34	-	932	1 006
gross exchange amounts, incl.:		5	8	14	-	27	107
currency interest rate swaps	7.2.8	(2)	8	14	-	20	99
net exchange amounts, incl.:		688	197	20	-	905	899
commodity swaps	7.2.8	655	151	-	-	806	801
Other	7.2.5.3, 7.2.8	306	63	21	82	472	472
		9 058	2 486	3 914	2 745	18 203	17 871

As at 31 December 2016 and as at 31 December 2015 the maximum possible indebtedness due to loans amounted to PLN 12,728 million and PLN 13,916 million, respectively. As at 31 December 2016 and as at 31 December 2015 PLN 11,110 million and PLN 8,441 million, respectively, remained unused.

The value of guarantees regarding liabilities to third parties granted during ongoing operations as at 31 December 2016 and as at 31 December 2015 amounted to PLN 488 million and PLN 458 million, respectively. These concern mainly: civil-law guarantees of contract performance and public-law guarantees resulting from generally applicable regulations secured regularity of business licensed in the liquid fuels sector and resulting from this activity tax and customs receivables, etc.

In addition, guarantees and sureties granted in the Group on behalf of related parties as at 31 December 2016 and as at 31 December 2015 amounted to PLN 12,437 million and PLN 6,836 million, respectively. They were mainly related to secure of ORLEN Capital future liabilities due to these transactions of Eurobonds issuance and timely payment of liabilities by related parties.

Based on analysis and forecasts as at the end of the reporting period, the Group recognized the probability of payment of these amounts as low.

### Credit risk

As at 31 December 2016 and as at 31 December 2015 the Group received bank and insurance guarantees of PLN 2,520 million and PLN 2,648 million, respectively. Additionally the Group receives from its customers securities such as blockade of cash on bank accounts, deposits, mortgage and bills of exchange. Additional information is presented in note 7.2.5.2.

### 7.4. OTHER EXPLANATORY NOTES

### 7.4.1. Concessions held

The Group's operations require concessions, due to their importance to the public interest.

	Remaining concessions periods
31/12/2016	(in years)
Electrical energy: manufacturing, distribution, trade	3-14
Heating energy: manufacturing, transmission, distribution, trade	9-14
Gaseous fuels: transmission, distribution, trade	4-14
Liquid fuels: manufacturing, transmission, trade, storage	1-14
Non-reservoir storage of crude oil and liquid fuels	13
Rock salt: exploration, recognition and exploitation	1.5-16
Exploration and recognition of crude oil and natural gas deposits	1-4
Marine Wind Farms: preparation, implementation, operation	25
Personal and property security services	indefinitely

As at 31 December 2016 and as at 31 December 2015 the Group had no liabilities related to concession services in scope of IFRIC 12 – Service concession arrangements.

#### 7.4.2. Leases

### SELECTED ACCOUNTING PRINCIPLES

#### Lease

A lease is an agreement whereby a lessor conveys to the lessee in return for a payment or series of payments the right to use an asset for an agreed period of time. Assets used under the finance lease, that is under agreement which transfers substantially all the risks and rewards incidental to ownership of an asset to the lessee, are recognized as assets of the lessee. Assets used under the operating lease, that is under the agreement that does not transfer substantially all the risks and rewards incidental to ownership of an asset to the lessee, are recognized as assets of the lessee, are recognized as assets of the lessee, are recognized as assets of the lessor. Determining whether the transfer of risks and rewards exists depends on the assessment of essence of the economic substance of the transaction.

### 7.4.2.1. Group as a lessee

### **Operating lease**

As at 31 December 2016 and as at 31 December 2015 the Group was a lessee under non-cancellable operating lease agreements (tenancy, rent), which regard mainly the lease of petrol stations, means of transportation and computer equipment. Agreements include clauses concerning contingent rent payables. In most cases they can be prolonged.

The total lease payments, resulting from non-cancellable operating lease agreements recognized as expenses in 2016 and in 2015 amounted to PLN (79) million and PLN (85) million, respectively.

Future minimum lease payments under non-cancellable operating lease agreements

	31/12/2016	31/12/201\5
up to 1 year	83	73
above 1 to 5 years	210	207
up to 1 year above 1 to 5 years _above 5 years	544	474
	837	754

### Finance lease

As at 31 December 2016 and as at 31 December 2015 the Group was a lessee under finance lease agreements, which relate mainly to the buildings and constructions, machinery and equipment and vehicles.

In concluded lease agreements, the general conditions of finance lease are effective, they do not contain any clauses concerning contingent rent payables, give the possibility to purchase the leased equipment and eventually can be prolonged.

			uture minimum lease ments	Value of future mi	nimum lease payments
	NOTE	31/12/2016	31/12/2015	31/12/2016	31/12/2015
up to 1 year		29	26	35	33
above 1 to 5 years		60	58	79	77
above 5 years		81	82	109	112
	7.2.5.3, 7.2.9	170	166	223	222

#### 7.4.3. Investment expenditures incurred and future commitments resulting from signed investment contracts

The total amount of investment expenditures together with borrowing costs incurred in 2016 and in 2015 amounted to PLN 4,673 million and PLN 3,183 million, respectively, including PLN 89 million and PLN 306 million of investments relating to environmental protection.

As at 31 December 2016 and as at 31 December 2015 the value of future commitments resulting from contracts signed until this date amounted to PLN 1,941 million and PLN 3,054 million, respectively.

#### 7.4.4. Contingent assets and liabilities

#### SELECTED ACCOUNTING PRINCIPLES

#### Contingent assets and liabilities

The Group discloses at the end of reporting period information on contingent assets if the inflow of resources embodying economic benefits is practically probable. If it is practicable the Group estimates the financial impact of contingent assets valuing them according to the principles of valuation provisions. The Group discloses at the end of reporting period information on contingent liabilities if the outflow of resources embodying economic benefits is probable, unless the

possibility of outflow of resources embodying economic benefits is remote.

#### ESTIMATES

#### Contingent assets

On the basis of the insurance policies held the Group estimates the value of the compensation related to accident on installation, which took place in the Group entities.

#### **Contingent assets**

On 13 August 2015 the steam cracker unit accident in Unipetrol Group took place. Based on the insurance policies Unipetrol Group expects insurers to cover reconstruction costs of installations, which estimated at approximately PLN 0.6 billion translated using the exchange rate as at 31 December 2016 (representing CZK 3.9 billion), as well as lost business profits (business interruption), which estimated at approximately PLN 1.7 billion translated using the exchange rate as at 31 December 2016 (representing CZK 10.1 billion).

In 2016 Unipetrol Group recognized in other operating income (note 7.1.4) amounts of partial compensation received from insurers in the amount PLN 1,280 million. After consideration the above amount the value of contingent asset as at 31 December 2016 due to described above damage Unipetrol Group estimated in the amount of PLN 1 billion translated using the exchange rate of the 31 December 2016 (representing CZK 6.1 billion). The final amount of compensation will depend on the final agreement with insurers.

Received cash by 31 December 2016 due to the described above compensations amounted to PLN 1,080 million translated using the exchange rate as at 31 December 2016 (representing CZK 6.6 billion).

The remaining part of partial compensation amount recognized in other operating income, Unipetrol Group received in January 2017.

On 17 May 2016, the accident on installation FCC (Fluid Catalytic Cracking) in the Kralupy refinery in Unipetrol Group took place. Based on the insurance policies, Unipetrol Group expects insurers to cover reconstruction costs which estimated at approximately PLN 49 million translated using the exchange rate as at 31 December 2016 (representing CZK 0.3 billion) as well as lost business profits (business interruption), which from the accident to the 31 December of 2016 estimated in the amount of approximately PLN 147 million translated using the exchange rate as at 31 December 2016 (representing CZK 0.9 billion). In February 2017 Unipetrol Group signed with insurer the agreement related to partial compensation due to the accident on FCC based on which the Group will recognize in other operating income in the 1<sup>st</sup> quarter of 2017 the amount of PLN 158 million (representing USD 40 million translated using the exchange rate of the 31 December 2016).

The final amount of compensation will depend on the final agreement with insurers.

Production in the Kralupy refinery and the steam cracker unit in Unipetrol Group was restored in the 4th quarter of 2016.

Information on significant court proceedings including contingent liabilities is presented in note 8.

### 7.4.5. Excise tax guarantees

Excise tax guarantees and excise tax on goods and merchandise under the excise tax suspension procedure as at 31 December 2016 and as at 31 December 2015 amounted to PLN 2,066 million and PLN 1,815 million, respectively.

### 7.4.6. Related party transactions

In 2016 and 2015 and as at 31 December 2016 and as at 31 December 2015 were no transactions of related parties with members of the Management Board and the Supervisory Board of the Parent Company, other key executive personnel of the Parent Company and their relatives.

In 2016 were transactions of related parties with key executive personnel of the ORLEN Group companies with related parties in the amount of PLN 0.6 million, the main amount regarded purchase of marketing services from a person related with key personnel of the Anwil Group and ORLEN Poludnie Group in the amount of PLN 0.3 million and PLN 0.2 million, respectively. As at 31 December 2016 the balance of liabilities amounted to PLN 0.2 million.

In 2015 were transactions of related parties with key executive personnel of the ORLEN Group companies with related parties in the amount of PLN 0.4 million, the main amount regarded purchase of marketing services from a person related with key personnel of ORLEN Servis in the amount of PLN 0.3 million.

### ORLEN Group companies' transactions and balances of settlements with related parties

	Sales		Р	Purchases	
	2016	2015	2016	2015	
Jointly- controlled entities	2 148	2 954	(58)	(213)	
joint ventures	2 115	2 806	(35)	(37)	
joint operations	33	148	(23)	(176)	
Associates	38	48	(5)	(32)	
	2 186	3 002	(63)	(245)	

	Trade and other receivables		Trade and ot	her liabilities
	31/12/2016	31/12/2015	31/12/2016	31/12/2015
Jointly- controlled entities	430	509	15	5
joint ventures	415	508	3	4
joint operations	15	1	12	1
Associates	15	17		8
	445	526	15	13

The above transactions with related parties include mainly sales and purchases of refinery and petrochemicals products and of services. In 2016 and in 2015 there were no related party transactions in the Group concluded on other than an arm's length basis.

# 7.4.7. Remuneration together with profit-sharing paid and due or potentially due to the members of the Management Board, the Supervisory Board of the Parent Company and other members of key executive personnel of the Parent Company and the ORLEN Group companies

	2016	2015
Remuneration of the Management Board Members of the Parent Company performing duties in the current	13.5	13.5
year remuneration and other benefits	8.4	7.2
bonus paid for the previous year	5.1	6.3
Bonuses potentially due to the Management Board Members of the Parent Company performing duties in the current year , to be paid in the next year	7.9	6.7
Remuneration and other benefits paid to the former Management Board Members of the Parent Company $^{\star}$	4.3	1.8
Remuneration and other benefits of the key executive personnel	209.9	177.5
remuneration and other benefits of the key executive personnel of the Parent Company	44.4	37.1
key executive personnel of the subsidiaries belonging of the ORLEN Group	165.5	140.4
Remuneration of the Supervisory Board Members of the Parent Company	1.4	1.5

\* In 2016, bonus paid for the year 2015 and remuneration paid for severance payment and for non-competition; in 2015 remuneration paid for severance payment and for non-competition.

Remuneration of PKN ORLEN Management Board, PKN ORLEN Supervisory Board and other key executive personnel of PKN ORLEN and the Group entities includes short-term employee benefits, post-employment benefits, other long-term employee benefits and termination benefits paid, due and potentially due during the period.

On 24 January 2017 the Extraordinary General Meeting of Shareholders at which were adopted resolutions regarding rules of determining the PKN ORLEN Management Board and the Supervisory Board remuneration, took place. The full text of adopted resolutions is available on website: <u>http://www.orlen.pl/EN/InvestorRelations/RegulatoryAnnouncements/Pages/Regulatory-announcement-no-14-2017.aspx</u>

#### Bonus systems for key executive personnel of the ORLEN Group

The regulations applicable to the Management Board of PKN ORLEN, directors directly reporting to the Management Board of PKN ORLEN and other key positions of the ORLEN Group have certain common features. The persons subject to the above mentioned systems are remunerated for the accomplishment of specific goals set at the beginning of the bonus period, by the Supervisory Board for the Management Board Members and by the Management Board for the key executive personnel. The Bonus Systems are consistent with the Concern's Values, so as to promote the cooperation between individual employees in view to achieve the best possible results for the ORLEN Group.

Bonus systems for the Management Board Members of the ORLEN Group companies in 2017 will be adapted to the conditions specified in the Act on the principles of determining the amount of remuneration for people managing certain companies of 9 June 2016 (Official Journal 2016, item 1202).

### Remuneration regarding non-competition clause and dissolution of the contract as a result of dismissal from the position held

According to agreements the Management Board Members of PKN ORLEN are obliged to obey a non-competition clause for 6 or 12 months, starting from the date of termination or expiration of the contract. In the period, they are entitled to receive remuneration in the amount of six or twelve basic monthly remuneration, payable in equal monthly instalments. In addition, agreements include remuneration payments in case of dissolution of the contract because of dismissal from the position held. Remuneration in such a case is six or twelve basic monthly remuneration.

Directors directly subordinate to the Management Board of PKN ORLEN and the Management Board Members of the ORLEN Group companies are typically obliged to obey a non-competition clause for 6 months, starting from the date of termination or expiration of the contract. In the period, they

receive remuneration in the amount of 50% of six-month basic remuneration, payable in 6 equal monthly instalments. Severance pay for termination of the contract by the Employer amounts to three or six times basic monthly remuneration.

The Management Board Members of the ORLEN Group companies' contracts in 2017 will be adapted to the to the conditions specified in the Act on the principles of determining the amount of remuneration for people managing certain companies of 9 June 2016 (Official Journal 2016, item 1202).

### 7.4.8. Remuneration arising from the agreement with the entity authorized to conduct audit of the financial statements

	2016	2015
Remuneration of KPMG Audyt Sp. z o.o. in respect of the Parent Company audit and reviews of the financial statements	<b>1.7</b> 1.0	1.3
additional services	0.7	0.2
Remuneration of KPMG Audyt Sp. z o.o. and KPMG member firms in respect of subsidiaries of the Capital Group	5,0	4.4
audit of the annual financial statements and verification procedures	3.8	3.9
additional services	1.2	0.5
	6.7	5.7

In the period covered by this consolidated financial statements the entity authorized to conduct audit of the ORLEN Group's financial statements was KPMG Audyt Sp. z o.o. According to the agreement concluded on 30 May 2005 with subsequent amendments KPMG Audyt Sp. z o.o. executed the interim reviews and audits of separate and consolidated financial statements in years 2005-2016.

On 15 December 2016 the PKN ORLEN Supervisory Board has appointed "Deloitte Polska spółka z ograniczoną odpowiedzialnością spółka komandytowa" as the entity authorized to conduct the interim reviews and audits of separate financial statements of PKN ORLEN and consolidated financial statements of ORLEN Group for years 2017 and 2018 (with the possibility to extend the cooperation for further periods, subject to prior approval by the PKN ORLEN Supervisory Board).

# 8. INFORMATION CONCERNING SIGNIFICANT PROCEEDINGS IN FRONT OF COURT, BODY APPROPRIATE FOR ARBITRATION PROCEEDINGS OR IN FRONT OF PUBLIC ADMINISTRATION BODIES

As at 31 December 2016 the ORLEN Group entities were parties in the following significant proceedings in front of court, body appropriate for arbitration proceedings or in front of public administration bodies:

### 8.1. Proceedings in which the ORLEN Group entities act as the defendant

### 8.1.1. Proceedings with the total value exceeding 10% of the Issuer's equity

### Risk connected with the disposal of assets and liabilities related to purchase of Unipetrol shares

The claim regarding the payment of compensation for losses related among others, to alleged unfair competition of PKN ORLEN included in Agrofert Holding a.s. (Agrofert) claim and alleged illegal violation of reputation of Agrofert in relation to purchase by PKN ORLEN of UNIPETROL shares. By judgment of 21 October 2010 the Court of Arbitration ("the Court of Arbitration") in Prague (Czech Republic) dismissed the entire claim of Agrofert against PKN ORLEN regarding the payment of PLN 3,186 million translated using the exchange rate as at 31 December 2016 (representing CZK 19,464 million) with interest and obliged Agrofert to cover the cost of proceedings born by PKN ORLEN. On 3 October 2011 PKN ORLEN received from the upper court in Prague Agrofert's claim which repealed the above judgment. The complaint was dismissed by the court with the ruling of 24 January 2014. On 7 April 2014 Agrofert appealed the above decision. On 7 April 2015 the court of appeals dismissed the appeal of Agrofert claim. In November 2016 Agrofert appealed to the Czech Constitutional Court against that decision. PKN ORLEN is taking legal actions in order to retain the above mentioned favorable judgments issued in this case.

### 8.1.2. Other significant proceedings with the total value not exceeding 10% of the Issuer's equity

### Tax proceedings in ORLEN Południe S.A. (previously Rafineria Trzebinia S.A.)

On 14 May 2014 and 20 May 2014 the company received the decisions of the Head of the Customs Office in Kraków determining excise tax liabilities for the months: May - August 2004 in the amount of PLN 132 million. Rafineria Trzebinia S.A. paid the entire liability with interest using at the same time, provisions recognized for this purpose in prior years. Rafineria Trzebinia S.A. appealed to the Voivodship Administrative Court ("VAC") in Kraków against the above decisions. On 26 February 2015 the VAC in Kraków announced a judgment dismissing the company's claims. On 5 May 2015 the company submitted to the Supreme Administrative Court ("SAC") in Warsaw annulment claims against the judgement of the VAC, that were not recognized until the date of approval of the foregoing financial statements.

In view of the issue by the European Court of Justice in Luxembourg judgement in a similar case the company has submitted applications for renewal of administrative proceedings. Director of the Customs Chamber in Kraków by a decision issued on 23 July 2015 refused to reopen the proceedings due to the ongoing proceedings before the SAC in the cases final decisions for May – August 2004. The company filed an appeal regarding the decisions of the Director of the Customs Chamber in Kraków refusing to reopen the proceedings, which were dismissed. The company filed complaints against above decisions on 16 November 2015, which the VAC in Kraków dismissed on 11 February 2016. On 28 April 2016 the company submitted to the SAC annulment claims against the above described proceedings. These annulment claims were not recognized until the date of the approval of the foregoing financial statements.

### I.P.-95 s.r.o. compensation claim against UNIPETROL RPA s.r.o.

On 23 May 2012, UNIPETROL RPA s.r.o. received from the District Court in Ostrava a claim brought by I.P.-95 s.r.o. for compensation related to the filing by UNIPETROL RPA s.r.o. a motion for bankruptcy of I.P.-95 s.r.o. in November 2009. The total amount of the claim is approximately PLN 293 million, translated using the exchange rate as at 31 December 2016 (representing CZK 1,789 million). UNIPETROL RPA s.r.o. is one of eight defendants which the claim was brought against. According to UNIPETROL RPA s.r.o the claim is without merit. The parties expect the further steps in the proceedings.

# Claim of OBR S.A. for compensation

On 5 September 2014, the company OBR S.A. filled an action against PKN ORLEN with the District Court in Łódź for a claim for payment in respect of an alleged breach by PKN ORLEN of patent rights: The technique of the separation of hydrodesulfurization products of heavy residue after extractive distillation of crude oil'. The amount of the claim in the lawsuit has been estimated by OBR S.A. of approximately PLN 83 million. The claim covers the adjudged sum of money from PKN ORLEN for OBR S.A. in the amount corresponding to the value of the license fee for the use of the solution under the above patent and adjudge the obligation to repay the benefits derived from the use of this solution. On 16 October 2014, PKN ORLEN responded to the lawsuit. By the procedural

document from 11 December 2014, the value of the dispute was referred to by the plaintiff in the amount of approximately PLN 247 million. By the court order from 21 May 2015 the parties were directed to mediation. Mediation proceedings were completed. The case was referred to the District Court in Łódź. The first hearing was held on 19 October 2016. The hearing fixed on 4 January 2017 did not take place. The new date of hearing was scheduled for 22 March 2017. In the opinion of PKN ORLEN the above claims are without merit.

### 8.2. Court proceedings in which the ORLEN Group entities act as a plaintiff

### Arbitration proceedings against Basell Europe Holdings B.V.

On 20 December 2012 PKN ORLEN sent an arbitration request to Basell Europe Holdings B.V. regarding an ad hoc proceeding before the Court of Arbitration in London on compensation relating to Joint Venture Agreement signed in 2002 between PKN ORLEN and Basell Europe Holdings B.V. On 12 May 2016, the Court of Arbitration sent a judgment to the parties in which dismissed all claims of PKN ORLEN and adjudged the return of proceeding's expenses to the Basell Europe Holdings B.V. After analysis of the possibilities of appeal PKN ORLEN decided not to complain against an annulment of judgment, which ends the proceedings in the case.

### The dispute between ORLEN Lietuva and Lietuvos Geležinkeliai

On 31 December 2014, ORLEN Lietuva filed a motion for arbitration against the company Lietuvos Gelezinkeliai ("LG") in the court of arbitration in Vilnius. Currently in this proceeding ORLEN Lietuva calls for the conversion of tariffs for rail transport in line with the contract with LG for the period from January 2014. ORLEN Lietuva applied also for the compensation due to an incorrect interpretation of the agreement on rail transport by LG by using incorrect rates. Consideration of the request of ORLEN Lietuva would lead - depending on the interpretation adopted by the court of arbitration - to save for the company in the amount estimated until October 2016 not less than PLN 181 million translated using the exchange rate as at 31 December 2016 (representing not less than EUR 41 million) or to receive compensation for the use of incorrect rates in the amount of PLN 442 million translated using the exchange rate as at 31 December 2016 (representing EUR 100 million).

Simultaneously, by 31 December 2016, seven court proceedings were initiated in which LG demands from ORLEN Lietuva a payment of approximately PLN 166 million translated using the exchange rate as at 31 December 2016 (representing approximately EUR 37.5 million) from fees for rail transport of ORLEN Lietuva products. Three of the above described proceedings were combined and then the court decided that the combined case will not be considered by the state court since the priority of the court of arbitration which was confirmed by the court of appeal order. Then the case was the subject of recognition by the Lithuanian Supreme Court, which decided that the case may be considering on the merits by the state court, because the claim of LG can be considered as a separate receivables for another period of implementation of the agreement. Proceeding the state court refused to open the proceeding also due to the jurisdiction of the court of arbitration. LG appealed against the above decisions of state courts and proceedings on appeal are in progress. ORLEN Lietuva appealed to the court of appeal against the decision to open proceeding in the seventh case and expects the court decision.

#### **ORLEN GROUP STRUCTURE AND JOINT ARRANGEMENTS** 9.

9.1. Group structure

9.2. Subsidiaries 9.3. Investments in joint arrangements

### 9.1. GROUP STRUCTURE

### SELECTED ACCOUNTING PRINCIPLES

#### Principles of consolidation

The consolidated financial statements of the Group include assets, liabilities, equity, income, expenses and cash flows of the Parent Company and its subsidiaries that are presented as those of a single economic entity and are prepared as at the same reporting period as separate financial statements of the Parent Company and using uniform accounting principles in relation to similar transactions and other events in similar circumstances

The subsidiaries are consolidated using full consolidation method and joint operations by recognition of respective share in assets, liabilities, revenues and cost. The joint ventures as well as investments in associates are accounted for under equity method.

The Group's share in profit or loss of the investee is recognized in the Group's profit or loss as other operating activity.

For investments in subsidiaries - non-controlling interests shall be presented in the consolidated statement of financial position as non-controlling interest, separately from the equity of the owners of the Parent Company.

For investments in associates - the Group has a significant influence if it holds, directly or indirectly (i.e. through subsidiaries), from 20% to 49% of the voting rights of an entity, unless it can be clearly stated otherwise.

### PROFESSIONAL JUDGEMENTS

#### Investments in subsidiaries and jointly controlled entities

The Group, regardless of the nature of its involvement in the entity (the entity in which it invested) defines its status by assessment, whether it controls the entity in which the investment was made, and whether it has a joint control in a joint venture, after consideration of all the facts and circumstances.

PKN ORLEN as the Parent Company is a multi-segment entity, appropriately allocated to all operating segments and corporate functions.

Name of entity	Parent company	Share in tota	l voting rights	Consolidation method/ Valuation method
		31/12/2016	31/12/2015	
Downstream Segment				
ORLEN Lietuva Group				
AB ORLEN Lietuva	PKN ORLEN S.A.	100%	100%	full
UAB Mazeikiu Naftos prekybos namai	AB ORLEN Lietuva	100%	100%	full
OU ORLEN Eesti	UAB Mezeikiu naftos prekybos namai	100%	100%	full
SIA ORLEN Latvija	UAB Mezeikiu naftos prekybos namai	100%	100%	full
UAB Emas	AB ORLEN Lietuva	100%	100%	full
UNIPETROL Group				
PARAMO, a.s.	UNIPETROL, a.s.	100%	100%	full
MOGUL SLOVAKIA, s.r.o.	UNIPETROL RPA, s.r.o.	-	100%	full
Paramo Oil, s.r.o.	PARAMO, a.s.	100%	100%	full
UNIPETROL Austria HmbH	UNIPETROL, a.s.	-	100%	full
JNIPETROL RPA, s.r.o. UNIPETROL Slovensko. s.r.o.	UNIPETROL, a.s. UNIPETROL RPA, s.r.o.	100% 100%	100% 100%	full full
UNIPETROL Deutschland GmbH	UNIPETROL RPA, S.I.O.	100%	100%	full
UNIPETROL RPA Hungary Kft.	UNIPETROL RPA, s.r.o.	100%	100%	full
CHEMOPETROL, a.s.	UNIPETROL, a.s.	-	100%	full
Spolana a.s.	UNIPETROL RPA, s.r.o.	100%	-	full
UNIPETROL DOPRAVA, s.r.o.	UNIPETROL RPA, s.r.o.	100%	100%	full
PETROTRANS, s.r.o.	BENZINA, s.r.o.	100%	100%	full
UNIPETROL RAFINÉRIE, s.r.o.	UNIPETROL, a.s.	-	100%	full
ČESKÁ RAFINÉRSKÁ, a.s.	UNIPETROL, a.s.	100%	100%	full
Butadien Kralupy a.s.	UNIPETROL, a.s.	51%	51%	share in assets and liabilities
ANWIL Group				
Anwil S.A.	PKN ORLEN S.A.	100%	100%	full
Spolana a.s.	ANWIL S.A.	-	100%	full
Przedsiebiorstwo Produkcyjno-Handlowo-Usługowe				
Pro-Lab Sp. z o.o.	ANWIL S.A.	-	99.99%	full
Przedsiębiorstwo Usług technicznych Wircom Sp. z o.o.	PKN ORLEN S.A.	-	97.38	full
Basell Orlen Polyolefins Group				
Basell ORLEN Polyolefins Sp. z o.o.	PKN ORLEN S.A.	50%	50%	equity method
Basell ORLEN Polyolefins Sprzedaż Sp. z o.o.	Basell ORLEN Polyolefins Sp. z.o.o.	100%	100%	equity method
ORLEN Południe Group				
ORLEN Południe S.A.	PKN ORLEN S.A.	100%	100%	
EkoNaft Sp. z o.o.	ORLEN POŁUDNIE S.A.	-	100%	full
Energomedia Sp. z o.o.	ORLEN POŁUDNIE S.A.	100%	100%	full
Euronaft Trzebinia Sp. z o.o.	ORLEN POŁUDNIE S.A.	100%	100%	full
Konsorcjum Olejów Przepracowanych - Organizacja Odzysku S.A.	ORLEN Południe S.A.	89%	89%	full
ORLEN Oil Group				
ORLEN Oil Sp. z o.o.	PKN ORLEN S.A.	100%	100%	full
ORLEN Asfalt Group				
•		4000/	4000/	£.11
ORLEN Asfalt Sp. z o.o. ORLEN Asfalt Ceska Republika s.r.o.	PKN ORLEN S.A.	100% 100%	100% 100%	full full
Inowrocławskie Kopalnie Soli "Solino" S.A.	ORLEN ASFALT Sp. z o.o. PKN ORLEN S.A.	100%	100%	full
	PKN ORLEN S.A. PKN ORLEN S.A.	100%	100%	full
Kopalnia Soli Lubień Sp. z o.o.	PKN ORLEN S.A. PKN ORLEN S.A.	100%	100%	full
ORLEN Paliwa Sp. z o.o.	PKN UKLEN S.A.	100%	100%	TUII

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Name of entity	Parent company	Share in total v	oting rights	Consolidation method/
				Valuation method
		31/12/2016	31/12/2015	
Petrolot Sp. z o.o.	PKN ORLEN S.A.	100%	100%	full
ORLEN Eko Sp. z o.o.	PKN ORLEN S.A.	100%	100%	full
Baltic Power Sp. z o.o.	PKN ORLEN S.A.	100%	100%	full
ORLEN KolTrans Sp. z o.o.	PKN ORLEN S.A.	99.85%	99.85%	full
Ship-Service S.A.	PKN ORLEN S.A.	60.86%	60.86%	full
ORLEN Transport S.A.	PKN ORLEN S.A.	-	100%	full
ORLEN Wir Sp. z o.o.	PKN ORLEN S.A.	-	76.59%	full
Retail Segment				
AB Ventus-Nafta	PKN ORLEN S.A.	100%	100%	full
ORLEN Deutschland GmbH	PKN ORLEN S.A.	100%	100%	full
ORLEN Budonaft Sp .z o.o.	PKN ORLEN S.A.	100%	100%	full
ORLEN Centrum Serwisowe Sp. z o.o.	PKN ORLEN S.A.	99.33%	99.33%	full
UNIPETROL RPA, s.r.o.	UNIPETROL, a.s.	100%	-	full
BENZINA, s.r.o.	UNIPETROL, a.s.	-	100%	full
Upstream Segment				
ORLEN Upstream Group				
ORLEN Upstream Sp. z o.o.	PKN ORLEN S.A.	100%	100%	full
ORLEN Upstream International BV	PKN ORLEN S.A.	-	100%	full
ORLEN Upstream Canada Ltd.	PKN ORLEN S.A.	100%	100%	full
1426628 Alberta Ltd.	ORLEN Upstream Canada Ltd.	100%	100%	full
OneEx Operations Partnership	ORLEN Upstream Canada Ltd. ORLEN Upstream Sp. z o.o.	100%	100% 100%	full full
Kicking Horse Energy Inc. KCK Operating Company Ltd.	ORLEN Upstream Sp. z 0.0. ORLEN Upstream Sp. z 0.0.	-	100%	full
Columbia Natural Resources Canada Ltd.	ORLEN Upstream Sp. z o.o.		100%	full
Kicking Horse Internat. Exploration Ltd.	ORLEN Upstream Sp. z o.o.		100%	full
Pieridae Production GP Ltd	ORLEN Upstream Canada Ltd.	50%	50%	equity method
671519 NB Ltd	Pieridae Production GP Ltd	50%	50%	equity method
KCK Atlantic Holdings Ltd.	Kicking Horse Energy Inc.	100%	100%	full
Pieridae Production LP	KCK Atlantic Holdings Ltd.	80%	80%	equity method
FX Energy, Inc.	ORLEN Upstream Sp. z o.o.	100%	100%	full
FX Drilling Company, Inc.	FX Energy, Inc.		100%	full
FX Producing Company, Inc. Frontier Exploration, Inc.	FX Energy, Inc. FX Energy, Inc.	- 100%	100% 100%	full full
FX Energy Netherlands Partnership C.V.	FX Energy, Inc.	100%	100%	full
FX Energy Netherlands B.V.	FX Energy Netherlands Partnership C.V.	100%	100%	full
FX Energy Poland Sp. z o.o.	FX Energy Netherlands Partnership C.V.	100%	100%	full
Corporate Functions				
AB ORLEN Lietuva	PKN ORLEN S.A.	100%	100%	full
UNIPETROL Group				
UNIPETROL, a.s.	PKN ORLEN S.A.	62.99%	62.99%	full
UNIPETROL RPA, s.r.o.	UNIPETROL, a.s.	100%	100%	full
UNIPETROL SERVICES, s.r.o. Unipetrol výzkumně vzdělávací centrum, a.s.	UNIPETROL, a.s. UNIPETROL, a.s.	- 100%	100% 100%	full full
HC Verva Litvinov, a.s.	UNIPETROL RPA, s.r.o.	70.95%	70.95%	full
ORLEN Administracja Sp. z o.o.	PKN ORLEN S.A.	100%	100%	full
ORLEN Capital AB	PKN ORLEN S.A.	100%	100%	full
	PRIN URLEN S.A.	100 %	100%	Iuli
ORLEN Centrum Usług Korporacyjnych Sp. z o.o.	PKN ORLEN S.A.	100%	100%	full
ORLEN Finance AB	PKN ORLEN S.A. PKN ORLEN S.A.	100%	100%	full
ORLEN Holding Malta Group	THAT ONLER O.A.	10070	10070	iun
ORLEN Holding Malta Ltd.	PKN ORLEN S.A.	100%	100%	full
Orlen Insurance Ltd.	ORLEN HOLDING MALTA Ltd.	100%	100%	full
ORLEN Ochrona Group			10001	
ORLEN Ochrona Sp. z o.o.	PKN ORLEN S.A.	100%	100%	full
UAB Apsauga	ORLEN OCHRONA Sp. z o.o.	100%	100%	full
ORLEN Serwis S.A.	PKN ORLEN S.A.	100%	100%	full
ORLEN Projekt S.A.	PKN ORLEN S.A.	99.77%	99.77%	full
ORLEN Laboratorium S.A.	PKN ORLEN S.A.	99.38%	99.38%	full
Płocki Park Przemysłowo-Technologiczny Group				
Płocki Park Przemysłowo-Technologiczny S.A. (PPPT S.A.)	PKN ORLEN S.A.	50%	50%	equity method
Centrum Edukacji Sp. z o.o.	PPPT S.A.	69.43%	69.43%	equity method

# Activity of core companies belonging to ORLEN Group

Name of entity	Headquarters	Principal activity
AB ORLEN Lietuva (including its own Capital Group)	Lithuania - Juodeikiai	crude oil processing, production of refining products and wholesale
UNIPETROL a.s. (including its own Capital Group)	Czech Republic - Prague	crude oil processing as well as manufacture and distribution of refinery, petrochemical and chemical products
Anwil S.A	Poland - Włocławek	production of nitrogen fertilizers, plastic and chemicals
ORLEN Południe S.A.	Poland - Trzebinia	crude oil processing, production and sale of biofuels, oils
ORLEN Oil Sp. z o.o.	Poland - Cracow	production, distribution and sale of grease oils, maintenance liquids
ORLEN Asfalt Sp. z o.o.	Poland - Płock	manufacture and sale of road bitumens and specific bitumen products
ORLEN Paliwa Sp. z o.o.	Poland - Płock	liquid fuels trade
Inowrocławskie Kopalnie Soli "SOLINO" S.A.	Poland - Inowrocław	storage of crude oil, fuels and gases, extraction and supply of brine
ORLEN Upstream Sp. z o.o. (including its own Capital Group)	Poland - Warsaw	exploration and recognition of hydrocarbon deposits, extraction of crude oil and natural gas

### STRUCTURED ENTITIES

#### **ORLEN Capital AB**

The company's business is raising funds through the issuance of bonds and other financial instruments for institutional and private investors. ORLEN Capital AB specializes in granting borrowings or loans to Group companies and conduct any other activities related to the financial instruments.

On 30 June 2014 and on 7 June 2016 ORLEN Capital AB issued Eurobonds with 7-year redemption of approximately of PLN 5,530 million translated using exchange rate as at 31 December 2016 (representing EUR 1,250 million). The funds obtained by ORLEN Capital through the issue were transferred to PKN ORLEN under the borrowing agreement. PKN ORLEN is the guarantor of the both issued bonds by an irrevocable and unconditional guarantees issued to the bondholders of PLN 9,290 million translated using exchange rate as at 31 December 2016 (representing exchange rate as at 31 December 2016 (representing of EUR 2.1 billion). The guarantees were granted for the time of the Eurobonds issues, until 30 June 2021 and 7 June 2023, respectively.

### ORLEN Finance AB

The company's business is to conduct financial services within the ORLEN Group, including intercompany borrowings, as well as any other financial instruments, including mainly external financing.

As at 31 December 2016 the Group has issued the guarantee to ORLEN Finance of PLN 885 million.

### **ORLEN** Insurance Ltd.

ORLEN Insurance is an internal insurance company (i.e. captive), which main purpose is insurance and reinsurance the Group's business, matching insurance to the individual needs of its property and the potential loss of margin.

# 9.2. SUBSIDIARIES

### 9.2.1. Changes in shareholder structure of the Group

TYPE OF TRANSACTION / ENTITIES	TRANSACTION DATE	NUMBER OF AQUIRED / (SOLD) SHARES
SALES OF SHARES*		
by PKN ORLEN:		
in ORLEN Transport S.A.	29 February 2016	(25,530,000)
by FX Energy Inc:		
w FX Drilling Company, Inc	30 December 2016	(1,000,000)
w FX Producing Company, Inc.	30 December 2016	(1,000,000)
INCREASE IN SHARE CAPITAL AND SUBSCRIPTION OF SHARES		
by PKN ORLEN:		
in ORLEN Upstream Sp. z o.o.	25 May 2016	3,478
TRANSFORMATION OF ENTITY		
ORLEN Laboratorium Sp. z o.o. into ORLEN Laboratorium S.A.	10 August 2016	-
MERGERS AND ACQUISITIONS WITHIN THE GROUP:		
MERGERS AND ACQUISITIONS WITHIN THE GROUP:		
ORLEN Upstream Canada with Kicking Horse Energy Inc., KCK Operating Company Ltd., Columbia Natural Resources Canada, Ltd. and Kicking Horse International Exploration Ltd	1 January 2016	-
Unipetrol Slovensko s.r.o. with Mogul Slovakia s.r.o.	1 January 2016	-
Unipetrol RPA s.r.o. with Benzina s.r.o.	1 January 2016	-
ORLEN Serwis S.A. with ORLEN Wir Sp. z o.o. and Wircom Sp. z o.o	29 February 2016	240,344
Unipetrol RPA, s.r.o. with Unipetrol Services, s.r.o, Unipetrol Rafinerie, s.r.o. and Chemopetrol, a.s.	1 August 2016	-
ORLEN Upstream sp. z o.o. with ORLEN Upstream International B.V.	24 October 2016	-
Unipetrol RPA s.r.o with ČESKÁ RAFINÉRSKÁ a.s	1 January 2017	-
ACQUISITIONS OF SHARES		
by PKN ORLEN:		
in ORLEN Serwis S.A.	9 Novemeber 2016	79,028
in ORLEN Serwis S.A.	30 December 2016	2,276
by UNIPETROL RPA:		
in Spolana a.s. from Anwil S.A.	10 June 2016	7,482,788
DELETION FROM TRADE REGISTRY		
Pro-Lab sp. z o.o. in liquidation	18 April 2016	(18,282)
EkoNaft sp. z o.o. in liquidation	17 May 2016	(100)
Unipetrol Austria HmbH in liquidation	9 September 2016	(1)

\*Impact of the transactions on the financial data of the Group were presented in the note 7.1.4 in the line profit on sale of subsidiaries in the amount PLN 63 million.

Changes in the Group structure are an element of the strategy, assuming a focus on core activities and allocating the resulting available capital for development of the Group in the most prospective areas.

### 9.3. INVESTMENTS IN JOINT ARRANGEMENTS

	Place of business	Principal activity	Valuation method
joint ventures			
		production, distribution and sales of	
Basell ORLEN Polyolefins Sp. z o.o. (BOP)	Płock	poliolefins	equity method
Płocki Park Przemysłowo-Technologiczny (PPPT)	Płock	renting real estate	equity method
Pieridae Production GP Ltd (ORLEN Upstream Group)	Calgary	exploration and extraction of minerals, storage, transport and logistics	equity method
joint operations			
Butadien Kralupy a.s. (Unipetrol Group)	Kralupy nad Vltavou	manufacturing of butadien	share in assets and liabilities

Additionally, ORLEN Upstream has participated in the following joint operations:

- participation in a holding founded by ORLEN Upstream, Polskie Górnictwo Naftowe i Gazownictwo (PGNIG), LOTOS Petrobaltic and University of Science and Technology (Akademia Górniczo-Hutnicza), Institue of Oil and Gas (Instytut Nafty i Gazu), Gdansk University of Technology, Warsaw University of Technology (Blue Gas – Polish Shale Gas program). The program aims to manufacture and commercialize the technology and gain knowledge for the extraction of shale gas in Poland. The Company participated in 6 projects carried out in 2013-2017. ORLEN Upstream's total contribution to the implementation of these projects amounts to PLN 26 million. Until the end of 2016, the company donated to the Blue Gas program a cash contribution of PLN 8 million. In 2016, there were no costs incurred by ORLEN Upstream within the holding.
- exploration extraction projects carried out together with PGNiG (the search areas "Sieraków" 49% share of ORLEN Upstream, "Bieszczady" 49% share of ORLEN Upstream, Garwolin" 51% share of ORLEN Upstream and through subsidiary FX Energy Poland the search areas "Plotki" 49% share of FX Energy Poland and "Warszawa Poludnie" 51% share of FX Energy Poland ). The agreements provide the conduct of joint operations and activities in the field of exploration, prospection and extraction of crude oil and natural gas. ORLEN Upstream and FX Energy Poland has the right to proportionate share of the income and bears a proportionate share in the costs of joint operations.

#### Investments accounted for under equity method

	31/12/2016	31/12/2015
Joint ventures, incl.:	756	767
Basell ORLEN Polyolefins Sp. z o.o. (BOP)	677	693
Pieridae Production GP Ltd (ORLEN Upstream Group)	47	45
Associates	7	7
	763	774

### Share in profit from investments accounted for under equity method

	2016	2015
Joint ventures, incl.:	297	252
Basell ORLEN Polyolefins Sp. z o.o. (BOP)	298	252
Associates	-	1
	297	253

#### Condensed financial information of Bassel ORLEN Polyolefines Sp. z o.o.

	31/12/2016	31/12/2015
Non-current assets	856	874
Current assets	1 152	1 376
cash	440	394
other current assets	712	982
Total assets	2 008	2 250
Total equity	1 395	1 415
Non-current liabilities	50	36
Current liabilities, incl.:	563	799
trade and other liabilities	548	783
Total liabilities	613	835
Total equity and liabilities	2 008	2 250
Net debt	(440)	(393)
Net assets	1 395	1 415
Group's share in joint ventures (50%)	698	708
Consolidation adjustments	(21)	(15)
Joint ventures investments accounted for under equity method	677	693

	2016	2015
Sales revenues	3 218	3 895
Cost of sales, incl.:	(2 365)	(3 136)
depreciation and amortisation	(97)	(101)
Gross profit on sales	853	759
Distribution expenses	(90)	(112)
Administrative expenses	(25)	(23)
Other operating income and expenses, net	(1)	1
Profit from operations	737	625
Net finance income and costs	7	4
Profit before tax	744	629
Tax expense	(142)	(120)
Net profit	602	509
Total net comprehensive income	602	509
Net cash provided by operating activities	745	611
Net cash (used) in investing activities	(74)	(17)
Net cash (used) in financing activities	(625)	(433)
Dividends received from joint ventures	311	190
Net profit	602	509
Group's share in joint ventures (50%)	301	255
Consolidation adjustments	(3)	(3)
Group's share in result of joint ventures accounted for under equity method	298	252

In 2016 and in 2015, there were no significant restrictions in associates and joint ventures resulting from loans agreements, regulatory requirements and other contractual agreements that would restrict access to assets and settlement of liabilities of the Group.

# 10. EVENTS AFTER THE END OF REPORTING PERIOD

After the end of the reporting period, no events occurred other than disclosed in the foregoing consolidated financial statements, which would require recognition or disclosure.

### 11. STATEMENTS OF THE MANAGEMENT BOARD AND APPROVAL OF THE FINANCIAL STATEMENTS

### In respect of the reliability of preparation of consolidated financial statements

The Management Board of PKN ORLEN hereby declares that to the best of its knowledge the foregoing consolidated financial statements and comparative data were prepared in compliance with the accounting principles applicable to the ORLEN Group in force and that they reflect true and fair view on financial position and financial result of the ORLEN Group.

# In respect of the entity authorized to conduct audit of financial statements

The Management Board of PKN ORLEN declares that the entity authorized to conduct audit, auditing the annual consolidated financial statements, was selected in compliance with the law and that the entity and auditors conducting the audit met the conditions to issue an independent opinion in compliance with relevant regulations and professional standards.

Zbigniew Leszczyński

of the Boar

Membe

The foregoing consolidated financial statements were approved by the Management Board of the Parent Company on 14 March 2017.

Sławomir Jędrzejczyk Vice-President of the Board

Wojciech Jasiński President of the Board

**Mirosław Hochalsk** 

Presiden of the Board

Krystian Pater Member of the Board

Piotr Chelmiński Member of the Board

Signature of the person responsible for keeping accounting books

echonski

Rafał Warpechowski Executive Director Planning and Reporting



2016



# MANAGEMENT BOARD REPORT ON THE OPERATIONS OF ORLEN GROUP AND PKN ORLEN S.A. FOR THE YEAR 2016

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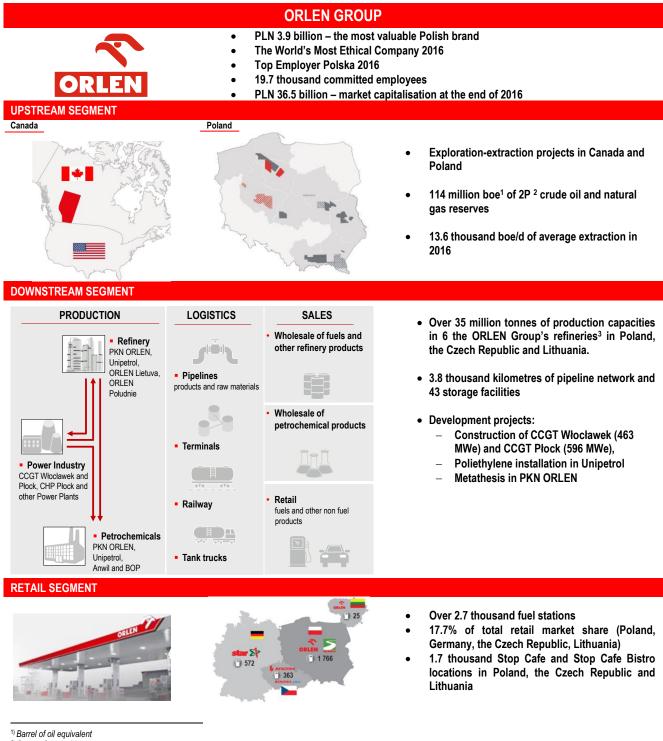
ON THE OPERATIONS OF ORLEN GROUP AND PKN ORLEN

# 1. ORLEN GROUP

# 1.1. INTRODUCTION

Polski Koncern Naftowy ORLEN S.A. ("PKN ORLEN"; "the Parent Company"; "the Company") together with the companies being members of the Polski Koncern Naftowy ORLEN S.A. Capital Group

("the ORLEN Group", "the Group", "the Concern") is the leader in the petroleum and petrochemical industry in the Central and Eastern Europe.



<sup>2)</sup> Proven & probable reserves

3) The refinery in Paramo does not process crude oil.

**OUR MISSION:** We discover and process natural resources to fuel the future.

# **ORLEN, FUELLING THE FUTURE**

# Values and rules of conduct

# Wojciech Jasiński, The President of the Management Board of PKN ORLEN:

"One of the key elements of the new ORLEN Group strategy within People pillar are all activities and defining the internal organisational culture based on ORLEN values: Responsibility, Progress, People, Energy and Dependability. We take care of local communities and the environment, look for new opportunities, act with enthusiasm, we are honest and reliable. We proved that in the last three years by exceeding the strategic objectives established in the strategy."

"The core values and standards of conduct of PKN ORLEN" is primarily a guide to relationships within the company, but also with the external environment - with business partners, local communities, natural environment and competition.

Since the inauguration of the project in 2012, the ORLEN values: Responsibility, Progress, People, Energy and Dependability are still relevant still guiding the company and its employees the way to achieving the ambitious goals contained in the new ORLEN Group strategy for the years 2017-21.

This direction of changes and introduced actions was appreciated not only by Polish experts but also internationally. In 2014-2016 US Ethisphere Institute has granted to PKN ORLEN the title of The World's Most Ethical Company, placing the Concern as the only company from Central and Eastern Europe in this honourable ranking. Simultaneously as a leader in ethical solutions in the region, PKN ORLEN became for the third time a partner in the "Ethical Company" contest, which goal is to create a Polish equivalent of ethical companies ranking.

PKN ORLEN corporate culture based on values is constantly developing and addresses the needs of changing environment. The solutions adopted in the field of ethics are effective and demonstrate the responsibility of the Concern against the challenges and expectations.

RESPONSIBILITYWe respect our customers, shareholders, the<br/>natural enviroment and local communitiesImage: Community of the statusImage: Community of

# 1.2. MANAGEMENT AND SUPERVISORY BOARD

#### The Management Board

The Supervisory Board at its meeting on 8 February 2016, dismissed Mr Marek Podstawa from the Management Board of PKN ORLEN and appointed Mr Mirosław Kochalski to the position of

Composition of the Management Board as at 31 December 2016:

the Vice-President of the Management Board of the Company and Mr Zbigniew Leszczyński to the Management Board Member of the Company.



# WOJCIECH JASIŃSKI

President of the Management Board, Chief Executive Officer,

On 16 December 2015 Mr Wojciech Jasiński was appointed as President of the Management Board and CEO of the Company.

In years 1972 – 1986 he worked in Plock, in the National Bank of Poland, Branch in Plock and in the Town Hall, also as a legal counsel in the Tax Chamber. In years 1990 – 1991 he organised the local government in Plockie Voivdeship, being the Delegate of the Government's Plenipotentiary for Local Government Reform. From 1992 to 1997 he worked in the Supreme Audit Office (NIK) at the positions director of NIK's Delegation Office in Warsaw, Finance and Budget Team, State Budget Department. In years 1997-2000 he was a Member and then the President of the Management Board of Srebrna company seated in Warsaw. In years 1998 – 2000 he was a Member of the Supervisory Board of Bank Ochrony Środowiska. From September 2000 to July 2001 he held the position of Undersecretary of State in the Ministry of Justice. In years 2006 – 2007 he was the Minister of State Treasury.

Since 2001 he has been the Member of Polish Parliament (4-8th terms of the Parliament), where he performed the following function: the Chairman of Standing Subcommittee for the Banking System and Monetary Policy, Chairman of the Economy Committee, Chairman of the Public Finance Committee. He was also a member of the State Treasury Committee in the Parliament.

On 25 February 2016 he was appointed as the Member of the Supervisory Board of PKO Bank Polski S.A.



#### SŁAWOMIR JĘDRZEJCZYK

Vice-President of the Management Board, Chief Financial Officer

In June 2008, Mr Slawomir Jędrzejczyk was appointed as Member of the Management Board of PKN ORLEN. On 18 September 2008 he became Vice-President of the Management Board.

He graduated from the Łódź University of Technology and obtained the title of British Certified Auditor from the Association of Chartered Certified Accountants. From 2005 to 2008 he served as President of the Management Board and CEO of Emitel. Earlier he had worked for companies listed on the Warsaw Stock Exchange: as Head of the Controlling Division of Telekomunikacja Polska SA, as Member of the Management Board and Chief Financial Officer at Impexmetal SA, as well as in the Audit and Business Advisory Department of Price Waterhouse.

Currently, he serves as Vice-Chairman of the Supervisory Board of Unipetrol a.s. Since 1 January 2014 he acts as a member of the Board of Directors of ORLEN Upstream Canada Ltd.



# MIROSŁAW KOCHALSKI

Vice President of the Management Board, Corporate Affairs

Mr Mirosław Kochalski was appointed by the Supervisory Board to the position of Vice President of the Management Board on 8 February 2016.

He is a graduate of the Faculty of History at the University of Nicolaus Copernicus University in Toruń. He completed postgraduate studies at the National School of Public Administration and "Enterprise Value Management" at the Warsaw School of Economics. He has a long-standing experience on managerial and advisory positions in the private and public sector.

In 1994 he worked at the Chancellery of the Prime Minister as a Chief Specialist. In years 1995–1999 he worked at the Public Procurement Office as a Director of Public Procurement Bulletin, Director of Training and Promotion Department and then as a Chief Executive Officer. From 1999 to 2002 he held the position of the Director of Supplies and Non-fuel Purchases Department at PKN ORLEN S.A. In years 2003-2006 he was an employee of the local government of the City of Warsaw, starting from the position of the Director in the Public Procurement Office and then acting as the President of the City of Warsaw. From 2006 to 2008 he held the position of the Position of the Position of the President of the Management Board of Ciech S.A. In 2010 he worked as Managing Director at Coifer Impex SRL in Bucharest. From 2012 to 2015 he acted as Director of the Centre for Document Personalization in the Ministry of Interior.



#### PIOTR CHEŁMIŃSKI

Member of the Management Board, Business Development / Power and Heat Generation Officer

Mr Piotr Chełmiński was appointed as the Member of PKN ORLEN Management Board on 10 March 2012.

He is a graduate of the Warsaw University of Agriculture. In 1996, he completed postgraduate course in management at the University of Management and Marketing in Warsaw (Partner of the University of Denver). He studied at the Institute of Heat Engineering, Warsaw University of Technology in the field of gas energetics on specialization of Gas Turbines and Combined Gas Systems as well graduated Senior Executive Programme in London Business School (SEP 88 LBS). During his professional career he has accumulated years of experience holding various positions on the management boards of Polish and other foreign-owned companies, including listed companies.

In the years 1995 – 1996 he served as Vice-President for sales, marketing and export of Okocimskie Zaklady Piwowarskie S.A. From 1996 to 1996 he worked for Eckes Granini GmbH & Co. KG as Regional Director for CEE region and as President of its subsidiary, Aronia S.A. During 1999 – 2001 he has been a Member of the Board of Directors, Browar Dojlidy Sp. z o.o. From 2001 to 2002 he held the position of the Member of the Board of Directors and Member of the Supervisory Board of Werner & Merz Polska Sp. z o.o. In the following years (2001 – 2006) he served as Member of the Board of Directors and as Member of the Supervisory Board – direct operational supervision of Sales and Marketing, Kamis-Przyprawy S.A. From 2006 to October 2009 he served as Vice-President for Sales and Marketing, Gamet S.A. Torun, Poland and from 2007 to 2009 as Member of the Board of Directors, Gamet Holdings S.A. Luxembourg. From December 2009 to April 2013 he held the post of Chairman of Board of Directors and CEO at Unipetrol, a.s.

Currently, he serves as Chairman of the Supervisory Board of ANWIL S.A. and Chairman of Supervisory Board of Basell ORLEN Polyolefins Sp. z o.o.



#### ZBIGNIEW LESZCZYŃSKI

Member of the Management Board, Sales

Mr Zbigniew Leszczyński is the Member of the Management Board since 8 February 2016.

He is a graduate of the University of Warsaw, Faculty of Accounting and Finance. He also completed postgraduate courses, including EU Business Management at the Warsaw School of Economics, Computer Networks Design and Operation at the Nicolaus Copernicus University in Toruń, and Project Management at the Kozminsky University.

He has extensive managerial experience in the fuels industry. Having worked for the ORLEN Group for almost a decade, he was responsible for various projects, including the construction and development of the service station chain and retail network settlements at ORLEN Paliwa and for supporting and expanding the refining product wholesale business at PKN ORLEN. He also implemented many strategic projects for PKN ORLEN.

He also served as President of the Management Board of Wodociagi i Kanalizacja w Opolu Sp. z o.o., President of the Management Board of Rynex Sp. z o.o., President of the Management Board of Wisła Płock S.A. and Sales and Marketing Director at Kompania Węglowa S.A. He also owned his own business providing project management, supervision and advisory services.

He also serves as Chairman of the Supervisory Board of ORLEN Deutschland GmbH, Member of the Supervisory Board of Unipetrol and Chairman of the Supervisory Board of ORLEN Paliwa.



#### **KRYSTIAN PATER**

Member of the Management Board, Production

Mr Krystian Pater is the Member of the Management Board of PKN ORLEN since March 2007.

He is a graduate of the Nicolaus Copernicus University in Toruń, Faculty of Chemistry. Additionally, he has completed post-graduate courses in Chemical Engineering and Equipment at the Warsaw University of Technology, Management and Marketing at the Pawel Wodkowic University College in Plock, Petroleum Sector Management, Enterprise Value Management at the Warsaw School of Economics and Academy of Leadership Psychology at the Warsaw University of Technology Business School. In 1993, he started working for Petrochemia Plock SA and, later on, for PKN ORLEN, where from 2005 to 2007 he served as Executive Director responsible for Refining Production.

Currently he is Member of the Management Board of AB ORLEN Lietuva and Member of the Supervisory Board of Unipetrol a.s. Additionally, he serves as Member of the Management Board of CONCAWE and Chairman of the Association of Oil Industry Workers in Plock.

#### Supervisory Board

On 29 January 2016 PKN ORLEN Extraordinary General Meeting of Shareholders dismissed Mr Adam Ambrozik, Mr Cezary Banasiński, Mr Grzegorz Borowiec, Mr Cezary Możeński and Mr Leszek Jerzy Pawłowicz from the PKN ORLEN Supervisory Board and appointed to the Supervisory Board Mr Mateusz Henryk Bochacik, Mr Adrian Dworzyński, Ms Agnieszka Krzętowska, Mr Remigiusz Nowakowski and Mr Arkadiusz Siwko. On 14 September 2016 Mr Remigiusz Nowakowski resigned from the position of PKN ORLEN Supervisory Board Member due to the possibility of potential conflict of interest.

Composition of the Supervisory Board as at 31 December 2016:



## ANGELINA ANNA SAROTA

Chairman of the Supervisory Board

Mrs Angelina Sarota was appointed as a Member of the Supervisory Board of PKN ORLEN in June 2008. For two terms served as a Secretary of Supervisory Board and from 27 June 2013 as a Chairman of the Supervisory Board of PKN ORLEN SA

Ph.D. in law, legal adviser, graduate of the Faculty of Law and Administration of the Jagiellonian University, the National School of Public Administration and postgraduate studies "Strategic Management of Human Resources" at the Kozminski University. In 2015 graduated from the prestigious program of the Advanced Executive MBA Program at the University of Navarra in Barcelona.

From May 2014 to July 2016 she served as Vice President of the Management Board of PGE EJ 1 Sp. z o.o., responsible for legal and regulatory affairs.

From April to May 2014 Minister Counsellor at the Ministry of Treasury in the Ownership Policy Department. From 2005 to 2014 Director of the Legal Department of the Prime Minister's Office responsible for legal and legislative support, in particular for the Prime Minister, the Head of the Prime Minister's Office and the General Director. From 2003 – 2005 Deputy Director of the Department of Science Strategy and Development in the Ministry of Scientific Research and Information Technology. From 2001 to 2003, chief specialist in the Court Representation Department and the Restructuring and State Aid Department in the Ministry of Treasury. Member of the Board of the College of Europe Foundation in Warsaw.

She was a member of the Supervisory Boards i.a. of the following companies: Cerg Spółka z o.o. in Gliwice, Chemar Spółka z o.o. in Kielce, Vice Chairman of the Supervisory Board of Warsaw Technology Park S.A and Vice Chairman of the Supervisory Board of the Polish Security Printing Works S.A.



# RADOSŁAW LESZEK KWAŚNICKI

Vice-chairman of the Supervisory Board

Mr Radoslaw Leszek Kwaśnicki has been appointed as a Member of PKN ORLEN Supervisory Board on 15 May 2014 (sitting in the Corporate Governance Committee and CSR Committee)

He is a PhD degree in legal sciences, a legal counsel and Managing Partner of Kancelaria RKKW - KWAŚNICKI, WRÓBEL & Partnerzy and is specialized in company law, equity market law and legal proceedings. He graduated from AMP (Advanced Management Program) on IESE Business School, University of Navarra.

Since 2016 he has been a Member of the Supervisory Board of Sphinx Poland SA (Sitting in the Audit Committee). He held the functions, among others, of the Chairman of the Supervisory Board of Agencja Rozwoju Przemysłu S.A. (2007), Vice-chairman of the Supervisory Board of PGE ZEW-T Dystrybucja Sp. z o.o (2008 - 2009), the Secretary of the Supervisory Board of BOT Elektrownia Turów S.A. (2007 - 2008), Member of the Supervisory Board of PGE Energia S.A. (2008 - 2009), the Chairman of the Supervisory Board of Geometria Pyrzyce Sp. z o.o (2006 - 2007), the Chairman of the Supervisory Board of Geometria Pyrzyce Sp. z o.o (2006 - 2007), the Chairman of the Supervisory Board of W Investments SA (2012 - 2014), the Chairman of the Supervisory Board of W Investments SA (2012 - 2014), the Chairman of the Supervisory Board of the Brokerage House of Investments SA (2012 - 2014), Member of the Supervisory Board of the Supervisory Board of NAVI GROUP (2014). He is a Member of the Supervisory Board of Polish State Railways SA (2015).

Mr. Kwaśnicki obtained a prestigious recommendation of the Global Law Experts as Poland's only lawyer in the area of the commercial law. He was also honoured in this area by the European Legal Experts as well as in the field of corporate law and mergers and acquisitions (M&A) by the Legal 500. Mr Radoslaw Kwaśnicki has won 1st place in the competition Forbes Professionals 2014 – Professions of Public Trust" in Mazovian Voivodship.

Mr. Kwaśnicki was a President of the Court of Appeals at the Regional Chamber of Legal Advisers in Warsaw, and now he is its arbitrator. He also acts as an arbitrator of the Court of Arbitration at the Polish Chamber of Commerce, Court of Arbitration at the Lewiatan Confederation, International Court of Arbitration at the International Chamber of Commerce (ICC) in Paris and Court of Arbitration at the Polish Bank Association.

He took part in legislative and strategic work related to the development of the commercial law. He is an editor and author, and co-author of several books and comments, as well as over three hundred other publications and statements concerning practical aspects of commercial law. Mr Kwaśnicki is a member of the Editorial Board of "Monitor of Commercial Law".

Mr Kwaśnicki is a chief editor of "Prawo Biznesu - Law in Action" (Business Law - Law in Action), a blog about economic law. Fluent in English and German.



# MATEUSZ HENRYK BOCHACIK

Secretary of the Supervisory Board

Mr Mateusz Henryk Bochacik was appointed to the Supervisory Board of PKN ORLEN on 29 January 2016.

He graduated from the law and history at the Jagiellonian University in Cracow. In 2013 he passed advocate exam and was entered on the list of advocates conducted by the Regional Council of Advocates in Cracow.

He is an advocate and conducts his own legal office in Cracow specializing in civil, economic and administrative law. During his practice he represented public persons as well as private ones, among others commercial companies, local government units and journalists. In total he was a representative in numerous lawsuits at the common and administrative courts as well as at the Supreme Court.

Mr Bochacik was also an assistant of the Minister-Coordinator of the Special Services and Deputy of the Polish Member of Parliament Zbigniew Wassermann as well as a director of his Deputy office (2007-2010). In years 2010-2013 he was an assistant of Deputy of the European Parliament Member Mr Pawel Kowal.



#### ADRIAN DWORZYŃSKI

Independent Member of the Supervisory Board

Mr Adrian Dworzyński was appointed to the Supervisory Board of PKN ORLEN on 29 January 2016.

He is graduate of the Faculty Law and Administration at the University of Łódź. In years 1998 - 2002 Counsel – legal training at Warsaw Bar Association. In years 1997 – 2002 he worked in Andrzej Żebrowski i Wspólnicy Law Office, providing legal services to large companies, especially banks. Between 2003-2005 the Office of the City of Warsaw Deputy Director and subsequently Director of the Legal Office. In years 2006 - 2007 Chancellery of the President of the Republic of Poland Director of the Legal and Legislative Office. In years 2007 – 2012 Director of the Legal Department at Polkomtel S.A. In 2013 Director of the Legal Department at PGE Polska Grupa Energetyczna. Since 2014 he provides legal services under his own Law Office

In years 2003-2010 the Member of the Warsaw Bar Association. Between 2010-2013 Mr Adrian Dworzyński served as Vice Dean of Warsaw Bar Association.

He was a Member of the Supervisory Boards: Oczyszczalnia Ścieków Południe Sp. z o.o. (2003-2005), Tramwaje Warszawskie Sp. z o.o. (2005), Polska Agencja Informacji i Inwestycji Zagranicznych S.A. (2006-2008), Nordisk Polska Sp. z o.o., PGE Dom Maklerski S.A., PGE Energia Odnawialna S.A. and Przedsiębiorstwo Usługowo-Produkcyjne TOP SERWIS Sp. z o.o. (2013).

He is currently an Independent Member of the Supervisory Board in AAT Holding S.A. and DUON Group.



#### ARTUR GABOR

#### Independent Member of the Supervisory Board

Mr Artur Gabor was appointed the Supervisory Board of PKN ORLEN in 2010. On 27 June 2013 Mr Artur Gabor was re-elected to the Company's Supervisory Board for next term of office.

He graduated from the Department of Economics at University College London and from the Faculty of Law at the University of Warsaw.

In 2015 he completed the prestigious Advanced Management Programme on IESE Business School and a programme for Supervisory Board members -Value Creation Through Effective Boards at the Harvard Business School/IESE Business School.

As a Partner at Gabor&Gabor, he is responsible for investment and economic advisory services. In 1986–1987, he worked as a research assistant at the Institute of Economic Sciences of the Polish Academy of Sciences. In 1987–1990, he was Market Development Department Director at Paged S.A., and between 1990 and 1994 – a Partner in Warszawska Grupa Konsultingowa. He held the positions of Managing Director for Poland at Credit Lyonnais Investment Banking Group (1994–1998), Director of Mergers and Acquisitions for Central Europe and Russia at General Electric Capital (1998–2004) and Director of Finance Sector at IBM Poland (2005–2006). In 2003–2004, he was a member of the Management Board of the American Chamber of Commerce and since 2005 he has been a member of the Chamber's Standing Advisory Committee. Since 2006, he has been a member of the Corps of Independent Members of Supervisory Boards at the Polish Institute of Directors.

In 2001–2004 he served as Deputy Chairman of the GE Capital Bank S.A. Supervisory Board and member of the GE Bank Mieszkaniowy S.A. Supervisory Board. In 2004–2005 he served as Chairman of the Getin Bank S.A. Supervisory Board and member of the Getin Holding S.A. Supervisory Board. In 2004–2008, he held the position of Deputy Chairman of the Energopontaż Północ S.A. Supervisory Board. In 2006–2007 he was a member of the Polmos Lublin S.A. Supervisory Board and in 2007–2011 – Deputy Chairman of the Energopontaż Północ S.A. Supervisory Board. In 2010–2013 he was a member of the Polmos Lublin S.A. Supervisory Board and in 2007–2011 – Deputy Chairman of the Energopol Katowice S.A. Supervisory Board. In 2011–2013 he was a member of the Fleet Holdings S.A. Supervisory Board and in 2012–2015 – a member of the Prime Car Management Supervisory Board. In 2009 he became Deputy Chairman of the Sinks S.A. Supervisory Board and since December 19th 2013 has held the position of its Chairman. Since January 2014 he has been a member of the Supervisory Board of MPay S.A. (listed on the New Connect market), since February 2015 – a member of the Idea Bank Supervisory Board.



# AGNIESZKA KRZĘTOWSKA

Independent Member of the Supervisory Board

Ms Agnieszka Krzętowska was appointed to the Supervisory Board of PKN ORLEN on 29 January 2016.

Ph.D. degree in economics, academic lecturer at the College of Economics and Social Sciences, The Warsaw University of Technology. Lecturer at the State School of Higher Professional Education in Plock. Over several years she managed the Institute of Economics and Law at the State School of Higher Professional Education in Plock.

Competent, responsible, perfectly oriented in contemporary economics and directions of domestic and world economy development. In her professional career she deals with enterprise financials, demography and statistics. These areas were subjects of her numerous publications.



# WIESŁAW TOMASZ PROTASEWICZ

Member of the Supervisory Board

Mr Wiesław Tomasz Protasiewicz was appointed to the Supervisory Board of PKN ORLEN on 3 June 2016.

He graduated from the Faculty of Production Economics at the Central School of Planning and Statistics in Warsaw (currently the Warsaw School of Economics). He completed post-graduate studies in the field of accounting at the Kozminski University in Warsaw. He is a qualified provider of commercial bookkeeping services, based on a certificate issued by the Minister of Finance.

In 1982–1990, he was employed at Mostostal Siedlce, where he was involved in production planning and subsequently in exports. In 1990–1994, he worked at the Siedlce Voivodship Authority as head of the Economic Development Department, and from 1993 he was the Siedlce Voivodship Governor. In 1994, he started working for commercial companies in Warsaw as Chief Financial Officer. In 1998, he was appointed to the Management Board of PKP and subsequently of PKP S.A.; he held the position of Vice-President of the Management Board responsible for economics and finances, among other areas. In 2003, he became a member of the management board of Miejskie Zakłady Autobusowe Sp. z o.o. in Warsaw, where he was in charge of the Economics and Finance Division, marketing and implementation of IT solutions. In late 2007, he was appointed Vice-President of the Management Board of Polskie Sieci Elektroenergetyczne "Operator" S.A. in Warsaw.

Since 2010, he has been less involved in day-to-day professional work, focusing instead on providing economic consultancy.

In 1992–2009, he served on the Supervisory Boards of many commercial companies, including Hydrobudowa-6 S.A. in Warsaw, WARS S.A. in Warsaw, PKP Przewozy Regionalne Sp. z o.o. in Warsaw, and PSE "Centrum" S.A. in Warsaw, mostly as Chairman of the Supervisory Board.

# 1.3. ORGANISATION AND DEVELOPMENT POLICY

The ORLEN Group companies conduct the following business activities:

- production and commercial activities crude oil processing, production of refining, petrochemical and chemical products and semi-products, wholesale and retail sale of fuels and other products,
- service activities crude oil and fuels storage, transport, maintenance and repair services, laboratory, security, design, administrative, insurance and finance services,
- connected with exploration and extraction of hydrocarbons and with production, transport, distribution and trade in electric and heat energy.

The scope of activities of individual entities is also available on the PKN ORLEN website <u>http://www.orlen.pl</u> and <u>point 9.1.</u> of the Consolidated Financial Statement for 2016.

For management purposes, the ORLEN Group is divided into the 3 operating segments: Downstream, Retail, Upstream and Corporate Functions.

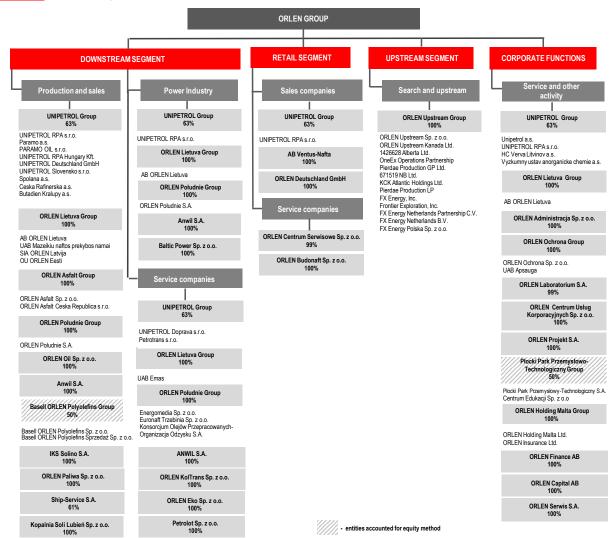
A more detailed description of these abovementioned segments is presented in point 3.2, and their financial results in point 4.2.

The ORLEN Group includes PKN ORLEN as the Parent Company and entities located in Poland, Germany, the Czech Republic, Lithuania, Malta, Sweden, the Netherlands, Slovakia, Hungary, Estonia, Latvia, the USA and Canada. As at 31 December 2016 the ORLEN Group consisted of 70 companies, including 59 subsidiaries.

Percentage of shares owned by the Parent Company/ORLEN Group in capital of the ORLEN Group companies and consolidation methods are presented in <u>point 9.1.</u> of the Consolidated Financial Statements for 2016.

SCHEME 1. Capital and organisational relations in the ORLEN Group as at 31 December 2016.

PKN ORLEN as the Parent Company of the Group is a multisegment entity, appropriately allocated to all operating segments and Corporate Functions.



The ORLEN Group is striving to strengthen the position of its companies in the area of their primary activities and to extend the energy segment. At the same time is focusing on the improvement of management, restructuring and consolidation of assets.

The purpose of these measures is to increase the market value of the ORLEN Group, to strengthen its position on the parent markets, as well as to extend its supply chain. The primary developmental investments aim at further expanding the product portfolio and the degree of conversion, generating new energy powers and prudent continuation of projects related to the exploration and extraction of hydrocarbons.

Holding management principles, i.e. solutions aiming at the implementation of shared goals for companies in the ORLEN Group,

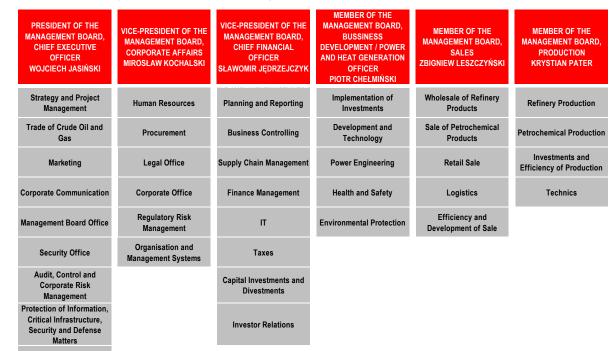
defined by the Parent Company, were implemented to ensure effective management. The solution has been implemented on the basis of the ORLEN Group's Constitution stipulating three key regulations: the Agreement for Cooperation, the Group Regulations, and the provisions of ORLEN Group company Statutes/Agreement.

The Constitution provided for the standardisation of exchange of information, effective monitoring of key business decisions, as well as for the standardisation of organisation norms. Furthermore, the Constitution defines the legal basis for the formation of a cohesive strategy for the ORLEN Group.

Effective PKN ORLEN corporate supervision over the companies of the Group is based on the supervision of their operating activity, as well as their financial and formal-legal supervision.

# **ORLEN GROUP**

1.3.1. Changes in the principles of organisation and management in the Parent Company and the ORLEN Group



SCHEME 2. The responsibility division of Members of the Management Board of PKN ORLEN as at 31 December 2016.

In 2016, changes made to the organisational structure of PKN ORLEN, were mostly related to the following:

Innovation Office

- an Innovation Office was established within the division of the President of the Management Board, CEO.
- a division was established headed by the Vice-President of the Management Board, Corporate Affairs, to which the Offices of the HR Executive Director and of the Procurement Executive Director were moved (previously, they used to function within the division headed by the President of the Management Board, CEO).
- the Group's Counsel Office was closed down and the organisational units reporting to it were moved to the division of the President of the Management Board, CEO (Management Board Office and Security Office) and to the division of the Vice-President of the Management Board, Corporate Affairs (Legal Office, Corporate Office, Regulatory Risk Management, and Organisation and Management Systems).
- relocation of the Ethics Ombudsman reporting obligation from closed Group's Counsel office to the HR Executive Director.

In 2016, apart from the above organisational changes, the Parent Entity did not make any modifications to the principles of management of the Group.

# **Unipetrol Group**

At its meeting on 11 May 2016, the Supervisory Board dismissed Mr Piotr Wielowieyski from the company's Management Board and appointed Mr Andrzej Modrzejewski and Mr Robert Małłek to the Board. On 1 July, the Supervisory Board dismissed Mr Marek Świtajewski as President of the Management Board and appointed Mr Krzysztof Zdziarski. At the meeting held on 1 July 2016, Mr Andrzej Modrzejewski was appointed President of the Management Board of the company, while Mr Mirosław Kastelik and Mr Krzysztof Zdziarski were appointed Vice-Presidents of the Management Board. At the meeting held on 30 November, the Supervisory Board accepted Mr Martin Dučák's resignation as Member of the Management Board effective at the end of 2016.

As part of the organisational processes carried out in 2016, work was continued related to the consolidation of companies from the Unipetrol Group. In 2017, the activities of Polymer Institute Brno, Benzina, Unipetrol Services, Unipetrol Rafinerie, Chemopetrol and Česká Rafinérská are run within Unipetrol RPA.

## Support function centralisation processes

In 2016, projects of further centralisation of accounting services, payroll and personnel processes within the ORLEN Group were continued. In terms of human resources and payroll, FX Energy Polska was incorporated to central HR-payroll service. At the end of 2016 ORLEN Centrum Usług Korporacyjnych Sp. z o.o. kept accounting books of 20 ORLEN Group companies along with payroll and personnel processes of 26 ORLEN Group companies.

# In the **remaining ORLEN Group companies**, no significant changes in the organisation and management principles occurred.

# 1.3.2. Changes in capital relations

Changes in capital relations in 2016 are described in <u>point 9.2.</u> of the Consolidated Financial Statements for 2016.

# 1.4. SELECTED OPERATION AND FINANCIAL DATA

# TABLE 1. Selected operation and financial data for the years 2012-2016.

Specification	Unit	2016	2015	2014	2013	2012
I. MACROECONOMIC DATA (average value for the period)						
Brent oil	USD/bbl	43.7	52.4	98.9	108.7	111.7
Ural oil	USD/bbl	41.7	51.0	97.2	107.4	110.2
WTI oil	USD/bbl	43.5	48.8	94.0	99.0	94.1
Brent/URAL differential <sup>1</sup>	USD/bbl	2.5	1.8	1.7	1.0	1.3
Model Downstream margin <sup>12</sup>	USD/bbl	11.7	13.8	11.4	10.8	12,9
Model refining margin <sup>1</sup>	USD/bbl	5.3	8.2	3.4	3.4	5.7
Model petrochemical margin 1	EUR/t	960	968	781	730	685
Average exchange rate USD/PLN	PLN	3.9435	3.7730	3.1537	3.1615	3.2581
Average exchange rate EUR/PLN	PLN	4.3637	4.1843	4.1845	4.1976	4.1852
Average exchange rate EUR/USD	USD	1.1066	1.1090	1.3269	1.3277	1.2846
II. OPERATING ACTIVITY	005			1.0200	1.0211	1.2010
Sales of products and goods, including:	'000 tonnes	39 453	38 676	35 740	35 909	35 288
Downstream	'000 tonnes	39 433	30 380	27 706	28 376	27 821
Retail	'000 tonnes	8 187	7 986	7 776	7 516	7 467
Upstream	'000 tonnes	558	310	258	17	1 401
Crude oil throughput ORLEN Group, of which:	'000 tonnes	30 147	30 908	230	28 216	27 939
Crude oil throughput or CEL Croup, of Which.	'000 tonnes	15 130	15 674	14 278	15 182	15 191
Crude oil throughput in Unipetrol Group	'000 tonnes	5 422	6 495	5 130	3 607	3 927
Crude oil throughput in ORLEN Lietuva Group	'000 tonnes	9 323	8 486	7 497	9 010	8 533
III. FINANCIAL ACTIVITY	000 10111100	0.070	0400	1 401	0010	0 000
3.1. Consolidated statement of profit or loss and other comprehensive income						
	PLN million	79 553	88 336	106 832	113 597	119 864
Sales revenues EBITDA LIFO before allowances, including: <sup>34</sup>	PLN million PLN million	9 412	8 738	5 213	3 086	5 095
Downstream	PLN million	8 107	7 776	4 210	2 407	4 724
Retail	PLN million	1 801	1 539	1 416	1 268	1 006
Upstream	PLN million	255	44	152	(32)	(24)
Corporate Functions	PLN million	(751)	(621)	(565)	(52)	(611)
EBITDA LIFO, including:	PLN million	9 557	7 745	(147)	3 086	4 407
LIFO correction	PLN million	85	(1 510)	(2 573)	(668)	(175)
EBITDA, including:	PLN million	9 642	6 235	(2 720)	2 418	4 232
Amortisation	PLN million	2 110	1 895	1 991	2 111	2 202
Operational profit (loss)	PLN million	7 532	4 340	(4 711)	307	2 030
Net profit (loss)	PLN million	5 740	3 233	(5 828)	90	2 170
3.2. Balance sheet data				(0 020)		
Total assets	PLN million	55 559	48 137	46 725	51 352	52 253
Equity capital	PLN million	29 285	24 244	20 386	27 551	28 307
Net debt	PLN million	3 363	6 810	6 720	4 668	6 727
3.3. Consolidated cash flow statement		0000	0010	0.120	1000	0.12.
Net cash from operating activities	PLN million	9 331	5 354	3 187	5 540	2 970
Net cash from / (used in) investing activities, including:	PLN million	(4 436)	(4 096)	(4 020)	(2 441)	(2 853)
CAPEX	PLN million	4 673	3 183	3 788	2 484	2 004
Free cash flows	PLN million	4 895	1 258	(833)	3 099	117
Net cash from / (used in) financing activities	PLN million	(2 210)	(2 866)	2 083	(2 438)	(3 340)
3.4. Key indicators		(2210)	(2 000)	2 000	(2 400)	(0 040)
Return on capital employed (ROACE)) <sup>6</sup>	%	18.8	14.9	1.8	0.7	6.3
Return on capital employed LIFO (ROACE LIFO)7	%	18.6	19.1	8.8	2.3	6.8
Net financial gearing <sup>8</sup>	%	11.5	28.1	33.0	16.9	23.8
Profit/(Loss) attributable to shareholders of the Parent Company per share (EPS)	PLN/share	12.30	6.63	(13.59)	0.41	5.48

Protiv(Loss) attributable to snareholders of the Parent Company per share (EPS) PLUshare 12.30 6.63 (13.59) 0.41 5.4 1) The method of calculating the margin has been placed at the end of these reports <u>Clossary of selected concepts and financial industry</u>. 2) Due to changes in the method of management in the field of refining, petrochemical and energy in the ORLEN Group and the creation of an integrated Downstream Segment in 2014 has begun calculation of the Downstream Margin Model. In addition, the value of margin mentioned above was presented for 2013 year. 3) The ORLEN Group inventories are valued in the financial statements in accordance with International Financial Reporting Standards by the method of weighted average cost or purchase price. This method results in recognition of the positive effects of an increase and negative effects of a decrease in oil prices on reported results. For this resons, this report presents additionally the operating results by UFO. 4) The results of operations for the years 2012, 2014, 2015 and 2016 include write-downs for impairment of assets in the amount of: PLN (688) million PLN (5 360) million, PLN (993) million, and PLN 145 million. 5) Free cash flow = net cash from operating activities + net cash from / (used in) investment activities. 6) ROACE = operating profit after tax and before write-down the value of assets / average capital employed (equity + net debt). 7) ROACE LIFO = LIFO operating profit after tax and before write-down the value of assets / average capital employed (equity + net debt). 8) Net financial gearing = net debt / shareholder's equity - calculated as of the period.

# 1.5. THE MOST SIGNIFICANT EVENTS, AWARDS AND HONOURS

#### 2016 year

## JANUARY

#### Changes in PKN ORLEN Supervisory Board

On 28 January 2016 the Ministry of the State Treasury acting on behalf of the shareholder the State Treasury, according to § 8 item 2 point 1 of the Company's Articles of Association dismissed Mr Remigiusz Nowakowski from the PKN ORLEN Supervisory Board. Regulatory announcement no. 15/2016.

PKN ORLEN Extraordinary General Meeting of Shareholders on 29 January 2016 dismissed Mr Adam Ambrozik, Mr Cezary Banasiński, Mr Grzegorz Borowiec, Mr Cezary Możeński and Mr Leszek Jerzy Pawlowicz from the PKN ORLEN Supervisory Board and appointed to the Supervisory Board Ms Agnieszka Krzętowska, Mr Mateusz Henryk Bochacik, Mr Adrian Dworzyński, Mr Remigiusz Nowakowski and Mr Arkadiusz Siwko. Regulatory announcement no. 17/2016.

## FEBRUARY

## Changes in the composition of PKN ORLEN Management Board

The Supervisory Board of PKN ORLEN, following its meeting on 8 February 2016, has recalled Mr Marek Podstawa from PKN ORLEN Management Board and at the same time appointed Mr Miroslaw Kochalski to the position of the Vice-President of PKN ORLEN Management Board and Mr Zbigniew Leszczyński to the position of the member of Company's Management Board for the common three year term of office ending on the day when the Ordinary Shareholders Meeting approves financial statement for 2016.Regulatory announcement no. 22/2016.

#### MAY

#### Fitch Ratings affirmed rating of PKN ORLEN

On 25 May 2016 Fitch Ratings ("Fitch", "Agency") affirmed the long-term credit rating at the level of BBB- with stable perspective. Regulatory announcement no. 132/2016.

#### JUNE

### New term of office of PKN ORLEN Supervisory Board

The Ordinary General Meeting of Shareholders on 3 June 2016 appointed members of PKN ORLEN Supervisory Board Members for a new term of office as follows (Regulatory announcement no. 149/2016): Ms Angelina Anna Sarota to the position of Chairman of the Company's Supervisory Board, Mr Mateusz Mariusz Bochacik, Mr Adrian Dworzyński, Mr Artur Gabor, Ms Agnieszka Krzętowska, Mr Radosław Leszek Kwaśnicki, Mr Remigiusz Nowakowski, Mr Wiesław Tomasz Protasewicz.

#### Eurobonds issue with the value of EUR 750 million within the ORLEN Group

Detailed information is provided in part of the half-year condensed consolidated financial statements in point A.3.13. Regulatory announcement no. 143/2016

#### JULY

#### PKN ORLEN Management and Supervisory Boards consent for realization of project of building a metathesis installation in Płock

On 21 July 2016 Management Board and Supervisory Board of PKN ORLEN gave consent for realization of project of building a metathesis installation at production plant in Plock. It is one of the key development project in petrochemical segment and its aim is to increase propylene production by 100 thousand tonnes per year to the level of 550 thousand tonnes per year. The cost of investment will amount to ca. PLN 400 million. Regulatory announcement no. 199/2016.

#### Termination of talks regarding potential possibilities of consolidation of chemical and fertilizers sector

Polski Koncern Naftowy ORLEN S.A. ("PKN ORLEN") hereby informs about termination of talks conducted on the base of Non-disclosure Agreement concluded in January 2015 ("Agreement") between the State Treasury, Grupa Azoty S.A., PKN ORLEN and Anwil S.A. regarding potential possibilities of consolidation chemical and fertilizers sector. Therefore PKN ORLEN submitted a termination of the Agreement. <u>Regulatory announcement no. 201/2016</u>.

#### AUGUST

#### Fitch Ratings upgraded PKN ORLEN's national long-term rating

Polski Koncern Naftowy ORLEN S.A. ("PKN ORLEN") informs that on 3 August 2016 Fitch Ratings ("Agency") has upgraded PKN ORLEN's national long-term rating and national senior unsecured rating (referred also to series A, B, C, D, E and F retail bonds, issued within the public bond issue programme) from "A-(pol)" to "A(pol)". The change of national rating of PKN ORLEN follow the recalibration of the Polish national rating scale driven by the downgrade of Poland's long-term local currency Issuer Default Rating ("IDR") assigned by the Agency. Regulatory announcement no. 205/2016.

#### SEPTEMBER

#### Changes in PKN ORLEN Supervisory Board

On 14 September 2016 Mr. Remigiusz Nowakowski resigned from the position of PKN ORLEN Supervisory Board Member due to the possibility of potential conflict of interest that may occur between the companies PKN ORLEN and TAURON Polska Energia S.A. in which Mr. Nowakowski holds the position of the President of the Management Board. The potential conflict of interest may occur due to the fact that TAURON Polska Energia S.A. approved a new strategy and works on a new strategy of PKN ORLEN are pending. Regulatory announcement no. 226/2016.

#### DECEMBER

# PKN ORLEN Strategy for years 2017-2021

On 15 December 2016 the Management and Supervisory Boards of PKN ORLEN approved the document "PKN ORLEN Growth Strategy". The strategy for the years 2017-2021 is based on three pillars: building values, people and financial strength. Detailed information about the Strategy were presented on PKN ORLEN website. Regulatory announcement no. 275/2016.

#### Deloitte Polska appointed as a qualified auditor of PKN ORLEN and the ORLEN Group financial statements

On 15 December 2016, has appointed "Deloitte Polska spółka z ograniczoną odpowiedzialnością spółka komandytowa", as a qualified auditor to audit unconsolidated financial statements of PKN ORLEN and consolidated financial statements of ORLEN Capital Group for financial years 2017 and 2018 and review unconsolidated financial statements of PKN ORLEN and consolidated financial statements of PKN ORLEN and consolidated financial statements of ORLEN Capital Group for the first and third quarter and first half of 2017 and 2018 (with the possibility to extend the cooperation for further periods, subject to prior approval by PKN ORLEN Supervisory Board). <u>Regulatory announcement no. 276/2016.</u>

#### 2017 year until publication of the Management Board Report.

#### JANUARY

#### **Extraordinary General Meeting**

On 24 January 2017 Extraordinary General Meeting was held, during which resolutions concerning remuneration of the Management Board and Supervisory Board Members were adopted. Information for each resolution is available on PKN ORLEN website. Regulatory announcement no. 14/2017.

#### Information on significant agreements are described in point 3.4.

#### The most important awards and honours

#### JANUARY

Anita Włodarczyk, the ORLEN Sports Group representative, won second place in the 81st Plebiscite of "Przegląd Sportowy" and TVP for the Best Athlete in Poland in 2015.

#### FFRRUARY

PKN ORLEN for the fourth time in a row obtained title of "Top Employer Polska", confirming its status as the leading employer in the country. ORLEN Asfalt was awarded the title of Leader of Innovation in Diamenty Polskiej Infrastruktury competition organized by the Executive Club. Unipetrol Group took third place in the annual ranking of the Top Employers in the category of Energy & Gas & Petrochemicals, organised by the Association of Students and Graduates (Stowarzyszenie Studentów i Absolwentów).

#### MARCH

For the second time PKN ORLEN obtained prestigious title of "The World's Most Ethical Company" for implementation ethics in the company's daily operations and determination of the standards of ethical leadership

PKN ORLEN received "Gieldowa Spółka Roku" (Public company of the year) award in the "Investment relations" category organized by "Puls Biznesu" newspaper and TNS Polska.

#### APRIL

PKN ORLEN received the award in the "Charity Leader" category for the institution distinguished by exceptional activities to improve the living conditions of the most deprived persons. ORLEN Upstream received a positive recertification by Chartered Institute of Purchasing & Supply (CIPS) for the highest standards in the implementation of procurement processes.

#### MAY

In the consecutive edition of the prestigious "Fleet Awards" organised by the "Magazyn Flota", fleet card program FLOTA has been acclaimed as the best in the category "Fuel cards for large fleets"

PKN ORLEN was awarded the "CSR Golden Leaf" for its outstanding activities in the area of the social responsibility and sustainable development. This is the fifth "CSR Leaf", following three silver and one gold, which have been previously granted to the Company by the "Polityka" magazine and Deloitte experts. Anwil SA received for the second time a "CSR White Leaf" by the "Polityka" magazine and consulting company Deloitte for its activities in the field of corporate social responsibility.

#### JUNE

Wojciech Jasiński, President of the Management Board of PKN ORLEN has been awarded the title of "Global Player 2016" by "Gazeta Bankowa" magazine in POLISH ECONOMY LEADERS plebiscite

The FLOTA PKN ORLEN Program won in the "Fuel Card" category for its full range of additional services in the annual edition of the Fleet Derby Plebiscite.

#### SEPTEMBER

Benzina brand of Unipetrol Group received the "Superbrand 2016" title awarding the best brands in the market on the basis of the nationwide GFK survey.

#### OCTOBER

In the eleventh edition of "The Best Annual Report", PKN ORLEN received a special award for the best, integrated financial statement report in the "Enterprise" category, a special distinction for several years of PKN ORLEN's Team commitment to improving the quality of financial statements.

PKN ORLEN also received the title of "The Best of the Best" awarded to companies which managed three times to win the top award in the above mentioned competition. The PKN ORLEN financial report gained the greatest number of points in the history of the competition.

PKN ORLEN Integrated Report for 2015 was awarded by the Warsaw Stock Exchange in the tenth edition of the "Social Reports" competition organized by the Responsible Business Forum and Deloitte.

#### NOVEMBER

PKN ORLEN received the title of "Ambassador of the Polish Chemistry" for "Polish Chemistry" brand promotion and activities for the benefit of the sector in foreign markets. The presentation of the title took place during the "Polish chemistry" forum organised by the "Polish Chamber of Chemical Industry'

Anwil SA won the ranking of "Companies with the energy of 2016 - Leaders of Polish exports" prepared by the magazine "W sieci" in the category of large companies.

#### DECEMBER

PKN ORLEN and Warsaw University of Technology, Plock subsidiary awarded in the category of "Best Practices - Business, Education, Science" during the "Oil - Chemistry" conference, organised by the publisher of "Miesiecznik Gospodarczy Nowy Przemysl" and wnp.pl portal, for a good, well-thought, well-organised and effective cooperation of industry, science and education

Since 2009, PKN ORLEN has continuously been among the 25 companies being members of RESPECT Index on the Warsaw Stock Exchange, which consists of companies managed in a responsible and sustainable manner

# 2. STRATEGY

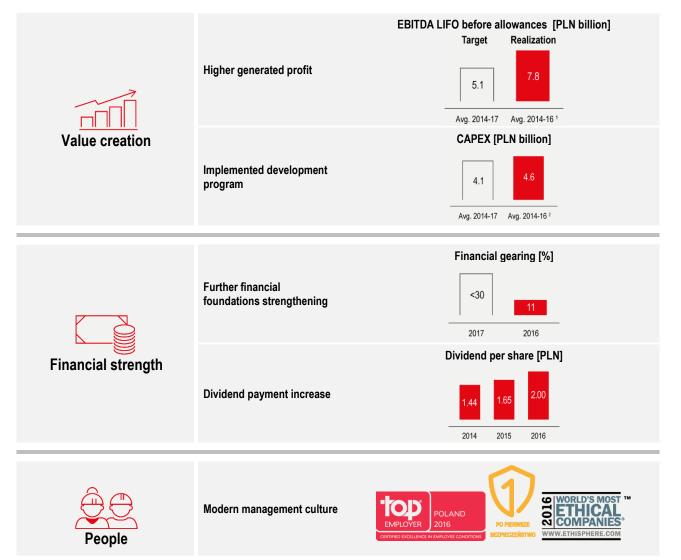
# Wojciech Jasiński, President of the PKN ORLEN Management Board:

"Our strategy for 2017-2021 years remains focused on three pillars: Value Creation, People, and Financial Strength. Our priority for the coming years will be to further strengthen our market position and implement key investment projects. Naturally, People remain a key element of the strategy. We believe that our top talent and modern organisational culture will help us continue on a growth path. Our strategy is strongly geared towards innovation that creates value. In the spirit of patriotism, we also want to forge partnerships with Polish entrepreneurs, scientific research institutions and other state-owned companies."

# 2.1. SUMMARY OF IMPLEMENTATION OF STRATEGIC ACTION FOR THE PERIOD 2014-2016

In the last three years, PKN ORLEN was consistently achieving strategic goals. The target level of annualised EBITDA LIFO was exceeded, which for 2014-2016 was on average PLN 7.4 billion and were higher by PLN 2.3 billion compared with the assumptions for the years 2014-2017. A stable financial situation allowed to implement development investments with consistently increasing dividend which, in the period 2014-2016, amounted to PLN

2.2 billion. At the same time safe financial indicators were kept. Financial performance has been appreciated by the market – on 21 November 2016, for the first time in history, PKN ORLEN became the most valuable company on the Warsaw Stock Exchange, with the capitalisation from the date of the strategy publication for the period 2014-2017 (23 July 2014) to this day increased by PLN 13.8 billion.



1) Before impairment allowance of fixed assets of PLN (5.4) billion in 2014; PLN (1.0) billion in 2015; PLN (2.1) billion on average in 2014-2016.

2) Includes acquisitions in the Upstream segment in the years 2014-2015 in the amount of PLN 2.1 billion, giving an annual average of PLN 0.7 billion in 2014-2016.

# 2.2. STRATEGY ASSUMPTIONS FOR THE YEARS 2017-2018

# Pillars of PKN ORLEN's strategy 2017-2021

	Integrated assets and a strong market position in Downstream	Security of raw materials     Operational excellence     Effective sales     Modern sales of fuels network
Value creation	Offer development and high customer satisfaction in retail	<ul><li>Unique purchasing experience</li><li>Operational excellence</li></ul>
value oreation	The strategy of prudent continuation in Upstream	<ul> <li>Increased extraction in Poland and Canada</li> <li>Prudent continuation</li> </ul>
	Solid foundations	<ul><li>Rating on investment level</li><li>Financial gearing below 30%</li></ul>
	Secured financing	<ul><li>Diversified funding</li><li>The possibility of inorganic development</li></ul>
Financial strength	Dividend payment	<ul><li>Systematic increase in the dividend per share</li><li>The level depends on the financial situation</li></ul>
	Innovations creating value	<ul><li>A culture of innovation</li><li>Internal and external innovation</li></ul>
$\widehat{\oplus} \bigoplus$	Concern for the safety and the environment	<ul> <li>Zero accidents at work</li> <li>Process safety</li> <li>Caring for the environment</li> </ul>
People	Action on the basis of the ORLEN values	<ul> <li>Responsibility</li> <li>Progress</li> <li>People</li> <li>Energy</li> <li>Dependability</li> </ul>

The vision concerning the Group's development in the new strategy reflects the global trends, for instance when it comes to the utilization of energy sources, technological development and the social processes which will contribute to new behaviour and new expectations on the part of customers. PKN ORLEN will concentrate

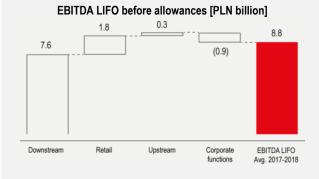
on strengthening its market position, focus on the customer, and use an integrated value chain, taking into account the growing role of petrochemicals as well as prudent continuation in the Upstream segment. The focus on value-added innovations is an important element of the strategy.

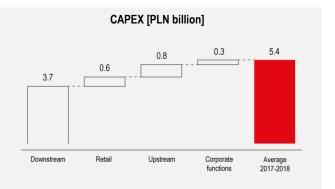
# 2.3. THE MAIN OBJECTIVES OF THE STRATEGY IN THE YEARS 2017-2018

The dynamics of the market environment forces us to adjust the planning perspective. This is why the new strategy features a new method of presenting goals and aspirations. The strategic directions have been set for the next 5 years, while the specific financial and operational goals were presented for the years 2017–2018, due to the significant variations in macroeconomic parameters.

# The main objectives of the strategy of PKN ORLEN in the years 2017-18:

- average LIFO EBITDA of PLN 8.8 billion,
- average annual investment of PLN 5.4 billion
- maintain financial gearing below 30%,
- consistent increase in the dividend per share.





# 2.4. STRATEGIC OBJECTIVES IN OPERATING SEGMENTS



# DOWNSTREAM

# Value levers

# Raw material security

- Diversification of crude oil supplies
- Securing natural gas supplies

## **Operational excellence**

- Integrated management of production assets in Poland, the Czech Republic and Lithuania
- Increasing flexibility to meet market and regulatory challenges by further improvement of key performance indicators. Increasing conversion rates and high-margin product yield.

## Strong market position

- Increasing share in domestic markets by providing an attractive product offering
- Expanding infrastructure to reach customers more rapidly and to strengthen competitive advantage

# Goals 2017-2018

# Sales and Logistics<sup>1</sup>

- Fuel market share: up by over 5 p.p.
- Taking advantage of the "shadow economy" reduction in Poland
- Petrochemical sales: up by over 1.2 million tonnes
- Electricity sales: over 3.4 TWh
- Costs of logistics: unit cost improvement by 6%

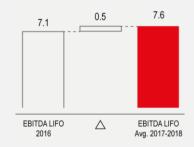
## Production<sup>1</sup>

- Investment implementation:
- PKN ORLEN: CCGT Płock, Visbreaking, Metathesis,
- ORLEN Lietuva: PPF Splitter,
- Unipetrol: Polyethylene 3,
- ANWIL: fertilizer plant expansion,
- ORLEN Południe: glycol unit
- Preparation of new development-related investments
- Improvement of key indicators:
  - Crude oil processing: up by over 3 million tonnes
  - White product yield: up by 1 p.p.
  - Improvement of Refinery Energy Intensity index and Plant Availability, respectively, by 1 p.p. and 2 p.p.

1) The quantitative indicators relate to the target of 2018 compared to 2016.

2) EBITDA LIFO 2016 and CAPEX based on execution forecast for 2016 according to the ORLEN Group Strategy presented on 16 December 2016. CAPEX includes expenditure for the reconstruction of Steam Cracker in Unipetrol in the amount of PLN 0.6 billion.

# EBITDA LIFO increase [PLN billion] <sup>2</sup>



# CAPEX <sup>2</sup> [PLN billion], on a yearly average





## Value levers

## Modern network of fuel stations

- Further development of the network of own and franchised stations
- Introduction of fuels with increased parameters thanks to the use of improved fuel additives
- Preparation for the selling of alternative fuels

#### Unique shopping experience

- · Launching new services and products
- Adjusting the offering using Big Data
- Improving customer satisfaction and further development of the loyalty program

## **Operational excellence**

- Consistent break-even point
   improvement
- Use of state-of-the-art technologies

# Goals 2017–2018 Modern network of fuel stations<sup>1</sup>

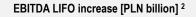
- Organic growth of the fuel station network by around 100 new stations
- Fuel market share: up by over 1 p.p.
- Adapting fuel stations to sell alternative fuels

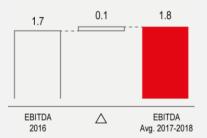
# Unique shopping experience (Stop Café 2.0 format)<sup>1</sup>

- Shop format and StopCafe improvement
- Total non-fuel margin: up by 17%
- Implementation of new products and services
  - financial services
  - e-commerce platform and click&collect service
- car sharing and car fleet management
- mobile payments, remote orders
- flexible and customized offering based on Big Data
- International fleet program

## Operational excellence<sup>1</sup>

- Improvement of fuel stations cost effectiveness
- Unit margin: up by 8%





## CAPEX <sup>2</sup> [PLN billion], on a yearly average



1) The quantitative indicators relate to the target of 2018 compared to 2016.

2) EBITDA 2016 and CAPEX based on execution forecast for 2016 according to the ORLEN Group Strategy presented on 16 December 2016.



# UPSTREAM

## Value levers

# Production increase in Poland and Canada

- Increasing the level of production and 2P resources
- Focusing on good quality assets and on the most profitable projects

#### Prudent continuation

- Flexible response to changes taking place in the oil and gas market
- Adaptation up capital expenditures to the macro situation

#### **Operational excellence**

- Continuous improvement of key performance indicators
- Obtaining synergies in the segment in Poland and Canada

# Goals 2017-2018

# Production increase in Poland and Canada<sup>1</sup>

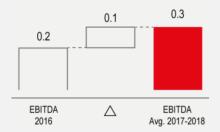
- Increasing production level to 15.7 thousand boe/d, i.e. by 2.4 thousand boe/d
   Poland: 0.3 thousand boe/d
  - Poland: 0.3 thousand boe/d
  - Canada: 2.1 thousand boe/d
- Increasing 2P hydrocarbon reserves to 113 million boe, i.e. by 9.3 million boe
  - Poland: by 7.1 million boe
  - Canada: by 2.2 million boe
- Increasing the number of wells (net) to 26 i.e.
  - Poland: 8 wells

# Canada: 18 wells

# Operational excellence<sup>1</sup>

 Achieving operational netback of over 70 PLN/boe

# EBITDA LIFO increase [PLN billion] <sup>2</sup>



#### CAPEX <sup>2</sup> [PLN billion], on a yearly average



1) The quantitative indicators relate to the target of 2018 compared to 2016.

2) EBITDA LIFO 2016 and CAPEX based on execution forecast for 2016 according to the ORLEN Group Strategy presented on 16 December 2016.

3) Including PLN 0.2 billion in Poland, PLN 0.4 billion in Canada during 2016 and PLN 0.4 billion in Poland, PLN 0.4 billion in Canada on average for 2017-2018.

# 3. OPERATING ACTIVITY

# 3.1. RESEARCH AND TECHNOLOGICAL DEVELOPMENT

Development of R&D portfolio and innovations are included in the new ORLEN Group strategy for 2017-2021 and they are one of the key creating value elements of the People – Innovations strategy's pillar.

As part of the research projects implemented, **PKN ORLEN** performed work related to the recovery of terephthalic acid from technological waste. Additionally, an industrial evaluation was performed aimed at assessing the impact of processing of naphtha from the hydrocracking plant at Reforming installation in order to improve yield from the Aromatics Unit.

A research project was initiated entitled "Methodology of forecasting and monitoring of the quality of gasoline intended for long-term storage in salt caverns. Technology of production of base gasoline and of finished motor gasoline as an element of counteracting disturbances in raw material and product economy", co-financed by the European Regional Development Fund as part of the INNOCHEM Program.

PKN ORLEN was the first Polish company to launch, in 2015, a crowdsourcing project addressed to the global community. In collaboration with NineSigma, the owner of the NineSights platform, the Company was looking for an idea to effectively utilise lowtemperature heat produced during the first stage of crude oil processing which is irretrievably lost to the atmosphere. In 2016, the contest ended, and the following teams were invited to further collaboration: the Polish company PWPO-T PROMONT, as the leader of a Polish-Swedish consortium specializing in chemical engineering, Guha Industries, an Indian engineering design company, as well as a German research centre ILK Dresden.

The project in the area of advanced biofuels was continued, related to the development of alternative sources of obtaining nextgeneration biocomponents, implemented in collaboration with the Warmian-Masurian University in Olsztyn and with the University of Szczecin.

PKN ORLEN launched an online platform for collaboration and knowledge sharing with regard to new technological solutions, called "Innovations, Startups". This state-of-the-art communication tool used by the most innovative companies is supposed to facilitate contacts with regard to innovation as well as provide win-win solutions. The new site, available at www.innowacje.orlen.pl, is intended mainly for startups and innovators.



The Unipetrol Group carried out research work focusing on processes related to the production of motor fuels and to the indepth processing of heavy fractions from crude oil throughput. The search continued for possibilities of using renewable energy sources in the production of motor fuels as well as work related to lowsulphur components of fuels and the production of road bitumen with higher durability and abrasion. Work has continued in relation to the potential utilization of light hydrocarbons obtained in the pyrolysis process, as well as to improve the quality of propylene used to produce polypropylene, optimize its production and introduce new catalytic systems in compliance with REACH.

The **ORLEN Lietuva Group** continued to implement projects related to the improvement of the energy efficiency of production processes. A series of projects were also implemented related to environmental protection and comprising for instance the reduction of dust from the Fluid Catalytic Crac (FCC) plant, sulphur compounds SO<sub>2</sub>, nitrogen compounds NO<sub>x</sub> from the company's CHP plant as well as a system for the monitoring of emissions on the FCC sulphur recovery and hydrogen production plants.

Anwil signed agreements on collaboration with the Institute of New Chemical Syntheses with regard to research work concerning the use of gypsum from flue gas desulfurization for the production of nitrate fertilizers, with the Nicolaus Copernicus University in Toruń to develop a technology for the treatment of sludge from salt brine purification in the chlorine production plant, and with the Institute of Electrical Engineering in Warsaw with regard to the kinetic activation of catalysts used in production processes. Work also continues to implement a technology for the production of nanocomposite modified PVC. External financing was obtained under the INNOCHEM program for the project entitled "Development of a technology for the production of PVC-based ceramisable composites".

**ORLEN Oil** conducted research work related to the implementation of new products, qualitative modifications of existing products, processes of obtaining new approvals, utilization of lubricating oils and setting of new directions for the development of lubricant technologies in response to customers' expectations. In 2016, technologies were developed and implemented for 22 new products in the area of oils for the automotive industry, 13 in the operating fluids group and 10 technologies in industrial oils, while modifications concerned 14 products in the industrial oils, plastic lubricants and automotive segment.

In 2016, the **ORLEN Południe Group** continued to implement a development project "Conversion of glycerin into 1.2-propylene glycol". An agreement was signed related to the purchase of the basic design and of the license. Work also continued related to second- and third-generation biofuels. The NEV fraction, constituting a raw material for the PKN ORLEN Catalytic Cracking plant, was implemented into production. An anti-caking agent was developed for artificial fertilizers thanks to the co-financing obtained under the INNOCHEM Sectorial Program for the project entitled "Biodegradable anti-caking agents for the artificial fertilizer industry".

The **ORLEN Upstream Group** continued to be involved in other scientific and research projects implemented under the "Blue Gas" program. This program is a part of a joint project by the National Centre for Research and Development and Agencja Rozwoju Przemysłu S.A. (Industry Development Agency). It is focused on supporting integrated research and development projects aimed at creating and commercializing production technologies. In 2016, research work was carried out in the Lubień Kujawski license area to confirm the parameters and the suitability of the salt deposit for natural gas storage.

# 3.2. OPERATING SEGMENTS

# 3.2.1 Downstream segment

#### 2016 Czech units **ORLEN Group** Poland Lithuania Republic Maximum processing capacity million t 35.2 16.3 8.7 10.2 Utilization of processing capacity 86 91 % 93 62 White products yields % 78 80 79 73 PRODUCTION Utilization of Olefin installation capacity % 47 70 18 Utilization of PTA installation capacity % 87 87 Czech units **ORLEN Group** Poland Lithuania Republic TOTAL thousand t 30 708 15 173 6 421 9 114 Refinery, including: thousand t 26 4 4 0 12 070 5 256 9 1 1 4 fuels thousand t 18 225 6 808 4 451 6 966 heavy fractions 4 3 3 4 1 961 453 1 920 thousand t other refinery products thousand t 3 881 3 301 352 228 Petrochemicals, including: 4 268 3 103 thousand t 1 165 olefins thousand t 681 661 20 SALES 245 245 polyolefins thousand t \_ 248 212 36 benzene thousand t plastics thousand t 351 284 67 fertilizers thousand t 1 089 914 175 PTA 605 605 thousand t \_ thousand t 1 0 4 9 427 622 other petrochemical products Czech units **ORLEN** Group Poland Lithuania Republic 3 7 5 3 1 774 Total length of used pipelines 1 888 91 km 930 674 length of used raw materials pipelines 1 6 9 5 91 km LOGISTICS length of used product pipelines 2 0 5 8 958 1 100 km units Poland Czech Republic Lithuania Heating power installed 2 149 1 040 MWt 768 Electric power installed MWe 345 112 160 Boiler's efficiency % 93.0 89.5 91.7 POWER % 84.2 Boiler's availability 76.4 90.1 INDUSTRY

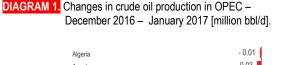
# 3.2.1.1. Market trends in the Downstream segment

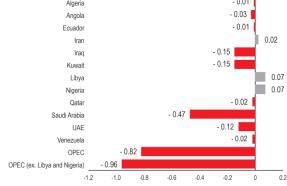
#### Adam Czyżewski, Chief Economist:

"Nearly a year ago I forecasted that 2016 would be the last year of cheap crude oil. Today, I can confirm once again that in the last year, crude oil was cheap. When you look at the average annual price, the Brent crude oil barrel cost slightly less than 44 dollars – 9 dollars less than in 2015 and the least in 12 years. I also hold my expectations that in the following years crude oil will become more expensive. Also among the economists engaged in the crude oil market, there's a dominant scenario of a moderate prices growth, stimulated by the intervention of OPEC and suppressed by rising extraction in the United States of America."

# CRUDE OIL PRICE

At the beginning of 2016 a Brent crude oil barrel cost USD 30. In June 2016 its price rose to more than USD 48, then grew in strength and at the end of the year amounted to USD 55. The increase in prices in 2016 is a result of i.a. unexpected OPEC agreement signed on 30 November 2016. It will lead to reduction in crude oil extraction in the countries of the cartel. The agreement is to be joined by i.a. Russia, Mexico and Kazakhstan.





Source: IHS

## Demand and supply of raw material

High crude oil supply, compared with the demand in a year's horizon, will affect the level of prices - according to the forecasts of the International Energy Agency (IEA), the balance between demand and production of the raw material will be reached in 2018.

TABLE 2	Crude oil market in 2015-2021	[million bbl/d].
---------	-------------------------------	------------------

ITEM	2015	2016	2017	2018	2019	2020	2021
World Demand	94.4	95.6	96.9	98.2	99.3	100.5	101.6
Total World Supply, including:	96.4	96.7	97.0	97.8	98.7	99.5	100.5
- Non-OPEC Supply	57.7	57.1	57.0	57.6	58.3	58.9	59.7
- OPEC	38.7	39.6	40.0	40.2	40.4	40.6	40.8
Implied Stock Change	2.0	1.1	0.1	-0.4	-0.6	-1.0	-1,1

Source: Data according to International Energy Agency (IEA).

In 2016 oil demand in the world increased by 1.2 million bbl/d and it is predicted that this average rate of growth will be maintained until 2021. The supply increased by only 0.3 million bbl/d. Disproportion between the growth of supply and demand will contribute to the depletion of global oil supply beginning in 2018.

## Potential directions of changes in crude oil prices

In the medium-term perspective until 2020, the majority of publicly available analyses and forecasts assume the increase of crude oil prices. Here are the main aspects which will be influencing prices in the next two years:

- OPEC's production policy the OPEC agreement of November 2016 should lead to a cut in crude oil production in Q1 and Q2 2017 and mitigate the risk of prices declining in the next two or three quarters. The effects of the agreement have already been reflected in oil prices, although the market is turning to its advantage the lower-than-planned cuts in crude oil production.
- the reaction of producers in the USA to higher crude oil prices – the predicted higher oil prices may stimulate production in the USA, and a higher supply of oil will reach the market after two or three quarters following the price increase, potentially contributing to a decrease in prices. Producers will enter the market who find it profitable to produce oil when the price is higher. If the price of crude oil decreases more strongly, the rate of increase of production in the USA will slow down accordingly. The potential reaction will be delayed by several quarters due to fact that producers secure themselves against the risk of oil prices going down.
- production in Libya and Nigeria one of the risk factors for crude oil prices in 2017 is the production in Libya and Nigeria, two of the OPEC countries excluded from the agreed production cuts. Both countries have a production potential that may be increased (or further decreased) by several hundred thousand barrels a day as a result of prevention or escalation of domestic armed conflict.
- fluctuations in the exchange rate of the US dollar the exchange rate of the US currency is not without influence on the prospects for oil prices; the US dollar appreciated strongly after the election of Donald Trump as the US president against the euro and against the currencies of emerging economies. The dollar's appreciation influences the increases of oil and fuel prices in those countries' markets.
- geopolitics potential escalation of armed conflict in the Middle East and Africa, which may have an impact on supply limitations and, consequently, increase in crude oil price.

The above mentioned factors imply a slow rise in oil prices from quarter to quarter from about USD 49/bbl in Q4 2016 to around USD 60/bbl in fourth quarter of 2018 (IHS Cera).

DIAGRAM 2. Change in prices of crude oil [USD/bbl].

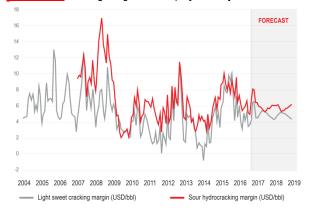
Source: IHS Cera.

# **DOWNSTREAM – SALES AND PRODUCTION**

A significant increase in margins in 2015 and their stabilisation in 2016 were supported by lower oil prices in the preceding years and by growing demand for products of crude oil throughput.

Despite the predicted decline of the Concern's Downstream margin in comparison to high margins in 2015-2016, it will still remain on a favourable level in 2017.

DIAGRAM 3. Refining margins in Europe [USD/bbl].



#### Source: IHS Cera.

In the short- and medium-term perspective, refinery margins in Europe will be shaped by competitive pressure. The main factors influencing margins were the following: the advantage of US and Middle Eastern refineries due to low energy cost vs. relatively high energy costs in Europe, modernisation of European refineries contributing to the extension of processing, as well as the growing competitiveness of exports from the Middle East, supplying fuel not only to Asia, but now also to Europe.

In the longer-term perspective, the refinery margins will depend on demand for products made from processed crude oil. The reasons for the changes in those margins should be sought in the more extensive structural changes on the market of fuel, diesel oil and petrochemical products. While stagnation or a slight decrease in demand for petroleum products in the transport segment are expected, major analytical institutions predict an increase in the significance of petrochemicals.

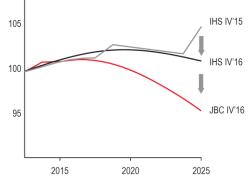
The increase in demand for gasoline in Europe in the years 2015–2016 was driven mainly by the decreasing crude oil prices – lower fuel prices translate into an increase in their consumption. In the

medium-term, the forecasts related to the demand for refinery products assume stabilisation due to the unchanging demand for gasoline, the flat and uncertain demand for diesel oil, and the growing demand for jet fuel and petrochemicals products.

The stabilisation of **demand for gasoline** results mainly from the efforts to reduce the emission intensity of the European economies, and the increased use of biofuels.

In the context of **demand on diesel oil**, a series of new arguments appeared on the fuel market in 2016, making it less likely to grow in the coming years. These arguments include:

- the scandal involving related to the measurements of harmful substances in diesel engines of German manufacturers.
- research currently in progress, carried out by EU countries, concerning emissions of harmful substances emitted by diesel engines which results may have a significant impact on the sales of diesel-oiled cars, potentially leading to a decrease in diesel oil consumption.
- legislative work currently in progress in the Netherlands and in Norway related to the ban on the sale of petrol- and dieselfuelled cars by 2025.
- the growing popularity of alternative fuels; the withdrawal of Japanese manufacturers from the production of economical diesel engines to develop engines using alternative fuels (electricity, natural gas).

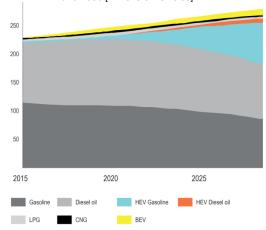


# DIAGRAM 4. Change in forecasts on diesel oil's demand in Europe in 2015-2025 (2015=100%).

Source: JBC Energy, IHS Cera

One need to bear in mind, however, that the fuel market in Europe is one of the least prospective in the world. The total global consumption of diesel and petrol is going to grow at a relatively low rate of 0.3% annually. However, the international increase in consumption is to a large extent polarised – the Europe and North American markets remain stable, while the whole growth takes place in emerging markets.

In the short- and medium-term perspective, electric cars will not have a significant impact on the fuel market – in Europe, electric cars will have accounted for only 4% of the car fleet by 2030, while traditional internal combustion engines will account for over 60%. The number of electric cars is going to grow from 0.9 million in 2015 to 12.5 million in 2030. Hybrid cars may have a significant share in the structure of EU fleets: according to forecasts by JBC, 74 million of them may appear by 2030 (82 million together with diesel hybrids), representing an annual average growth by 28% vs. 1.8 million in 2015.



## DIAGRAM 5. Passenger cars fleet structure in the European Union in 2010-2030 [millions of vehicles].

Source: JBC Energy

In the long-term perspective, the **petrochemical industry** may support demand for products made from processed crude oil, thus building refinery margins – growing implementation of modern plastic materials in the global economy.

Central and Eastern Europe is one of the fastest-growing markets in terms of demand for petrochemical products, produced by the ORLEN Group (polypropylene, ethylene, butadiene, paraxylene PTA and PVC).

DIAGRAM 6. Change in consumption of selected petrochemical products in Central-Eastern Europe [thousand tonnes/year].



Source: Nexant.

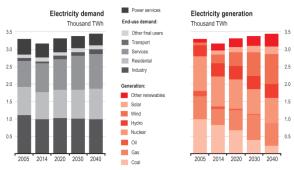
As the demand for petrochemical products grows, so does the competitive pressure – visible in particular in Europe:

- Olefins (ethylene, propylene, butadiene) strong pressure of imports from the Middle East and North American regions due to the cost advantage. European production based on kerosene is and will continue to be relatively less competitive, assuming the gradual growth of crude oil prices.
- Aromas (benzene, toluene, xylene, paraxylene) a decrease is predicted in the production capacities for benzene and toluene in Western Europe by 2030. The producers of aromas are going to strive to extend the value chain towards paraxylene and there is a potential risk of rising imports of benzene to Western Europe.
- Plastic materials (polyethylene, polypropylene, PVC) the packaging sector is the biggest area using plastics in Europe (40% of the demand). Price pressure is predicted for ethylene derivatives due to the shale gas revolution in the USA. The demand fluctuations will affect heavily producers who are not very innovative and whose margins are based mainly on the production scale.

## **DOWNSTREAM – POWER INDUSTRY**

According to the main scenario (New Policies) of the World Energy Outlook 2016 report created by the International Energy Agency, global demand for electricity will grow at a rate of 2% per year and will increase by two-thirds by 2040. The world economy will keep growing during this period at a rate of 3.4% per year. These trends represent a substantive change compared with the period of 1990-2014, in which both parameters grew with almost identical pace. In today's conditions the cheapest and also the most common source of electricity generation in the world is coal. However, in the long run it will be replaced by natural gas, hydropower and renewable energy sources. This change will be dictated by the necessity of decarbonisation of industry and fuel prices. In the coming decades significant changes will happen to the sources of power generation. Between 2008 and 2014 the share of wind energy increased by 4 percentage points and solar energy by 3 percentage points. By 2040 the share of these sources in electricity generation is expected to be tripled. Coal power continues a structural decline, whereas gas power grows gradually until 2030, after which it begins to slightly reduce its share in the global energy mix.

# DIAGRAM 7. Demand and sources of electric energy in Europe.



Source: International Energy Agency

In the power engineering area of the Downstream segment in the ORLEN Group, the key market is Poland – it provides favourable growth outlooks due to lower energy consumption compared to most European countries. Energy consumption per capita in Poland is much lower than the EU average and amounted to approx. 4.3 MWh/person in 2016, vs. the EU average of 5.5 MWh/person. In the years 2010–2016, energy demand grew at an average rate of

around 1.5% annually. Until 2020, rate of growth is expected to be at the level of around 1.8% (CAGR by CERA), and this increase will be above all correlated with the country's economic development. A significant part of the existing generation capacities in Poland require modernization or replacement due to their age and high emission intensity. It is estimated that, in the absence of appropriate economic signals, around 10 GW of generation capacities will have been decommissioned by 2025, which is the main reason why the power engineering segment is being developed within the ORLEN Group and why two power units are being erected with a total capacity of over 1 GW.

# 3.2.1.2. The ORLEN Group's position and competitive environment

## Krystian Pater, Member of the Management Board of PKN ORLEN, Production:

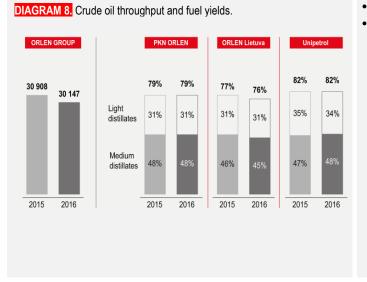
"In 2016, the ORLEN Group's production capacity was reduced by increased extent of maintenance overhauls. The cyclical stop of the Olefin installation (crucial for petrochemical production) was held in PKN ORLEN. In the Unipetrol Group, an emergency stop of FCC (Fluid Catalytic Crac) installation in Kralupy refinery took place from mid-May 2016 and we conducted a reconstruction of installations for ethylene production after a breakdown of August 2015. Thanks to the optimization of manufacturing processes, coordinating product flows within the ORLEN Group as well as purchases of semi-finished products and products, consequences of the failure were reduced. It is worth noting that the repairs have now been fully completed. In October, the unit in Kralupy and in November the Olefin installation in Litvinov, the Unipetrol Group's assets, were both restored back to functioning."

# MAIN PRODUCTION ASSETS OF THE ORLEN GROUP



- Total production capacities of the ORLEN Group refineries amount to 35.2 million tonnes.
- PKN ORLEN refinery in Plock is one of the most advanced, integrated production facilities in Central and Eastern Europe with production capacity of conversion units at the level of 16.3 million tonnes/year. In the field of petrochemical production the key installation Olefin has a maximum production capacity of about 700 thousand tonnes of ethylene and about 380 thousand tonnes of propylene. Produced monomers are an input for production of polymers in Basell ORLEN Polyolefins and for PVC installation in Anwil. PKN ORLEN also possesses a modern Complex PX / PTA of production capacity of around 690 thousand tonnes of terephthalic acid per year.
- Remaining Polish refineries in ORLEN Poludnie are located in Trzebinia and Jedlicze. They specialise in production of biocomponents, base oils, heating oils and regeneration of spent oils
- Refinery in ORLEN Lietuva in Mazeikai has a production capacity of 10.2 million tonnes/year and is the only such facility on the Baltic states market (Lithuania, Latvia and Estonia).
- Refineries of the Unipetrol Group are situated in Kralupy and Litvinov with production capacities up to 8.7 million tonnes/year. The Unipetrol Group also possessed petrochemical assets of total production capacities of approx. 600 thousand tonnes/year, including 320 thousand tonnes of polyethylene and approx. 280 thousand tonnes of polypropylene. Construction of a new Polyethylene 3 installation of total production capacity of approx. 270 thousand tonnes/year is in progress and will allow for increasing the use of the Olefins installation and for deeper integration of petrochemical and refinery production.
- Anwil in Włocławek is the only producer of polyvinyl chloride (PVC) in Poland as well as one of the major producers of sodium hydroxide and fertilizers in Poland. The production capacity is at the level of 1 160 thousand tonnes per year of nitrogen fertiliser, approx. 560 thousand tonnes per year of PVC and granules and approx. 360 thousand tonnes per year of sodium hydroxide.
- Basell ORLEN Polyolefins in Płock has facilities with total production capacities at the level of 820 thousand tonnes (420 thousand tonnes of polyethylene and 400 thousand tonnes of polypropylene). Products are distributed both in domestic and foreign markets.





# MARKET SHARES OF THE ORLEN GROUP IN DOWNSTREAM SEGMENT

# Wholesale of refinery products

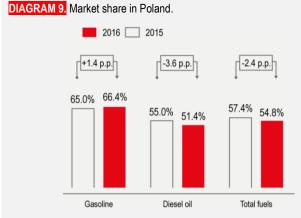
In 2016, the ORLEN Group conducted wholesale of refinery products in Poland, the Czech Republic, Germany, Slovakia, Hungary, Austria, Latvia, Lithuania, Estonia, Finland and Ukraine and by sea to Western Europe transhipment terminals. The ORLEN Group's domestic markets include: Polish, Lithuanian and Czech

# Competition in Central-Eastern Europe.

The biggest competitors of the ORLEN Group are:

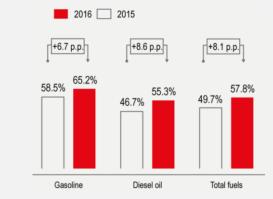
- Lotos Group with headquarters in Gdańsk second largest refinery in Poland.
- Mitteldeutschland Refinery in Leuna/Spergau of Total Group, located in the south-eastern Germany, about 150 km from the Polish-German border, the most modern of German refineries.
- PCK Refinery in Schwedt located north-east of Berlin, about 20 km from the Polish-German border.
- Slovnaft Refinery integrated refining and petrochemical group with a dominant position in the Slovak Republic, located near Bratislava, about 350 km south from the Polish border.
- Mozyr Refinery leading Belarusian refinery.
- Crude oil throughput in 2016 amounts to 30.9 million tonnes
- Crude oil throughput down by (2.5)% (y/y), including:
  - Poland by (3.5)% (y/y) as a result of the more extensive scope of maintenance shutdowns of the Fractional Distillation Units II and VI, of the Diesel Oil Hydrodesulphurisation unit, and of the Hydrogen and Olefin Production Plant. The Polyethylene and Polypropylene plants at Basell ORLEN Polyolefins and the Polyvinyl Chloride plant at Anwil were shut down for period maintenance. Fuel yield was at a comparable level (y/y).
  - The Czech Republic by (16.5)% (y/y) as a result of an emergency shutdown from mid-May 2016 of the Fluid Catalytic Crac plant at the Kralupy refinery and the date of commissioning of the ethylene production plant in November 2016 following the breakdown of August 2015. Fuel yield was at last year's level.
  - Lithuania increase by 9.9% (y/y) as a result of the less extensive scope of the shutdown for maintenance and of the improved market situation contributing to higher product sales. Lower fuel yield (y/y) mainly as a result of the change in the structure of processed crude oils (lower share of crude oils with lower sulphur content).

markets. The ORLEN Group has an extensive portfolio of refinery products, among others: gasoline, diesel oil, A-1 jet fuel, light and heavy heating oil, bitumen, engine oils and a wide range of non-fuel products and semi-products.



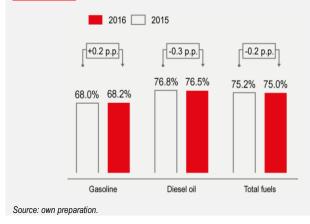
Source: own preparation.

# DIAGRAM 10. Market share in the Czech Republic.



Source: own preparation.

## DIAGRAM 11. Market share in the Baltic states.



Assortment sales of the ORLEN Group is described in point 3.2.1.3

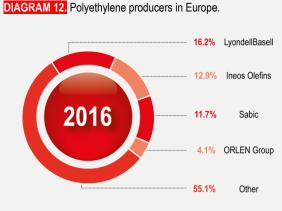
- Increase of ORLEN Group's market share in gasoline sales in Poland by 1.4 percentage point (y/y), up to a level of 66.4%.
- Decrease of the share in sales of diesel oil by (3.6) p.p. is of a statistical nature. As a result of the implementation of new legal regulations, the so-called shadow economy on the fuel market was reduced, and consequently the registered consumption presented by the Energy Market Agency increased in relation to the above, the market share figures in the years 2015–2016 are non-comparable.
- The ORLEN Group remains as a leader in fuel sales on the Polish market.
- A further strengthening of market position is expected thanks to implementation of strategic objectives for the years 2017-2021.
- Increase of market share due to growth in production capacities by 4.2 million tonnes per year to a level of 8.7 million tonnes per year after the acquisition of shares in Ceska Rafinerska from Shell and Eni in 2014 and 2015.
- Impact of maintenance overhaul of the Fluid Catalytic Crac installation from mid-May 2016 in Kralupy refinery on the level of fuel sales and market shares of the Unipetrol Group.

- Fierce price competition from Finnish, Belarussian and Russian suppliers.
- An extensive portfolio of trade partners from key market recipients to very small businesses, established position and good reputation enable us to keep the leading position in the market.

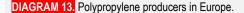
# **ORLEN GROUP**

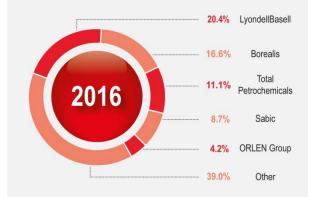
## Wholesale of petrochemical products

The ORLEN Group is one of the largest petrochemical companies in Central and Eastern Europe and the only producer of monomers and

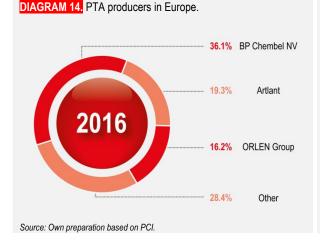


Source: Own preparation based on POLYGLOBE.



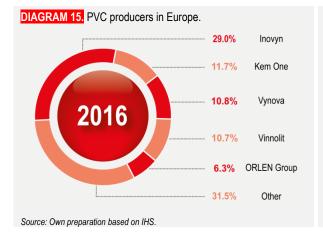


Source: Own preparation based on POLYGLOBE.



polymers on the Polish market and most petrochemical products on the Czech market.

- The production capacity of high and low density polyethylene in Europe are at a level of about 13 567 thousand tonnes/year.
- The largest producer of polyethylene is Lyondell Basell Industries, which has a production capacity of about 2 195 thousand tonnes/year (including a 50% stake in Basell ORLEN Polyolefins Sp. z o.o. (BOP). The company has assets located in Germany, France and Poland.
- Ineos Olefins & Polymers Europa with a production capacity of around 1 745 thousand tonnes/year and assets located in Belgium, France, Germany, Italy and Norway and Sabic with a production capacity of about 1 590 thousand tonnes/year and assets located in Germany, the Netherlands and the UK.
- Aggregate production capacities of ORLEN Group with plants in Poland and the Czech Republic (including a 50% stake in BOP) amount to around 555 thousand tonnes/year.
- ORLEN Group on the Czech market is constructing a new installation of Polyethylene 3 capable of production capacity of about 270 thousand tonnes/year.
- Polypropylene production capacity in Europe is at the level of about 11 559 thousand tonnes/year.
- Lyondell Basell Industries has a production capacity of about 2 365 thousand tonnes/year (including a 50% stake in BOP). The company has assets located in Germany, France, Italy, Spain, the UK and Poland.
- Borealis with a production capacity of around 1 920 thousand tonnes/year and assets located in Belgium, Germany, Austria and Finland and Total Petrochemicals with a production capacity of about 1 280 thousand tonnes/year and assets located in Belgium and France.
- Aggregate production capacities of the ORLEN Group with plants in Poland and the Czech Republic (including a 50% stake in BOP) amounts to about 480 thousand tonnes/year.
- PTA production in the European market in 2016 amounted to about 2 532 thousand tonnes/year.
- BP Chembel NV largest producer of PTA, located in Belgium with nominal capacity of 1 400 thousand tonnes/year.
- Artlant in Portugal with nominal production capacity of 750 thousand tonnes/year – due to prolonged construction of production installations since third quarter of 2014 the actual volume of production is limited.
- PKN ORLEN as the only one in Europe has PTA manufacturing systems fully integrated with the production of paraxylene and has a production capacity at a level of 630 thousand tonnes/year at disposal.
- Planned investments in PTA in Europe concentrate in Russia: Etana (750 thousand tonnes/year 2020), Mogilev (600 thousand tonnes/year 2020) and OJSC TANECO (210 thousand tonnes/year 2021), but due to long time horizon and unstable political circumstances the investments are uncertain.



Assortment sales of the ORLEN Group is described in point 3.2.1.3.

# LOGISTICS ASSETS OF THE ORLEN GROUP

Efficient logistics infrastructure is the key element of the competitive advantage of the ORLEN Group on the market.

The ORLEN Group uses a network of mutually complementary infrastructure elements: fuel terminals, onshore and offshore handling facilities, networks of raw material pipelines. In 2016, product logistics in the ORLEN Group was based on pipeline use, on railway transport, as well as on tank truck carriage.

In 2016 pipeline transport was the primary transport form of raw materials and products. The total length of used product and raw material pipeline networks, belonging to external entities and own facilities in Poland, the Czech Republic and in Lithuania was nearly 3.8 thousand km (2.1 thousand km are product pipelines, and 1.7 thousand km are raw material pipelines).

On the Polish market PKN ORLEN uses 620 kilometers of pipelines owned by Przedsiębiorstwo Eksploatacji Rurociągów Naftowych "Przyjaźń" and its own transportation infrastructure with a length of 338 km consisting of two sections: Płock - Ostrów Wielkopolski -Wrocław with a length of 319 km and Wielowieś – Góra (IKS Solino) with a length of 19 km. Crude oil transport is performed primarily with the use of a network of pipelines belonging to PERN "Przyjaźń", of a total length of 887 km, as well as using own pipeline of 43 km, linking Góra (IKS Solino) to Żółwiniec (connection to the PERN "Przyjaźń" pipeline).

- PVC nominal production capacity in Europe is 7 561 thousand tonnes/year.
- Oltchim and Karpatneftekhim, with nominal production capacities of approx. 300 thousand tonnes each, have been permanently shut down.
- The leading manufacturer of PVC in Europe is INOVYN (a company established through the merger of Ineos Chlor and Solvay) and has production capacity of 2 195 thousand tonnes/year.
- The next largest producers are Kem One, Vynova and Vinnolit which have production capacities estimated respectively at 881 thousand tonnes/year, 820 thousand tonnes/year and 809 thousand tonnes/year.
- Anwil S.A. with production capacities of 340 thousand tonnes/year is ranked eighth in production capacity on the European market of PVC.
- The Anwil's main competitors in the PVC domestic and European market are BorsodChem, Inovyn and Vynova.

For operational purposes of receipt, dispatch and loading of fuel in 2016, the ORLEN Group used in aggregate 24 facilities (own fuel terminals, terminals owned by entities from the ORLEN Group and third parties' centres). The total storage capacity within own infrastructure and based on agreements concluded at the end of 2016 amounted to 7 million m<sup>3</sup>.

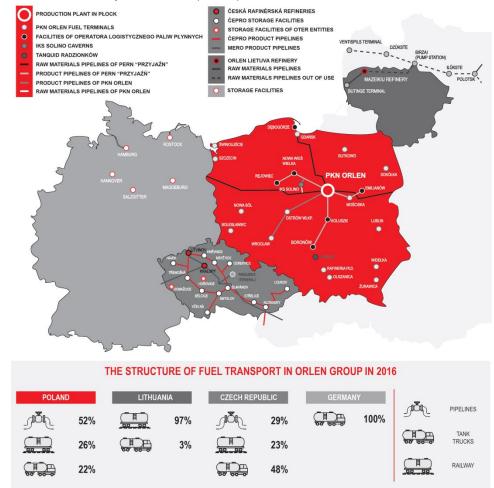
In 2016 on the Czech market, the ORLEN Group used 1 774 km of pipelines (1 110 km of product pipelines owned by CEPRO and 674 km of raw material pipelines owned by MERO) and 12 storage and distribution stations belonging to the state-owned operator CEPRO and 2 storage facilities leased from third parties.

The main component of the logistics infrastructure, currently used on the Lithuanian market, is the raw material pipeline with the length of 91 km, linking the Butinge terminal with the Mazeikiai refinery. Both the terminal and the pipeline are owned by ORLEN Lietuva.

On the German market, ORLEN Deutschland has taken advantage of the warehouse-distribution capacities in five facilities located in the northern part of Germany, belonging to external entities. Fuel transport on this market is performed entirely with the use of road transport.

# **ORLEN GROUP**

# SCHEME 4. Logistics infrastructure used by the ORLEN Group in Europe.

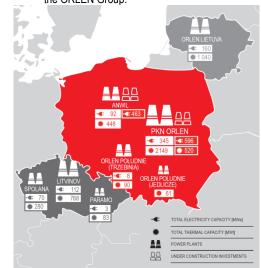


# POWER INDUSTRY

The ORLEN Group is a significant producer of electricity and heat energy, which is used in large part for their own production needs. It is also one of the largest consumers of gas in Poland and an active participant in the process of liberalisation of the gas market. According to the assumptions of the ORLEN Group Strategy, the current production sources are undergoing upgrading projects and new investments in the form of gas-steam blocks are carried out.

The ORLEN Group currently owns energy blocks in three countries. In Poland, they are located in Plock, Włocławek, Jedlicze and Trzebinia. In the Czech Republic in Litvinov, Spolana, Kolin and Pardubice and in Lithuania in Mazeikiai.

SCHEME 5. Energy assets and their technical parameters in the ORLEN Group.



- PKN ORLEN Power Plant in Plock ("PP") is the largest in terms of installed capacity industrial power plant in Poland and one of the largest in Europe, producing heat and electricity in the high-efficiency cogeneration. The PP provides, as the basic supplier, heat in steam and heating water and electricity the media used for the production installations and for external customers. In 2016 the investment projects related to adjustment to the new environmental requirements were formally completed. Implementation of the program of efficiency improvement in production of heat and power was successfully realised.
- Heat and Power Plant ORLEN Poludnie Group located in Trzebinia ensures full heating needs in steam and water, and partly the need of electricity. The basic fuel is coal dust.
- Heat and Power Plant in Jedlicze is the primary source of heat production in technological steam. The basic fuel is fine coal dust.
- Heat and Power Plant Anwil is an industrial power plant generating technological heat and electricity in a cogeneration process and it is powered by natural gas and heating oil.
- Heat and Power Plant in Litvinov in the Unipetrol Group is based on brown coal and its energy assets are currently under modernization.
- Heat and Power Plant in Spolana is mainly based on brown coal.
- The Paramo Heat and Power Plant includes two production plants: Kolin and Pardubice, in which the source of producing steam is based on the combustion of natural gas.
- Heat and Power Plant in the ORLEN Lietuva is a source of technological steam for production processes and operates on a mix of heavy heating oil and refining gases.

In 2016 the ORLEN Group led a construction of industrial heat and power plants in Włocławek and Płock.

The gas-steam power plant constructed in Włocławek of 463 MWe in total power will be strictly technologically linked to the Anwil Group Production Plant. The launch of power plants is scheduled for the second quarter of 2017 after the contractor completes diagnosed repairs, guarantee measurements and a test run. After commissioning, the newly built power plant will serve as the main source of technological heat and electricity for the Anwil Group, and the surplus of electricity manufactured will be allocated by PSE (Polskie Sieci Elektroenergetyczne S.A) on the domestic market.

In 2015, implementation of an investment started consisting in the erection of a GTCC unit in Płock with a capacity of 596 MWe. In April 2015, the construction site was handed over to the General Contractor, a consortium of Siemens AG and Siemens Polska Sp. z o.o. By the end of 2015, all the earthworks related to the technological structures as well as to the auxiliary structures had been carried out. In 2016, key elements of the CCGT unit arrived at the construction site, including the gas turbine, the steam turbine and the generator, and intense mechanical installation of the unit started. In 2016, all the administrative, planning and easement-related aspects had also been handled concerning the 400 kV line for the unit. The investment is planned to be completed by the end of 2017.

The activity on wholesale electrical energy market has been expanded from the Polish market to the Lithuanian and the Czech markets. Additionally in PKN ORLEN, the sale of the electrical energy to final users has started.

# 3.2.1.3. Volume sales of Downstream Segment

# Mirosław Kochalski, Vice-President of the PKN ORLEN Management Board, Corporate Affairs:

"The past year brought about the long-awaited comprehensive regulations supposed to contribute to the reduction of illegal fuel trading on the Polish market. We observed some notable advantages for the ORLEN Group already in Q4 2016, i.e. directly after the implementation of the so-called fuel package. Additionally, the positive effect of growth rate of the Polish economy and good situation on labour market was recorded. As a result, the Group saw a record growth in sales at that time vs. the same period of the previous year."

In 2016 ORLEN Group achieved a record sales volume in the Downstream Segment. Total sales volume amounted to 30 708 thousand tonnes and was higher by 1.1% (y/y) mainly as a result of higher refinery volumes by 4.9% (y/y) and lower by (17.5)% (y/y) petrochemical volumes on the Czech and Polish markets.

Light and medium distillates had the biggest impact on the level of sales.

A reduction in sales in the petrochemical industry in the field of monomers, polymers and PVC was the result of supply constraints related to the unavailability (until November 2016) of installations for

production of ethylene in the Unipetrol Group after a breakdown of August 2015 and a periodic maintenance overhaul of the Olefin installation in PKN ORLEN.

Higher PTA sales was a result of the intensification of production in the first half of 2016 and consistent sales policy on European markets, namely Polish and German.

The decrease in fertiliser sales was due to maintenance overhauls of production installations in June and July of 2016 in Anwil.

Sales -	2016		2015		2014		change %	
	value	volume	value	volume	value	volume	chang	e 70
1	2	3	4	5	6	7	8=(2-4)/4	9=(3-5)/5
Light distillates <sup>1)</sup>	10 513	5 766	11 528	5 437	13 270	4 623	(8.8%)	6.1%
Medium distillates <sup>2)</sup>	22 714	12 459	25 062	11 995	28 976	10 092	(9.4%)	3.9%
Heavy fractions <sup>3)</sup>	3 786	4 334	4 610	4 544	7 701	4 527	(17.9%)	(4.6%)
Monomers <sup>4)</sup>	2 025	681	2 978	878	3 447	837	(32.0%)	(22.4%)
Polymers <sup>5)</sup>	1 135	245	2 341	482	2 953	592	(51.5%)	(49.2%)
Aromas <sup>6)</sup>	625	248	930	358	1 662	413	(32.8%)	(30.7%)
Fertilizers7)	821	1 089	1 057	1 146	1 065	1 143	(22.3%)	(5.0%)
Plastics <sup>8)</sup>	1 218	351	1 492	445	1 424	418	(18.4%)	(21.1%)
PTA	1 571	605	1 532	587	1 767	571	<b>`</b> 2.5%	<b>`</b> 3.1%
Others <sup>9)</sup>	4 794	4 930	5 457	4 508	8 284	4 490	(12.1%)	9.4%
Total	49 202	30 708	56 987	30 380	70 549	27 706	(13.7%)	1.1%

TABLE 3. The ORLEN Group sales in the Downstream segment (PLN million/thousand tonnes).

1) Gasoline, LPG.

2) Diesel oil, light heating oil, jet fuel.

3) Heavy heating oil, bitumen, oils.

4) Ethylene, propylene.

5) Polyethylene, polypropylene.

6) Benzene, toluene, paraxylene, ortoxylene.

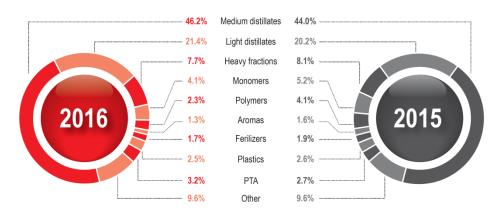
7) Canwil, ammonium sulphate, ammonium nitrate, other fertilizers.

8) PVC, PVC granulate. 9) Other:

- in volume terms consists mainly of brine, salt base, vacuum distillates, acetone, ammonia, butadiene, phenol, technical gases, glycols, caprolactam, caustic soda and sulphur. - in value terms includes the sale of other products, goods and materials of the segment, also includes revenues from the sale of mandatory reserves for the total amount of PLN

2 236 million in 2014 and revenues from sales of services of the segment.

DIAGRAM 16. Sales revenue structure of the ORLEN Group Downstream segment.



In 2016, 2015 and 2014, the ORLEN Group did not have any customers whose share in total sales would individually exceed 10%.

# 3.2.1.4. Markets

Basic domestic markets of the ORLEN Group companies in the Downstream segment:

- Polish market PKN ORLEN, ORLEN Paliwa sp. z o.o., ORLEN Południe S.A., ORLEN Asfalt Sp. z o.o., ORLEN Oil Sp. z o.o., IKS SOLINO S.A., Petrolot Sp. z o.o., Ship-Service S.A., Anwil S.A.
- Baltic states market AB ORLEN Lietuva, ORLEN Latvija SIA (Latvia), ORLEN Eesti OU (Estonia).
- The Czech Republic market Unipetrol RPA s.r.o., Paramo a.s., Unipetrol Slovensko s.r.o., Unipetrol Deutschland GmbH, Butadien Kralupy a.s., Unipetrol RPA Hungary Kft., ORLEN Asfalt Ceska Republika s.r.o., Spolana a.s.

Sales	2016	2015	2014	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Poland	15 173	15 192	14 660	(19)	(0.1%)
Lithuania	9 114	8 462	7 475	652	7.7%
Czech Republic	6 421	6 726	5 571	(305)	(4.5%)
Total	30 708	30 380	27 706	328	1.1%

TABLE 4. Sales volume of the ORLEN Group in the Downstream segment on domestic markets (in thousands of tonnes). 1)

1) by country of headquarter of company carrying out the sales.

DIAGRAM 17. Structure of sales volume of the ORLEN Group in the Downstream segment on domestic markets.



## Polish market

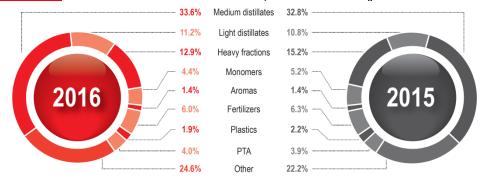
High growth of the Polish economy in comparison to European economies and good situation on the labour market had a significant impact on fuel consumption on the Polish market. Low fuel prices and an introduction of the so-called fuel package i.e. solutions which significantly reducing the impact of the shadow economy, had additional effect on domestic demand, particularly noticeable in IV quarter of 2016.

According to Energy Market Agency, domestic consumption of gasoline and diesel oil in 2016 increased respectively by 6.1% and 12.5% (y/y).

TABLE 5. Sales volume of the ORLEN Group in the Downstream segment on the Polish market (in thousands of tonnes).

Sales	2016	2015	2014	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Light distillates	1 704	1 634	1 624	70	4.3%
Medium distillates	5 104	4 980	4 437	124	2.5%
Heavy fractions	1 961	2 309	2 563	(348)	(15.1%)
Monomers	661	784	689	(123)	(15.7%)
Aromas	212	213	186	(1)	(0.5%)
Fertilizers	914	951	962	(37)	(3.9%)
Plastics	284	339	295	(55)	(16.2%)
PTA	605	587	571	18	3.1%
Other	3 728	3 395	3 333	333	9.8%
Total	15 173	15 192	14 660	(19)	(0.1%)

DIAGRAM 18. Structure of sales volume of the ORLEN Group in the Downstream segment on the Polish market.



Sales of the ORLEN Group in the entire Downstream segment on the Polish market in 2016 reached a level similar to last year's and amounted to 15 173 thousand tonnes. Realised refining volumes were higher by 2.2% (y/y) and petrochemical volumes dropped by (8.1)% (y/y) due to maintenance overhauls of Olefin installation in PKN ORLEN.

In the area of refinery products, the sales of light and middle distillates increased. Intensification of activities related to services

# **Operating markets of ORLEN Lietuva**

According to IMF estimates, GDP growth rate of Lithuania amounted to 2.6% (y/y), in Estonia 1.5% (y/y), and in Latvia 2.5% (y/y). Positive macroeconomic indicators had an impact on the increased demand for fuels, which in total for the three Baltic markets increased in the segment of gasoline by 3.2% (y/y) and diesel fuel by 4.9% (y/y). The largest increases

in consumption took place in Lithuania, where the demand for gasoline increased by 9.0% (y/y) and for diesel by 12.8% (y/y).

provided to the final users brought positive results in sales both to international groups and to the SME sector.

In 2016, the increase in sales of jet fuel was observed, making it possible to consolidate the leading position among its suppliers. The jet fuel market continues to be a significant component of the Group's selling strategy in relation to the dynamic increase in air transports in Poland.

Negative factor influencing consumption on the Estonian market was the increase in excise duty, which is to be continued in subsequent years. Low entry barriers for Baltic markets caused that ORLEN Lietuva operated in an environment of growing competition, mainly from importers from Finland and Belarus. Despite the market pressure, total volume of sales increased in 2016 by 7.7% (y/y).

TABLE 6. The ORLEN Group volume sales in the Downstream segment markets serviced by the ORLEN Lietuva Group (thousand tonnes).

Sales	2016	2015	2014	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Light distillates	2 753	2 480	2 178	273	11.0%
Medium distillates	4 213	4 179	3 611	34	0.8%
Heavy fractions	1 920	1 635	1 524	285	17.4%
Other	228	168	162	60	35.7%
Total	9 114	8 462	7 475	652	7.7%

DIAGRAM 19. Structure of sales volume of the ORLEN Group in the Downstream segment on the markets serviced by the ORLEN Lietuva Group.



The economic situation in Ukraine, which was very tough in the last several years, has now improved. In 2016 estimates point to an increase of GDP by around 1.5% (y/y) in comparison to fall by 9.9% the year before. Despite the improved economic ratios, households situation remains difficult, and the lack of stability on the financial market and the high inflation rate translate into a state of uncertainty

#### The Czech Republic market

In 2016, the Czech economy grew at a rate of 2.5% (y/y). Favourable market conditions led to an increase in the consumption of gasolines by 1.7% (y/y) and diesel oil by 4.0% (y/y).

In April 2015, Unipetrol acquired the remaining shares in Ceska Rafinerska a.s. from ENI. The Unipetrol Group became the sole owner of the Litvinov and Kralupy refineries and has become the sole producer of fuels in the Czech Republic.

and high market risk. An aggressive pricing policy was also seen to be pursued on the Ukrainian market by Belarusian refineries, as well as an intensified supply of fuels from Russia. In spite of the above restrictions, the ORLEN Lietuva Group increased sales on the Ukrainian market by 1.1% (y/y).

Total sales of light and middle distillates increased by 7.0% (y/y), despite the production restrictions caused by the emergency shutdown, starting in mid-May 2016, of the Fluid Catalytic Crac installation at the refinery in Kralupy.

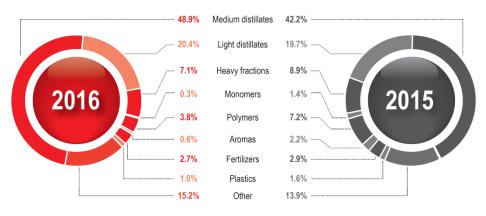
Lower petrochemical volumes by (4.5)% (y/y), were mainly caused by the failure of the ethylene production plant in August 2015, which was relaunched in November 2016. The restricted selling possibilities were balanced by the coordination of product flows within the ORLEN Group, and also thanks to the purchases of semi-

finished and finished products from third parties.

TABLE 7. Sales volume of the ORLEN Group in the Downstream segment on the Czech market (in thousands of tonnes).

Sales	2016	2015	2014	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Light distillates	1 309	1 323	821	(14)	(1.1%)
Medium distillates	3 142	2 836	2 044	306	10.8%
Heavy fractions	453	600	440	(147)	(24.5%)
Monomers	20	94	148	(74)	(78.7%)
Polymers	245	482	592	(237)	(49.2%)
Aromas	36	145	227	(109)	(75.2%)
Fertilizers	175	195	181	(20)	(10.3%)
Plastics	67	106	123	(39)	(36.8%)
Other	974	945	995	29	3.1%
Total	6 421	6 726	5 571	(305)	(4.5%)

DIAGRAM 20. Structure of sales volume of the ORLEN Group in the Downstream segment on the Czech market.



In 2016, Unipetrol Group continued sales to a wide portfolio of clients, including large fuel companies and supermarket chains.

## 3.2.1.5. Sources of supply

#### Crude oil

Crude oil deliveries to PKN ORLEN are realised through "Przyjaźń" pipeline and by sea using Gdańsk-Płock pipeline.

ORLEN Lietuva Group is supplied with raw material by the terminal in Butinge.

The supply of raw material for the production of Unipetrol Group takes place through the southern section of the pipeline "Przyjaźń" for the refinery in Litvinov and TAL and IKL pipelines to refinery in Kralupy. Litvinov refinery can also be supplied using the TAL and IKL pipeline.

In 2016 two long-term contracts for the supply of crude oil by pipeline to a refinery in Płock signed with Rosneft Oil Company and Tatneft Europe AG and a long-term agreement on the supply of oil by sea with Saudi Arabian Oil Company were in effect. The contracts provided PKN ORLEN with more than 70% of crude oil supplies.

In addition, pursuant to separate agreements, PKN ORLEN provides crude oil to the 3 ORLEN Group refineries located respectively in The Unipetrol Group has been selling its products on the Slovakian, Hungarian, German and Austrian markets through Unipetrol Slovakia and Unipetrol Deutschland.

Litvinov and Kralupy in the Czech Republic and in Mazeikiai in Lithuania.

In 2016 the crude oil supplies in all directions proceeded according to plan.

The raw material suppliers to all refineries of the ORLEN Group were both manufacturers and companies operating in the international crude oil market. Raw material delivered to Plock came primarily from Russia and Saudi Arabia, but deliveries from Kazakhstan, Iran and Azerbaijan were also realised. Crude oil for refineries in the Czech Republic was supplied from Russia, Algeria, Azerbaijan, Saudi Arabia, Azerbaijan and Kazakhstan. The supply of raw material to the Mazeikiai refinery came primarily from Russia, moreover, from Saudi Arabia and Kazakhstan.

In 2016, the share of Rosneft Oil Company in crude oil supplies exceeded 10% of the overall revenues of the ORLEN Group.

## Natural gas

Natural gas purchases in 2016 were based on a long-term contract among PKN ORLEN and PGNiG from 1997 and on agreements with alternative suppliers.

On 29 September 2016, PKN ORLEN signed with PGNiG S.A. new five-year contract remaining in force until 30 September 2021, which value may exceed PLN 7 billion.

Under concluded agreement, PGNiG became a strategic supplier of natural gas to the ORLEN Group companies in Poland.

The ORLEN Group carries out activities aimed at securing stable supplies and at reducing the overall cost of natural gas purchase, for instance by diversifying supply sources, centralizing natural gas trading, and building trader expertise. The new gas contract portfolio built in 2016 provides for a series of optimization measures, both at the level of the individual suppliers and of the various gas indices and in several delivery points.

The ORLEN Group also implements a number of exploration and extraction projects in order to obtain their own sources of gas and crude oil.

In 2016 the ORLEN Group did not have any suppliers whose share in natural gas supply would exceed 10% of the ORLEN Group's revenues.

# 3.2.2. Retail segment

# Zbigniew Leszczyński, Member of the Management Board, Sales:

"Yet again, the retail segment recorded an EBITDA result amounting to PLN 1.8 billion, i.e. nearly PLN 300 million higher (y/y). The result was achieved thanks to increased fuel sales volume by 2.5% (y/y) and improvement of fuel margins on the Polish and German markets. Measures aimed at continuous improvement of customer service standards at stations, taking into account the opinion and ever-changing customer expectations when planning new solutions and the constant extension of the offer helped to increase non-fuel margins achieved on all markets."

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		Z	016				
		units	ORLEN Group	Poland	Germany	Czech Republic	Lithuania
	Total sales	thousand t	8 186.6	5 052.4	2 453.6	617.4	63.2
لالم	Market share	%	17.7	34.8	6.0	17.8	3.5
	Number of retail stations including:	number	2 726	1 766	572	363	25
RETAIL	Premium	number	1 758	1 616	-	117	25
STATIONS	Economical	number	898	108	555	235	_
	Other	number	70	42	17	11	-
	CODO / COCO	number	2 173	1 317	475	356	25
	DOFO / DODO	number	553	449	97	7	-
stop		units	ORLEN Group	Polanc		zech public	Lithuania

stop C		units	ORLEN Gloup	Folaliu	Republic	Littiudilid	
	Number of outlets	number	1 691	1 500	168	23	
STOP CAFE	Stop Cafe	number	1 114	959	132	23	
AND STOP CAFE	Stop Cafe Bistro	number	536	500	36	-	
BISTRO OUTLETS	Stop Cafe 2.0	number	41	41	-	-	

# 3.2.2.1. Market trends in the retail segment

Almost the entire 2016 was a period of continuous low fuel prices at the stations, what limited the attractiveness of the economic networks. Premium stations began to acquire more recognition of customers. Customers were more eager to buy premium fuel and

paid more attention to available non-fuel products and gastronomic menu. In 2016 works related to new concepts of shops in the stations were carried out. The operators of fuel stations established a cooperation with large gastronomic networks and began to work on their own formats and brands. Large oil companies have focused on the launch of new solutions and functionalities, based on new technologies, tools and IT systems, mainly in the area of new forms of payment, ordering, communicating with customers and improving operational management of the network.

On the Polish market the effects of the legislative amendments aimed at limiting the so-called "shadow economy" were evident. To a high extent, they had an influence on the level of wholesale; however, in the retail segment, they resulted in the increase of the number of independent fuel stations operating in the market.

In the first half of 2016 Lukoil, which has a network of 230 stations in Poland, Lithuania and Latvia, decided to withdraw from the market and sell its retail assets to an Austrian company Amic Energy Management. In past years Lukoil sold its stations in Ukraine, Hungary, Slovakia, the Czech Republic and Estonia. Austrian investor plans to develop retail business on the markets of Central and Eastern Europe in the upcoming years.

In 2016, there was an another year with growthin the number of fuel stations on **Polish market** - nearly 200 new objects were launched. More than 75% of these are independent operators stations.

The number of petrol stations in the networks of foreign concerns remained at a level similar to 2015. In 2017 the rebranding process of Statoil stations (acquired several years ago by the Canadian company Alimentation Couche-Tard) will begin. All the stations are to operate under the Circle-K brand.

On the **Czech market**, the number of fuel stations in 2016 remained at the level of the previous year. However, structure of the market

## 3.2.2.2. Market position and environments

The ORLEN Group is an unquestionable leader in Central Europe, with a network of 2 726 fuel stations operating in the premium and economy segments.



SCHEME 6. The number of the ORLEN Group stations for the key markets at the end of 2016.

In Poland, fuel stations operate under the ORLEN brand in the premium segment and under the BLISKA brand in the economy segment, whereas in the Czech Republic – under the Benzina Plus and Benzina brands, whereas in Lithuania – under the ORLEN brand (premium segment). On the German market, fuel stations have been operating primarily in the economy segment – under the STAR brand and the network is complemented by a dozen of Familia market stations. has changed, a part of small non-public stations transformed into generally available objects, thereby increasing competition on the market.

An important change in the retail fuel market in the Czech Republic was most networks' introduction of refined fuels, which replaced standard fuels.

On the **German market**, there were no major structural changes. Foregoing leaders Aral and Shell maintained a leading position, despite a several years' decrease in number of stations in their networks. The biggest premium station networks on the German market also started to operate in the economy segment, what increased market competition. The main competitors of Star network, managed by ORLEN Deutschland, invested significant resources to modernize their stations, significantly improving their visualization and technical standard and expanding the non-fuel products. Today, more and more economy segment stations exceed the standard of premium stations.

On the **Lithuanian market** leading position was maintained by Lukoil, which was acquired in the first quarter of 2016 by Amic Energy Management from Austria. However, over the next few years these stations will operate under the current brand.

In Lithuania the company Couche-Tard began to introduce its own brand (Circle-K) in Statoil stations acquired in 2012. All networks operating on the Lithuanian market focused on development of gastronomy. In 2016 the level of retail prices on the Lithuanian market was strongly influenced by an increase in activity on the wholesale market of the Finnish concern Neste.

## Polish market

At the end of 2016 the ORLEN Group on the Polish market operated a network of 1 766 fuel stations. The implemented investment program was focused on the establishment of new fuel stations and highway facilities, upgrading of existing facilities and rebranding of the BLISKA stations to ORLEN.

Halfway through 2016 the ORLEN group began to implement the new shopping and gastronomic format named Stop Cafe 2.0. Provision of new functionalities dedicated for fleet customers and marketing campaigns run by the firm let the ORLEN Group to strengthen its position on the Polish market and increase the total volume of fuel sold by 5.6% (y/y).





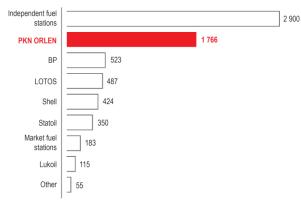
The market share decrease has a static nature. As the result of the introduction in 2016 of regulations, the so-called "grey zone" in the fuel market has been limited and, thus, the registered consumption as well as the one presented by the Energy Market Agency (ARE)

increased. In relation to the above, the values of market shares in the years 2015-2016 are incomparable.

According to the data published by POPiHN (Polish Organisation of Oil Industry and Trade) in 2016, more than 6.8 thousand fuel stations operated on the Polish market.

The main competitors of PKN ORLEN on the Polish market include such foreign concerns as: Shell, BP, Statoil, Lukoil, Total and two self-service station networks AS 24 and IDS, which owned 21.6% of the stations. At the end of 2016 the Lotos Group remained a 7.2% share in the total number of fuel stations in Poland. Noteworthy is the growing market share of independent stations.

DIAGRAM 22. Fuel station network in Poland as at 31.12.2016.



Source: Own preparation based on POPiHN data.

Continued expansion of the road system in Poland creates a possibility for development that assumes the so-called **Passenger Service Centers (MOP)** located next to highways and expressways. As of the end of 2016, there were 72 MOPs on the Polish market, out of which 28 (39%) belong to the ORLEN Group. Additionally, the ORLEN Group owns four facilities of this type, which are currently under construction.

# German market

The ORLEN Group has been present on the largest retail market in Europe – in Germany – since 2003. As of the end of 2016, the network owned by the ORLEN Deutschland GmbH included 572 fuel stations (4% of all fuel stations in Germany) and maintained a 6.0% share on the German retail market in 2016.

**DIAGRAM 23.** Share in the retail fuel market in Germany.



In 2016 the situation on the German fuel market has stabilized. The major competitors of ORLEN Deutschland GmbH are international fuel station networks such as: Aral, Shell, Esso, Total (45% of all stations) and economy segment networks of Jet and HEM (8% of all stations).

## The Czech Republic market

The ORLEN Group has retained its leading position in terms of number of fuel stations in the Czech Republic – as of the end of 2016, Benzina increased number of locations by 24 and managed 363 stations. Concluded investment projects i.e. incorporation of 20 fuel station acquired from OMV and persistent policy of retail price management contributed to a significant increase of the share on the Czech retail market to the level of 17.8%.

DIAGRAM 24. Share in the retail fuel market in Czech Republic.



Second place in the Czech market in terms of number of fuel stations belongs to Hungarian concern MOL (with 308 stations). In 2016 the MOL concern decided to implement the new gastronomy format named Fresh on 46 of their fuel stations in Europe. Within the next 5 years it is to be implemented on further 750 fuel stations managed by the Hungarian concern. Key members of the fuel market are also Shell, Euro Oil and OMV.

#### Lithuanian market

As of the end of 2016, the ORLEN Group in Lithuania owned 25 fuel stations (managed by the subsidiary AB Ventus-Nafta) and its market share accounted for of 3.5%.

DIAGRAM 25. Share in the retail fuel market in Lithuania.



Concern Neste remains as one of the main competitors of the ORLEN Group in the Lithuanian market, with 63 self-service stations. The remaining are networks operating under Lukoil brand, which possess 82 stations (network taken over by an Austrian company Amic Energy Management) and Statoil with 79 stations owned by Canadian company Alimentation Couche-Tard.

#### 3.2.2.3. Sales volume of retail segment

Sales volume of retail segment of the ORLEN Group in 2016 increased by 2.5% (y/y) and amounted to 8 187 thousand tonnes as a result of higher fuel sales on the Polish, Czech and Lithuanian markets with slightly lower volume on the German market.

TABLE 8. The ORLEN Group sales in retail segment (PLN million/thousand tonnes).

Sales	201	6	201	5	201	4	ahana	• 0/
Sales	value	volume	value	volume	value	volume	chang	e %
1	2	3	4	5	6	7	8=(2-4)/4	9=(3-5)/5
Light distillates1)	11 838	3 136	12 084	3 000	13 951	2 916	(2.0%)	4.5%
Medium distillates 2)	14 305	5 051	15 567	4 986	18 659	4 860	(8.1%)	1.3%
Other <sup>3)</sup>	3 698	0	3 401	0	3 303	0	8.7%	-
Total	29 841	8 187	31 052	7 986	35 913	7 776	(3.9%)	2.5%

Gasoline, LPG.
 Diesel oil; light heating oil sold by ORLEN Deutschland.

3) Other value – includes revenues from sales of non-fuel goods and services.

DIAGRAM 26. Structure of sales revenue of the ORLEN Group in retail segment.



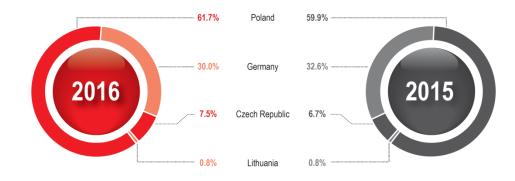
### 3.2.2.4. Markets

Domestic markets of the ORLEN Group in retail segment include PKN ORLEN operating in the Polish market, ORLEN Deutschland GmbH in the German market, Benzina network in the Czech market and AB Ventus Nafta in the Lithuanian market.

TABLE 9. Sales volume of the ORLEN Group in the retail segment on domestic markets (thousands of tonnes).

Sales	2016	2015	2014	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Poland	5 052.4	4 784.9	4 609.6	267.5	5.6%
Germany	2 453.6	2 602.0	2 620.7	(148.4)	(5.7%)
Czech Republic	617.4	537.8	487.6	79.6	14.8%
Lithuania	63.2	61.3	58.0	1.9	3.1%
Total	8 186.6	7 986.0	7 775.9	200.6	2.5%

DIAGRAM 27. Structure of sales volume of the ORLEN Group in the retail segment on domestic markets.



#### Polish market

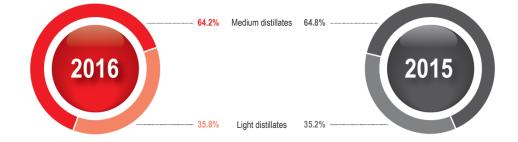
Fuel sales volume in 2016 increased by 5.6% (y/y) and amounted to 5 052 thousand tonnes. Completion of a series of developmental projects and the implemented efficiency initiatives contributed to the

increase in the annual average sales volume on CODO fuel stations by 3.2% (y/y) to the level of 4.25 million litres. The total sales of premium fuel (Verva) by 12% (y/y).

TABLE 10. Sales volume of the ORLEN Group in the retail segment on the Polish market (thousands of tonnes).

Sales	2016	2015	2014	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Light distillates	1 809.3	1 686.0	1 613.1	123.3	7.3%
Medium distillates	3 243.1	3 098.9	2 996.5	144.2	4.7%
Total	5 052.4	4 784.9	4 609.6	267.5	5.6%

DIAGRAM 28. Structure of sales volume of the ORLEN Group in the retail segment on the Polish market.



In 2016 another 17 objects were added to the ORLEN Group's retail network and as of the year end the network consisted of 1 766 fuel stations.

As part of the investment program there were 12 own CODO stations launched (including 1 Passenger Service Center "MOP"), 7 objects were modernized (projects "Break down and Build") and two own stations were closed. The result of these activities was an increase in the number of own stations up to 1 317 objects.

In the PKN ORLEN franchise network increased by 23 new fuel stations and included at the year-end 449 DOFO stations.

In 2016 the process of changing the brand from Bliska to ORLEN was completed in the own stations channel. In DOFO segment the project was continued and 43 new stations received an ORLEN brand. The number of premium stations operating under the ORLEN brand has increased from 1 541 in 2015 to 1 616 at the end of 2016. A total of 108 stations operated under the Bliska brand as at the end of 2016. Other stations are the stations in the so-called simplified format, the number of which was reduced from 49 to 42 in 2015.

In 2016, the ORLEN Group increased volume in fleet sales by over 10% (y/y), achieving a record level of 31.8% of the total volume of sales in the segment. In 2016, ORLEN started work on a new international fleet strategy allowing Polish customers to access filling points in most European countries. Sales to the small and medium enterprises segment increased by 16.9% (y/y).

In the first half of 2016, tests of convenience stores and of the new food corner ended. The project was initiated of implementing the new Stop Cafe 2.0 format in the ORLEN chain, combining a food

concept with a convenience store. Since three versions were developed of the formats, it will be possible to launch Stop Cafe 2.0 at stations of all kinds, including the biggest highway structures.

As at the end of 2016, 41 ORLEN stations had the new Stop Cafe 2.0. format in place, and its further implementation will constitute the main project in the non-fuel area in the coming years.

The year 2016 was another period of improvement of the results of car washes - 10% of the existing automatic car washes were upgraded, 9 more were put into operation, and the failure rate of the facilities as well as downtime were reduced. These activities contributed to an increase of revenue from the related services by 10% (y/y).

Measures aimed at continuous improvement of customer service standards at PKN ORLEN fuel stations and taking into consideration the changeable customer expectations when planning new solutions have contributed to a number of prizes and awards. At last year's Petrotrend Forum 3 ORLEN stations received prestigious awards in the Fuel Station of the Year 2016 competition, in categories: "Gastronomy at the Fuel Station", "Corporate Fuel Station of Fuel Concern in the Premium Segment" and Fuel Stations operating in a Passenger Service Centre." Among the franchise and partner stations an ORLEN station has been awarded in the category "Shop at a Fuel Station."

The FLEET program with a full range of additional services was awarded in the category "Fuel cards" in the Fleet Awards voting, in the category "Fuel cards" and Fleet Derby.

Once again in 2016, ORLEN stations were awarded honours of the Polish Programme of Service Quality (Polski Program Jakości Obsługi) - the prestigious title of "Customer Service Quality Star".

#### German market

In 2016 the ORLEN Group recorded a decrease in the total sales of fuels of (5.7)% (y/y) on the German market. This result includes both retail sales at fuel stations, as well as middle distillates sold in wholesale formula. Retail volume of ORLEN Deutschland increased by 2.6% (y/y), mainly due to higher diesel oil sales (y/y). Better

results of the retail segment did not offset the decrease in diesel oil and light heating oil sales realised in wholesale formula. In 2016, the average annual flow per station maintained at the level from the previous year and amounted to 4.5 million litres.

TABLE 11. Sales volume of the ORLEN Group in the retail segment on the German market (thousands of tonnes).

Sales	2016	2015	2014	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Light distillates	1 106.3	1 117.0	1 116.6	(10.7)	(1.0%)
Medium distillates	1 347.3	1 485.0	1 504.1	(137.7)	(9.3%)
Total	2 453.6	2 602.0	2 620.7	(148.4)	(5.7%)

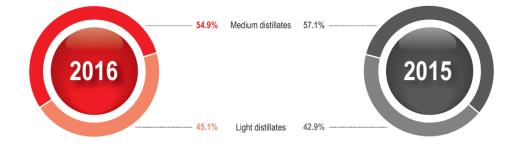


DIAGRAM 29. Structure of sales volume of the ORLEN Group in the retail segment on the German market.

In 2016, ORLEN Deutschland network included 10 new stations into its network, including 3 within individual acquisition projects and 7 stations from 13 stations from the Sun station package purchased in 2015. After shutdown of 3 objects, a network of stations managed by ORLEN Deutschland grew by 7 facilities to the level of 572 stations. At the end of 2016, there were 554 facilities operating in the economy segment under STAR brand, 1 station of the ORLEN brand located in Hamburg and 17 stations operating under supermarkets.

In 2016, Star stations once again recorded an improvement in nonfuel margins, i.a. as a result of adjusting the shops' offer, changing gastronomy offer and due to an increase in the availability of such services in the network. An important factor influencing non-fuel business area's results was the continuation of the replacement and

#### Czech market

2016 was a consecutive year of high dynamics of fuel sales in Benzina network at the level of 14.8% (y/y). The average annual sales recorded by Benzina stations increased by 6.7% (y/y) and reached a level of 2.1 million litres. An increase of Verva fuels

modernisation process of car washes. During 2016 forty car washes were replaced.

The Star brand has been recognized on the German market, as it received the "Berlins Liebling 2016" - a prize (created by "Berliner Morgenpost" publishing house) for the second position in the ranking of the largest Love Brands in the category of "Fuel Stations".

High-quality customer service standards have been recognized by an award granted by the leading economic magazine "Handelsblatt" and the research agency YouGov named "Preis-Leistungs-Sieger 2016" in the category of best value for money in the segment "Fuel Station".

In addition, industry magazine "Tankstelle" awarded the "Topp Station 2016" for the newly opened STAR station in Potsdam.

availability on more Benzina stations contributed to an increase of Verva sales share in the whole sales volume by 2 percentage points to 19.3% (y/y).

TABLE 12. Sales volume of the ORLEN Group in the retail segment on the Czech market (thousands of tonnes).

Sales	2016	2015	2014	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Light distillates	205.0	178.6	166.6	26.4	14.8%
Medium distillates	412.4	359.2	321.0	53.2	14.8%
Total	617.4	537.8	487.6	79.6	14.8%

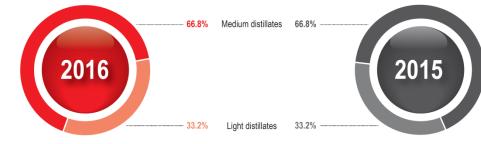


DIAGRAM 30. Structure of sales volume of the ORLEN Group in the retail segment on the Czech market.

As at the end of 2016, the ORLEN Group was running a chain of 363 stations in the Czech Republic, operating under two main brands: Benzina Plus (114 stations), Benzina (231 stations) and Benzina Expres (5 self-service stations) and 13 stations operating mainly under the so-called simplified brand.

In 2016, the process of taking over 68 stations purchased in 2015 from OMV located in the territory of the Czech Republic started. As at the end of 2016, 20 stations had been included in the Benzina chain, and the process of taking over of the remaining facilities should end in 2017. In 2016, 4 new own stations were additionally put into operation (including 1 highway station and 1 self-service station) and one franchise agreement was signed.

In 2016, the decision was made on brand unification on the Czech market. Ultimately, the ORLEN Group is going to run stations in the Czech Republic under the refreshed brand Benzina. The chain of self-service stations (Benzina Expres) is going to be an exception.

Ultimately, the Benzina stations are to become a premium chain. Food corners are also going to appear, and the fuel range will be extended to include Verva fuels.

The flexible pricing policy and the implementation of prepaid fleet cards, representing a unique solution on the Czech market, allowed the fleet sales segment to record an increase by volume by 9.7% (y/y).

In 2016, Benzina recorded an increase in revenues from the sale of non-fuel products and services by over 35% (y/y). An increase by nearly 28% (y/y) was recorded in the case of catering services. 168 Stop Cafe and Stop Cafe Bistro outlets were operating at the end of 2016, it is an increase by 37 locations (y/y).

In 2016, Benzina once again obtained the Superbrand award, given to the best brands on the market on the basis of a nationwide poll by GFK.

#### Lithuanian market

In 2016, the ORLEN Group recorded an increase of sales volume of 3.1% (y/y) on the Lithuanian market. Noticeable medium distillates sales increase is partly offset by a decrease in light distillates sales

(y/y). The average annual flow per station increased by 11.0% (y/y) to a level of 3.2 million litres.

TABLE 13. Sales volume of the ORLEN Group in the retail segment on the Lithuanian market (thousands of tonnes).

Sales	2016	2015	2014	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Light distillates	15.5	18.0	19.5	(2.5)	(13.9%)
Medium distillates	47.7	43.3	38.5	4.4	10.2%
Total	63.2	61.3	58.0	1.9	3.1%

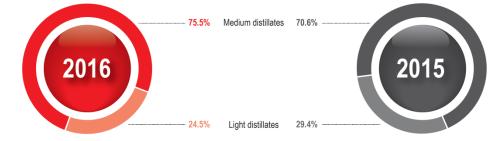


DIAGRAM 31. Structure of sales volume of the ORLEN Group in the retail segment on the Lithuanian market.

As at 31 December 2016 the retail network in Lithuania comprised of 25 own stations in COCO model in premium segment, under ORLEN brand. In 2016 the last VENTUS-branded fuel station, operating in economy segment, was excluded from the network. In 2016 the increase of Verva fuel share in total sales volume by 0.8 p.p. to 19.5% was recorded.

An increase in fleet sales of 15.8% (y/y) had a big impact on sales volumes. In 2016 an improvement in margins in the non-fuel business area was once again recorded. The VENTUS company received the an honour of "Strongest in Lithuania 2016" awarded by the "Creditinfo" Credit Bureau.

#### 3.2.2.5. Sources of supply

The majority of fuels sold on the Polish, Czech and Lithuanian markets comes from production within the Downstream segment of the ORLEN Group. An exception is the German market, on which the ORLEN Group did not have its own refining assets. The largest suppliers of this German company include the following sellers operating on the German market, i.a. BP Europe SE, Shell

Deutschland Oil GmbH, Holborn European Marketing Company Limited, Total Deutschland GmbH, Esso Deutschland GmbH, Raffinerie Heide GmbH. An important supplier of fuels to ORLEN Deutschland GmbH is also the Czech company Unipetrol RPS s.r.o., member of the ORLEN Group.

#### 3.2.3. Upstream segment

#### Sławomir Jędrzejczyk, Vice-President of the Management Board of PKN ORLEN, CFO:

"The ORLEN Group's strategy for 2017-2021 assumes further development of the exploration and production activities in order to extend access to own oil and natural gas resources. The production segment provides increasing value for the Group, both through its contribution to EBITDA and through the increase in 2P resources, which reached the level of 114 million boe at the end of 2016.

In response to the global market trends, investment expenditures in the production segment underwent dynamic optimisation in 2016. The project portfolio in Poland was transformed, with focus on conventional projects at advanced stages of development. In Canada, activity was focused on the strategic areas: Kakwa and Ferrier."

# 2016

		units	Canada	Poland
a l	Natural gas and oil reserves (2P)	million boe	102.5	11.3
F7A J	Output	million boe / year	4.5	0.5
	Average production	thousand boe / day	12.2	1.4
OUTPUT	Output structure (liquid / gas)	%	43 / 57	90 / 10
AND	Net drillings	number	13.1	5.0
PRODUCTION	Licences	number	-	30

#### 3.2.3.1. Market trends in the Upstream segment

According to the World Energy Outlook 2016 by the International Energy Agency (IEA), the energy intensity of the Polish economy in 2015 decreased by (1.8)% as a result of the further improvement of energy efficiency and of the increased use of cleaner energy sources, including mainly renewable sources, which are going to record the fastest increase until 2040.

The increase in global demand for primary energy by about 30% by 2040 in the International Energy Agency's (IEA) main scenario (New Policies Scenario) means that the use of all fuels will grow.

Among fossil fuels, natural gas will have recorded the biggest increase in consumption by 2040, by nearly 50%, while the consumption of crude oil will increase by around 12% by 2040.

As the downward trend with regard to energy demand in OECD countries continues to be seen, energy consumption is going to move towards regions where earnings are growing, where access to energy sources is more extensive, and where urban development is booming: India, Southeast Asia, China, as well as parts of Africa, Latin America, and the Middle East. According to the IEA's main scenario, energy demand in OECD countries in the years 2014–2040 is going to decrease by (0.1)% on average each year, while

economies of non-OECD countries will generate an increase in energy consumption by 1.6% annually.

# TABLE 14. Global demand for primary energy by fuel type and scenario [million toe<sup>1</sup>].

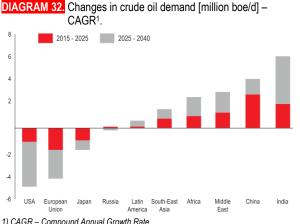
			New Po	licies
Source	2000	2013	Scena	ario
			2020	2040
Coal	2 316	3 926	4 033	4 414
Oil	3 669	4 266	4 461	4 735
Gas	2 071	2 893	3 178	4 239
Nuclear	676	662	831	1 201
Hydro	225	335	383	531
Bioenergy	1 026	1 421	1 541	1 878
Other renewables	59	181	316	936
Total	10 042	13 684	14 743	17 934

1) toe - ton of oil equivalent

Source: IEA.

The biggest increase in total **demand for crude oil** in the IEA's main scenario by 2040 will have been recorded by India, which will translate into an average annual growth rate (CAGR) of 3.8%.

China, on the other hand, with the second largest rate of growth of total crude oil consumption, will beat the USA already at the start of the 2030-2040 decade, becoming the largest consumer of crude oil in the world. Daily crude oil consumption in China in 2040 will reach 15.1 million boe/d, while the USA will use 13.1 million boe/d and India: 9.9 million boe/d.



1) CAGR - Compound Annual Growth Rate

In the period 2015-2016, due to the decreasing prices of crude oil and natural gas, as well as to the limited access to financing, the vast majority of exploration and production companies worldwide decided to limit the scope of the work carried out and to focus activity only on projects at an advanced stage of development of deposits, as well as on the most prospective exploration projects.

In the crude oil supply area, a return to active market management by OPEC is predicted, the first symptom of which was the formal meeting of OPEC countries in November 2016. Decision was made to reduce crude oil production in the first half of 2017 and that producers from outside the OPEC would join the agreement, including Russia. In total, 24 leading international crude oil producers undertook to reduce oil supply by 1.8 million boe/d, which was necessary according to OPEC estimates to balance out the oil market which was struggling with oversupply.

The improvement of the financial standing of companies from the sector was also accompanied by more intense activity on the M&A market. The intensified activity with regard to mergers and acquisitions was particularly noticeable in the USA, where consolidation of license areas took place, above all.

#### 3.2.3.2. Position and competitive environment

The new strategy of the ORLEN Group assumes further development of exploration and extraction activities in order to expand access to own resources of crude oil and natural gas.

Development of competences in the area of extraction required completing an international team of experts, capable of creating and managing a diversified portfolio of assets and of employing the latest available methods of exploration and extraction technologies.

In Poland, ORLEN Upstream with its subsidiary FX Energy are working either independently or with a partner (PGNiG) in 30 license areas over a total of 19 thousand km<sup>2</sup>, located in 9 voivodships of According to the basic scenario of the International Energy Agency, natural gas consumption is going to grow until 2040 virtually in each of the leading consumer countries, apart from Japan and Russia. China will account for the biggest increase in demand for natural gas in the IEA's basic scenario until 2040, with CAGR at the level of 4.6%, but India is going to be the country with the highest growth rate, at an average annual level of 5.2%. The USA will continue to be the largest consumer of natural gas in the world, with natural gas consumption at the level of 840 billion m<sup>3</sup> in 2040. At the same time, natural gas consumption in China will amount to 605 billion m<sup>3</sup>, and in India it will have reached 189 billion m<sup>3</sup>. In the Middle East, which is the second largest area of natural gas consumption growth, the figure will be around 804 billion m<sup>3</sup>.

#### DIAGRAM 33. Changes in natural gas consumption – CAGR [bcm<sup>1</sup>].



Source: IFA

In the global gas market, the increasing share of LNG supply will be visible, with the market share supposed to double by 2040 according to the IEA's forecasts. The current oversupply of gas and the construction of more LNG terminals which is in progress, mainly in the USA and Australia, where the new processing capacities amount to nearly 130 billion m<sup>3</sup> annually, leads to uncertainty as to when demand and supply on the gas market will reach an equilibrium. According to the IEA's forecasts, the USA and Australia will account for 2/3 of the total gas production increase until 2020, but between the start of the 2020-2030 decade and 2040, significant increases in gas supply will be generated by a larger group of producers, with East Africa and Argentina becoming further important players in the market.

Poland and in the area of three petroleum basins. The share of the ORLEN Group is 100% in 16 licenses, 51% in one license, and 49% in 13 licenses. The Group had 2P reserves of 11.3 million boe at the end of 2016, with the average annual extraction of 1.2 thousand boe/d.

In Canada, the ORLEN Group operates in the province of Alberta and has production assets over a total area of 1.5 thousand km<sup>2</sup> (377 thousand acres) with an annual average production of hydrocarbons in 2016 reaching 12.2 thousand boe/d, and total 2P reserves of 102.5 million boe at the end of the year.

#### 3.2.3.3. Activities in Poland

In 2016, the ORLEN Group continued to modify its asset portfolio. This was related both to the acquisition of new areas for exploration and to the abandoning of other, less prospective parts of the licenses.

In a tendering process, the Poręba-Tarnawa prospecting and exploration license was obtained from the Ministry of Environment in the Małopolskie voivodship, and another prospecting and exploration license, Skołyszyn, on the border of the Małopolskie and Podkarpackie voivodships. As part of the Edge area, a new license was obtained for prospecting and exploration of hydrocarbons, Tuchola.

An assessment was also performed of the appropriateness of continuing prospecting work in the license areas located in the Mazowieckie and Lubelskie voivodships (the Lublin Shale and Karbon project), the Łódzkie voivodship (the Mid Poland Unconventionals project), and the Małopolskie voivodship (the Karpaty project), and a decision was made to concentrate further prospecting work only in selected areas within the said projects.

Currently, hydrocarbon production in the Polish market takes place in collaboration with PGNiG S.A. and reaches the level of 56 thousand tonnes, proportionally to the ORLEN Group's share of 49%. Apart from the production activity carried out, the potential of the assets acquired also includes prospecting licenses.

As part of the work carried out in the Podlasie-Lublin Basin, acquisition of 3D seismic data was completed in 2016 in the Wierzbica license area. The data were subsequently analysed further as part of a scientific research project within the Blue Gas

SCHEME 7. Exploration projects of the ORLEN Group in Poland.



Source: Own preparation.

program. Work related to decommissioning of wells and well pads in the Wierzbica and Wodynie-Łuków license areas was also carried out.

In 2016, analysis of 2D seismic data ended in the Wodynie-Łuków license area. 3D seismic data were also acquired in the Lublin and Garwolin license areas and in block 255.

In the Perm Basin, analysis of 2D seismic data was performed in the Sieradz block. Documentation and preparatory work was also carried out to the development of a part of the Sieraków area.

In 2016 on Płotki area an exploratory borehole was performed in Pyzdry license and a drilling of exploratory borehole was started in Kórnik-Środa Wlkp license area. At the same time, planning-design activities for development of two reserves within the same license were carried out and planning activities for construction of Pyzdry gas station.

In 2016, development of the Karmin deposit ended in the Jarocin-Grabina license, and production started. In 2016, two exploratory boreholes were drilled in the Edge area, in the Unisław-Gronowo and Brda-Rzeczenica license areas.

As part of the work carried out in the Carpathian Basin in the area of Bieszczady, acquisition of 2D and 3D seismic data was carried out.

In 2016, a production test was performed for the well in block 437, and drilling of two exploratory boreholes started at blocks 437 and 457.

As part of the Karpaty project, an exploratory borehole was drilled at block 435. As part of the Miocen project, acquisition of 3D seismic data was performed in the Siennów-Rokietnica license area and their analysis started.

#### Exploration assets

- with cooperation: Warshaw South (51% PKN ORLEN share), Bieszczady (49% PKN ORLEN share) ORLEN Upstream 100% : Karbon, Lublin Shale.
- Mid-Poland Unconventionals, Karpaty, Miocen, Edge, Poręba-Tarnawa, Skołyszyn

#### Exploration and production assets

- with cooperation: Sieraków (49% of shares), Płotki Comercial production (49% PKN ORLEN share)
- ORLEN Upstream 100% of shares: Edge

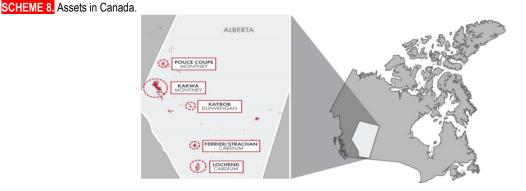
## **ORLEN GROUP**

#### 3.2.3.4. Activities in Canada

The production activity is carried out in the Alberta province through a subsidiary, ORLEN Upstream Canada, using horizontal drilling and hydraulic fracturing. In 2016, production and sales amounted to 502 thousand tonnes of hydrocarbons.

Operating activities on the stable Canadian market fit within the risk profile defined in the strategy. The favourable parameters of the assets held in terms of the deposits, as well as the development of business in the region, which has already been well explored, reduce the operational risk related to the investment. The Canadian market is characterized by excellent access to developed drilling and maintenance services, as well as by access to qualified staff with experience with regard to the extraction of unconventional deposits. The stable tax system and the friendly regulatory environment are also important.

In 2016, a gas treatment plant owned by ORLEN Upstream Canada was put into operation in the Ferrier/Strachan area. It has a production capacity of 1.1 million m<sup>3</sup> of reservoir fluid per day, allowing a total processing capacity of 6.5 thousand boe/d. The ORLEN Group also has some small production assets in the province of New Brunswick as well as a share of 10.7% in Goldboro LNG, a project involving the construction of an LNG export terminal on the east coast of Canada.



#### 3.2.3.5. Sales volume of Upstream segment

TABLE 15. The ORLEN Group volume sales in the Upstream segment (thousand tonnes).

Salaa	201	16	20 <sup>.</sup>	15	201	4	ahana	• 9/
Sales	value	volume	value	volume	value	volume	chang	e 70
1	2	3	2	3	4	5	8=(2-4)/4	9=(3-5)/5
Crude oil	84	76	104	96	188	100	(19%)	(21%)
Natural gas	172	359	68	179	84	133	153%	101%
Others	186	123	43	35	26	25	333%	251%
Total	442	558	215	310	298	258	106%	80%

Until the end of 2015 the extraction and sales of hydrocarbons was realised through the agency of ORLEN Upstream Canada Ltd. Thanks to the acquisition of 100% of FX Energy shares (conducted in December 2015), in 2016 the production and sales of hydrocarbons were also carried out on the Polish market.

In 2016 the aggregate sales on both markets amounted to a level of 558 thousand tonnes of crude oil, natural gas and NGL (Natural Gas Liquids) and increased by 80% (y/y).

DIAGRAM 34. Sales volume structure in the Upstream segment of the ORLEN Group.



## 3.3. RISK MANAGEMENT

#### 3.3.1. The functioning of the Corporate and Market Risk Management System

The ORLEN Group within its operations monitors and assesses risk and undertakes activities in order to minimise its impact on the financial situation on the ongoing basis.

In 2016 the PKN ORLEN and ORLEN Group companies' **Corporate Risk Management Policy and Procedure** which comprehensively regulates the process of Corporate Risk Management system was updated. PKN ORLEN has an Audit and Corporate Risk Management Department, which coordinates the corporate risk

SCHEME 9. Key roles in Corporate Risk Management System.

management process at all levels of the organisation and makes an independent and objective evaluation of risk management and internal control as well as business process analysis. The Department conducts audit tasks based on the annual audit plans approved by the Management Board and accepted by the Audit Committee of the Supervisory Board and the Supervisory Board. The Department may also perform ad hoc audits commissioned by the Supervisory Board and the Management Board.

Management Board PKN ORLEN

- Monitoring of the Corporate Risk Management System
- Risk assessment acceptance for company/the ORLEN Group

## Audit Committee of the Supervisory Board PKN ORLEN

✓ Monitoring of the Corporate Risk Management System

## Audit, Control and Corporate Risk Management Office

✓ Supervision of the process of corporate risk management, provision of tools and methodological support for the process participants

Risk owners	Process owners	Controls owners
✓ Main risk elements management	<ul> <li>Risk assessment on the process level</li> <li>Coordination of the process of control mechanisms self- assessment</li> </ul>	<ul> <li>Supervision over realization of control activities in processes in which they take part</li> <li>Running self-assessment of control mechanisms</li> </ul>
	The ORLEN Group employees	

- ✓ Risk identification
- ✓ Conveying information about potential risks to the Audit, Control and Corporate Risk Management Office

The methodology adopted by the Audit, Control and Corporate Risk Management Office allows to identify risk on a basis of one common model and link them with business processes and strategic objectives.

Enterprise Risk Management (ERM) System is one of the tools facilitating the effectiveness of realization of strategic and operational goals. It ensures comprehensive identification of risk and control mechanisms and its assessment on a project, process and whole organisation levels. PKN ORLEN is the first Polish corporation (except of the financial industry), which implemented a complex Corporate Risk Management System and the applied solutions are in line with the best practices in this area.

Assessment of risk in a breakdown by the business areas is carried out at least once every year, as part of the process of selfevaluation, and its purpose is to provide an update of risks which are most significant for the organisation. The process, risk and control owners are responsible for its performance. The most significant element of the Corporate Risk Management methodology applied involves the comparison of two risk assessments: **gross risk** assessment and **net risk** assessment. Gross assessment looks at the value of risk in the absence of control mechanisms and preventive measures, while net assessment is the value of risk estimated taking into account the efficacy of the control mechanisms and preventive measures for the specific risk that are in place. This approach makes it possible to manage identified threats better, as well as to confirm whether the strategies adopted to minimize them are accurate.

As a result of periodic assessment, plans of corrective actions are defined for the individual risks and controls, which main aim is to achieve an acceptable risk level. Each risk assessment and control mechanism testing process is completed with a report on the most significant risks and planned method of their limitation, which is submitted to the Management Board Members and the Supervisory Board Audit Committee.

In 2016, the process of risk self-assessment and control mechanism testing was carried out in PLN ORLEN S.A. with the presence of the managerial staff, which allowed for updating the assessment of 527 risks by testing 1251 control mechanisms in 83 business processes.

In the recent years an implementation of ERM system in key companies of the ORLEN Group is realised. In 2016 the companies already using the ERM system (Anwil S.A., ORLEN Deutschland) were joined by ORLEN Lietuva and Unipetrol a.s.

As part of the implemented **Corporate Risk Model**, all the identified risks are classified on the basis of the following categories:

- STRATEGIC RISKS risks directly connected with the strategic goals, referring to specific actions and to the degree of their performance (a.k.a. KPIs). For the purposes of detailed identification of strategic risks, partial strategies are created for the individual fields attributed to the appropriate owners, who perform quarterly risk assessments.
- II. PROJECT RISKS understood as uncertain events or circumstances which may have a negative impact on at least one project goal, if they occur. They are assessed on a systematic basis as implementation of the projects progresses, and in any case at least once a year as part of the self-assessment process.
- III. PROCESS/OPERATIONAL RISKS risks identified within the existing business processes, related directly to their key goals, making it possible to manage processes efficiently. These risks are assessed annually as part of the self-assessment process by the business areas, the main intention of which is to confirm the effectiveness of the control mechanisms used to keep the risk at the defined level.

TABLE 16. Risks and processes classification along with control mechanisms within the ERM functioning.

RISKS / PROCESSES	RISK DESCRIPTION	RISK MITIGATION METHOD
STRATEGIC		
Assumptions	<ul> <li>Inconsistent and unrealistic strategic goals and assumptions</li> <li>change of strategic goals/assumptions during the process</li> </ul>	Systematic review of the key strategic goals to check if they are up to date and their ongoing monitoring against the changing environment (regulations, market, key suppliers, etc.)
Division of competences	<ul> <li>inappropriate division of competences between the organisational units</li> <li>no decision-making centre</li> </ul>	High degree of employee specialization, appropriate assignment of duties and responsibilities by developing precise scopes of tasks.
Internal consistency	lack of internal consistency between strategic goals within the organisation	Preparation of partial strategies for individual areas for the purpose of specific identification of strategic risks. Review and approval of the strategy by the Management Board.
New regulations	<ul> <li>entry into force of unfavourable legal regulations</li> <li>no effective action of the public administration in relation to enforcement of the law</li> </ul>	Participation in public consultations for legislative drafts reducing the risk of implementation of unfavourable regulations.
Accidents at work and other threats	<ul> <li>incomplete knowledge about work safety among contractors</li> <li>threats to work safety and fire safety related to the presence of third-party employees on the ORLEN Group's premises</li> </ul>	Supervision and management of contractors' work by implementation of tools to monitor work safety. Implementation of uniform requirements for contractors and subcontractors in line with the guidelines set forth in the "ORLEN Group Safety Standard no. 9".
PROJECT		
Budget overrun	inappropriate estimate of the project implementation costs	Systematic monitoring of the contractor's activities. Defining KPIs with regard to deadlines, with delays entailing additional costs (penalties) for the Supplier
Schedule overrun	inappropriate assumptions concerning the project completion time	Constant supervision of inspectors over the performance of the work in progress, systematic evaluation of the progress of implementation of successive stages of the projects and enforcement of performance of the work.
Project scope modification	<ul> <li>incomplete performance of the project</li> <li>exceeding the project framework</li> </ul>	Systematic analysis of the environment in which the project is being implemented. Depending on the circumstances arising, potential decision to change the scope of its implementation.
Division of competences	inappropriate division of competences between the organisational units	Preparation and implementation of methodology concerning competency division of project team members in order to

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	no decision-making centre	avoid conflict of interests. Utilisation of dedicated IT tool supporting project implementation.
Systems	absence of IT systems supporting project implementation	Definition of alternative IT systems at the project planning stage or commencement of testing of other systems allowing project implementation.
Engineering/ technology	limited market of technology providers	Working with the licensor as partner if it is impossible to obtain technologies by way of a standard purchase.
Weather conditions	bad weather conditions (unexpected or highly intense)	Planning the implementation of a part of the scope of the project works on the basis of historical analyses of weather trends, thus minimising the risk of impact of weather conditions on planned activities.
PROCESS / OPERATIONAL		
Procurement		
	<ul> <li>supplying crude oil (by land and by sea) in a quantity and of a quality not corresponding to the requirements</li> <li>planning supplies in such a way as to meet the quality requirements related to the crude oil.</li> </ul>	Monitoring of the process of supplies carried out by land and by sea. Using dedicated analytical and statistical tools, analysing industry and news portals. Monitoring of the market of selected crude oil types with regard to their availability and purchase possibility. Confirmation of purchase profitability each time for transactions not covered by contracts.
	purchase of investment services and biocomponents	Supplier selection process performed in line with the procedures in force and in accordance with the required documents (including market analysis, time schedule, supplier assessment).
	guarantee of production continuity	Making sure that internal procedures are in place making it possible to react effectively in the case of an emergency by way of purchasing services and raw materials for production directly.
Production		
	<ul> <li>inappropriate planning and management of repairs in the production area</li> </ul>	Functional IT system supporting the repair planning process and maintenance at the production plant. Changes to the plans being developed and the process of acceptance of the individual elements of the plans are documented in the system.
	<ul> <li>operational inefficiency in the context of production supply chain balancing</li> </ul>	The area responsible for the production balancing process has tools in place making it possible to perform the balancing process in an optimum manner. The procedures and processes in place define responsibility, scope and deadlines for the provision of input data for the production balancing process.
	failure to achieve the assumed economic benefits resulting from the implementation of the initiatives	Ongoing monitoring and verification of initiatives on the basis of expert knowledge, ensuring the realisation of projects with highest efficiency potential.
Distribution and logistics		
	<ul> <li>environmental pollution as a result of the distribution processes carried out</li> </ul>	Periodic checking of contamination levels in Oil Terminals.
	<ul> <li>failure to comply with the requirements to physically maintain an appropriate level of mandatory stocks.</li> </ul>	Systematic monitoring of stock levels with reports verifying the levels of the required minimum quantities.
	<ul> <li>failure of the logistics infrastructure affecting supply continuity as well as supply of products, or loss thereof</li> </ul>	Periodic inspections of the condition of the logistic infrastructure, including updating of reports.
Retail	inefficient process of contract conclusion and price negotiations     follows to each othered standards and unfoir conduct on the part of	Pricing policy setting forth the rules of collaboration with contracting parties and systemic mechanisms to prevent irregularities. Acceptance of prices/discounts/payment terms in contracts before their signing. Checking the correctness of parameters of the contracts before entering them into the system and verifying customers' purchasing potential. Checking compliance with the ethical standards in place, as well as observance of the Ethical Code of Conduct checking
	<ul> <li>failure to apply ethical standards and unfair conduct on the part of employees, fraud on company property and other violations</li> </ul>	well as observance of the Ethical Code of Conduct; checking for any signs pointing to violations of ethical standards or fraud.

## **ORLEN GROUP**

	<ul> <li>failure of the pricing policy to maximize benefits and to develop market potential</li> </ul>	Dedicated tools used to manage prices and to ensure the pursuit of an efficient and competitive pricing policy. Checking and monitoring whether changes in retail prices are entered correctly in the systems.
Wholesale		
	<ul> <li>readiness to react quickly with regard to adjustment of sales plans in the case of changes in the value and production chains</li> </ul>	Implementation of sales plans on the basis of volumes agreed with the customers as per the contract/order. Systematic checking of sales and production plan implementation with the participation of the wholesale area and of the supply chain management office.
	<ul> <li>inefficient process of negotiating terms and of concluding commercial contracts</li> </ul>	Negotiation of trading conditions and signing agreements in accordance with the scope of authority granted. Provisions related to trading conditions are reviewed and consulted with other organisational units. Formal process in place for the conclusion of contracts and for the issuing of opinions about them.
	<ul> <li>failure of the pricing policy to maximize benefits and to develop market potential</li> </ul>	Price formulas approved by the area responsible for pricing policy development. Additional review by the business responsible for product sale. In petrochemicals, a formal process is in place for the negotiation of minimum.
Finance <sup>1</sup>		
	<ul> <li>commodity risk – related to changes in refinery and petrochemical margins generated from the sales of products, to the Brent/Ural differential, to prices of crude oil and products as well as of CO<sub>2</sub> emission allowances, and to the risk related to prices of commodities in cash-and-carry arbitrage transactions</li> </ul>	Cash flow planning. Market risk management policy and hedging strategies defining the rules for measuring individual exposure,
	<ul> <li>exchange rate risk – related to the currency exposure of cash inflows and outflows, investments, receivables and payables, and assets and liabilities denominated in foreign currencies</li> </ul>	parameters and time horizon for the hedging against the specific risk, as well as the use of hedging instruments.
	<ul> <li>interest rate risk – related to assets and liabilities held, for which the interest revenue and costs depend on variable interest rates</li> </ul>	
	<ul> <li>liquidity risk – related to an unexpected shortage of cash or lack of cash or access to sources of financing.</li> </ul>	Short- and long-term cash flow planning. Policy for short-term liquidity management, defining the rules of reporting and consolidating liquidity of PKN ORLEN and ORLEN Group companies. The Group pursues a policy of diversifying sources of financing and uses diversified tools for efficient liquidity management.
	<ul> <li>risk of loss of cash and deposits – risk of bankruptcy of domestic or foreign banks in which the ORLEN Group keeps or invests its cash.</li> </ul>	Short-term credit rating of the bank. Short-term liquidity management policy and policy of diversifying sources of financing as well as a tool for efficient liquidity management.
	<ul> <li>credit risk – related to the contracting parties' failure to pay trade receivables</li> </ul>	Analyses of contracting parties' reliability and solvency. Management based on the procedures and policy adopted with regard to trade credit management and debt recovery.
Applicable law and other regulations		
other regulations	<ul> <li>amendments to existing legislation or new regulations significantly influencing the ORLEN Group as well as its financial position and business results.</li> </ul>	Monitoring changes in legislation at the level of the individual jurisdictions as well as active participation in legislative processes.
	<ul> <li>The most important legislative acts regulating the functioning of the oil sector are the following:</li> <li>Act of 25 August 2006 on biocomponents and liquid biofuels (amended many times) – imposing the obligation on domestic refineries and fuel importers to meet what is referred to as the National Index Target, i.e. the obligation to ensure the minimum share of renewable fuels (biocomponents) in the total amount of liquid fuels.</li> </ul>	
	<ul> <li>Act of 7 July 2016 amending the act on the goods and services tax and certain other acts (fuel package) and Act of 22 July 2016 amending the Energy Law and certain other acts (energy package), introducing a series of fundamental changes regulating the market of liquid fuels in Poland, including new rules concerning VAT settlements related to the imports of liquid fuels into Poland, as well as closely linking the tax requirements to the licensing-related requirements in Poland.</li> <li>Act of 30 November 2016 amending the Energy Law and</li> </ul>	

	<ul> <li>certain other acts, introducing a schedule of deregulation of natural gas prices in Poland, assuming that the prices will be deregulated for industrial consumers starting from 1 October 2017 and for households starting from 1 January 2024.</li> <li>Act amending the Energy Law and certain other acts, restoring by 2018 the system of certificate-based support for the generation of electricity in high-efficiency cogeneration. In the coming years, the ORLEN Group is exposed to risks related to the number of certificates granted, to changes in the prices of the certificates, as well as to the risk of increase of costs of the substitute fees.</li> <li>Act amending the Energy Law and certain other acts, restoring by 2018 the system of certificate-based support for the generation of electricity in high-efficiency cogeneration. In the coming years, the ORLEN Group is exposed to risks related to the number of certificates granted, to changes in the prices of the certificates, as well as to the risk of increase of costs of the substitute fees.</li> <li>Act amending the Energy Law and certain other acts, restoring by 2018 the system of certificate-based support for the generation of electricity in high-efficiency cogeneration. In the coming years, the ORLEN Group is exposed to risks related to the number of certificates granted, to changes in the prices of the certificates, as well as to the risk of increase of costs of the substitute fees.</li> <li>Mandatory stocks – under the new regulations, producers and traders are obliged to pay what is referred to as a substitute fee in exchange for the gradual decrease of the obligation to physically maintain stocks. Change in the level of mandatory operational stocks: from 68 to 60 days in 2016, and to 53 days in 2017.</li> </ul>	
Corporate management		
	insufficient IT system security	A procedure in place in relation to the management of logical access to IT systems, which includes for instance authorization of requests to grant or modify rights to IT systems, restricted access to the OS layer and databases as well as to the system hardware, and complex level of password security.
	<ul> <li>inappropriately configured operational planning and supply chain optimization model favouring non-optimal business decisions</li> </ul>	Periodic analysis and update of model used for operational planning and daily monitoring of operating plan implementation by the supply chain management area. Planning data used for the corporate plan and for the operating activities are defined and provided using standardized forms in accordance with the work schedule.

1) A detailed description of the financial risks along with an indication of the method of their measurement, management and hedging is presented in point 7.3.5. of the Consolidated Financial Statements for 2016.

#### 3.4. SIGNIFICANT CONTRACTS, TRANSACTIONS AND PROCEEDINGS

#### 3.4.1. Significant contracts

Specification of significant contracts published in current announcements. A "significant contract", within the meaning of the Minister of Finance Regulation, should be understood as a contract or sum of contracts, total value of which for the period of 12 months exceeds 10% of PKN ORLEN equity.

#### Significant contracts concluded in 2016

#### JANUARY

On 11 January 2016 PKN ORLEN concluded agreements with Shell Polska Sp. z o.o.. for sale of gasoline and diesel oil in the period from 1 January 2016 to 31 December 2016. The total estimated net value of the agreement amounts to PLN 2 100 million. The total estimated value of agreements signed between the ORLEN Group and companies from the Shell group in the period from 13 January 2015 to 11 January 2016 amounts to approximately PLN 4 200 million. The agreements between the ORLEN Group and companies from the Shell group were concluded for the purchase of crude oil as well as purchase and sales of products. Regulatory announcement no. 3/2016.

On 11 January 2016 PKN ORLEN concluded agreement with company from BP Europe SE for sale of gasoline and diesel oil in the period from 1 January 2016 to 31 December 2016. The total estimated net value of the agreement amounts to PLN 4 500 million. The total estimated value of agreements signed between the ORLEN Group and companies from the BP group in the period from 26 June 2015 to 11 January 2016 amounts to approximately PLN 5 800 million. Regulatory announcement no. 4/2016.

On 11 January 2016 PKN ORLEN concluded agreement with company from Lukoil group for sale of gasoline and diesel oil in the period from 1 January 2016 to 31 December 2016. The total estimated net value of the agreement amounts to PLN 1 300 million. The total estimated value of agreements signed between the ORLEN Group and companies from the Lukoil group in the period from 29 May 2015 to 11 January 2016 amounts to approximately PLN 1 900 million. Regulatory announcement no. 5/2016.

On 18 January 2016 within the ORLEN Group there was concluded agreement with company from Vitol group. The total estimated value of agreements signed between the ORLEN Group and companies from the Vitol group in the period from 3 October 2015 to 19 January 2016 amounts to approximately PLN 1 830 million. Regulatory announcement no. 10/2016.

#### APRIL

On 29 April 2016 within the ORLEN Group there was concluded agreement with company from the Total group. The total estimated value of agreements signed between the ORLEN and companies from the Total group in the period from 29 July 2015 to 29 April 2016 amounts to approximately PLN 1 890 million. Regulatory announcement no. 102/2016.

#### MAY

On 6 May 2016 it signed an agreement with Saudi Aramco, headquartered in Dhahran. According to the Agreement Saudi Aramco will supply the ORLEN Group refineries with crude oil in the amount of approximately 200 thousand tonnes per month. The agreement was signed for the period from 1 May 2016 to 31 December 2016 and it will be automatically extended yearly for the following contract year unless it is terminated in line with the provisions of the Agreement. Regulatory announcement no. 107/2016.

On 30 May 2016 the ORLEN Group concluded agreement with the Glencore group. The total estimated value of agreements signed between the ORLEN Group and companies from the Glencore group in the period from 11 November 2015 to 30 May 2016 amounts to approximately PLN 1 790 million. <u>Regulatory announcement no. 137/2016.</u>

#### JUNE

On 16 June 2016 it signed with Rosneft Oil Company, Moscow, Russia an annex to the agreement signed on 21 June 2013 for crude oil deliveries to Unipetrol RPA in Litvinov, in the quantity from approx. 2 900 thousand tonnes to approx. 5 000 thousand tonnes per annum. The deliveries will be realised starting from 1 July 2016 to 30 June 2019. In the Agreement there have been set liquidated damages. <u>Regulatory announcement no. 168/2016</u>.

#### JULY

On 19 July 2016 PKN ORLEN concluded with the consortium of companies (General Electric International Inc. acting via General Electric International S.A., office in Poland and SNC-LAVALIN POLSKA sp. z o.o.) an annex to the agreement for building power plant in Włocławek. The Annex defines further steps related to defects detected during commissioning. Start of commercial operation of the Power plant is expected for the first quarter 2017. Regulatory announcement no. 197/2016.

#### AUGUST

On 1 August 2016 it signed an agreement with ELEKTROBUDOWA SA for design, deliveries and building "in turn key" formula a metathesis installation at the production plant in Plock as part of running the decisions of the Management Board and the Supervisory Board of PKN ORLEN of 21 July 2016. The project to build a metathesis plant with a total value of approximately PLN 400 million. Building of the metathesis installation is one of the key development projects in petrochemical segment of PKN ORLEN S.A. and its aim is to increase propylene production at the Plock plant by 100 thousand tonnes per year resulting in the level of 550 thousand tonnes. Estimated net value of the Agreement amounts to ca. PLN 250 million. Completion of the building and start-up of the unit is planned in the second half of 2018. <u>Regulatory announcement no. 202/2016</u>.

#### SEPTEMBER

On 29 September 2016 PKN ORLEN Management Board concluded of an individual contract with PGNiG S.A. for natural gas deliveries. On the base of the Contract PGNiG will deliver natural gas to ORLEN Capital Group in Poland starting from 1 October 2016 to 30 September 2021 (5 gas years). By signing of the Contract PGNiG will become a strategic provider of the natural gas to ORLEN Capital Group in Poland in the coming years. The estimated value of the Contract in the five-year period could amount to over PLN 7 000 million (on the base of current market conditions). <u>Regulatory announcement no. 233/2016</u>.

#### DECEMBER

On 7 December 2016 PKN ORLEN signed with Tatneft Europe AG, Switzerland ("Tatneft") an annex to the agreement signed on 16 June 2016, which extends the contractual period and increases the possible maximum volume of the crude oil delivered by Tatneft to Unipetrol RPA in Litvinov. According to Annex Tatneft will deliver to Unipetrol RPA in Litvinov a crude oil in the quantity from 1 620 thousand tonnes to 3 960 thousand tonnes in the period between 1 January 2017 and 31 December 2019. Regulatory announcement no. 269/2016.

#### Significant contracts in 2017 until publication date of the following Management Board Report's.



#### Agreement with the entity authorized to conduct audit of financial statements

The entity authorized to conduct audit of financial statements of ORLEN Group for 2016 is KPMG Audyt Sp. z o.o.

For further details on the abovementioned agreement see  $\frac{\text{point } 7.4.8}{2016}$  of the Consolidated Financial Statements for the year 2016.

#### 3.4.2. Other transactions and proceedings

For information about significant proceedings see point 8. of the Consolidated Financial Statements for the year 2016.

## 3.5. EMPLOYMENT AND PERSONNEL PROGRAMMES

#### Mirosław Kochalski, Vice-President of the Management Board of PKN ORLEN, Corporate Affairs:

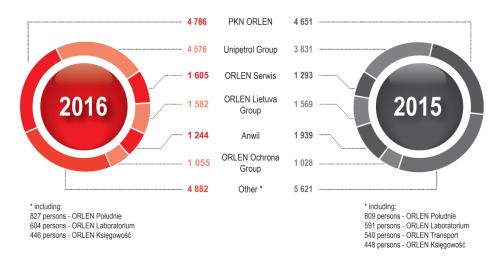
"People, this is one of the main pillars of the Company's strategy, which is why all activities related to the evolution of employment, relationships and good working environment is a priority for us. We run an extensive employee development program tailored to Strategy implementation and the needs of the individual employee, provide medical care, organise student internships and apprenticeship programs. We also try to ensure that our staff treated PKN ORLEN and other companies of the ORLEN Group as a family-friendly employer, which introduces solutions aiming to preserve the balance between working life and private life. Our employment policies and implemented personnel programs are highly evaluated by independent organisations. All aspects related to our employees and work are analysed, including the provision of primary and secondary working conditions, trainings, career development and management of organisational culture of the company. As a result, PKN ORLEN was awarded for the fifth time the prestigious certificate - Top Employers Poland 2016 "

At the end of 2016, employment in the ORLEN Group decreased by (202) persons to 19 730. The drop in employment is mainly due to contract of sale of the company ORLEN Transport and reorganization in ORLEN Oil and ORLEN Administracja with employment increase due to development in the areas: energy

sector of PKN ORLEN, maintenance services in ORLEN Serwis, ORLEN EKO, Centrum Serwisowe and in the Upstream segment in the ORLEN Upstream Group.

In 2016, average annual employment in the ORLEN Group amounted to 19 749 employees and dropped by (244) persons (y/y).

DIAGRAM 35. Employment at the end of 2016 and 2015 in the ORLEN Group Companies.



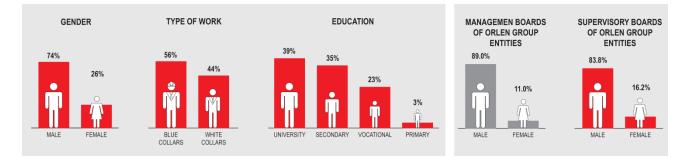


DIAGRAM 36. Employment structure in the ORLEN Group in professional groups in 2016.

The rules of remuneration are determined by the Corporate Collective Labour Agreement. The basic element of employees' remuneration is the basic salary – specified on the basis of the Remuneration Scale and the Table of Basic Salaries as well as the bonuses. Dependent on the occupied position, the employees are subject to monthly, quarterly, quarterly and annual or annual system of bonuses. Furthermore, the employees are entitled to an additional annual bonus based on the realisation of the solidarity aim as well as to numerous remuneration allowances due for, among others: shift work, chemical rescue or expatriate allowance. For particular achievements, the employer may award a prize from the Employer's Prize Fund. Since January 2016, the provisions of the Corporate

#### Realised personnel programmes

#### Personnel policy ("HR")

In 2016, work continued related to the building of employee engagement in the ORLEN Group. An employee opinion survey and an assessment of their needs as well as joint development and implementation of initiatives contributing to the improvement of satisfaction and engagement were carried out in 16 companies across the ORLEN Group. The most important initiatives included for instance new communication channels for employees (intranet, newsletters, bulletin boards, in-house magazines, HR inspirations), communicating employees' achievements, employee volunteering (Fabryka Dobrej Energii) and promoting a culture of safety. Furthermore, in 2016, solutions with regard to remuneration were determined and implemented in two Companies, while work regulations in accordance with the ORLEN Group binding standards were implemented in three Companies.

#### **Recruitment policy**

In 2016 the recruitment policy of the ORLEN Group was continued and focused on acquiring high-class specialists whose knowledge and competences together with an experience and professionalism of the current employees will ensure continuity and the highest level of business processes realised by the ORLEN Group. PKN ORLEN took part in the Job Fairs on technical universities and assisted students and graduates in gaining their first professional experience through providing internships and traineeships. Companies from the ORLEN Group worked with technical secondary schools and **DIAGRAM 37.** Employment structure of men and women in Management and Supervisory Boards in 2016

Collective Labour Agreement concerning the rules of bonuses have been changed

In 2016, the average gross monthly remuneration in the ORLEN Group was equal to PLN 6 960.

In 2016, the wage agreement was signed in PKN ORLEN with trade unions, which provides that each employee is entitled to an obligatory raise of basic salary in the amount of PLN 200 as well as to an appreciation bonus in the amount of PLN 100 and two non-recurring bonuses in the amount of PLN 1500.

In 2016, no collective redundancies were performed.

In 2016, collective labour disputes took place within Anwil S.A. and ORLEN Laboratorium S.A. which were ended through signing the agreement with trade unions.

universities on the adaptation of curricula to HR needs and on the development of the competences needed in the specific industry already at the stage of school education.

The so-called Adaptation Programme was continued, thanks to which newly hired employees become familiar with the ORLEN Group's activities, organisational culture, values and principles of conduct.

## **Development and training**

Development and training activities at PKN ORLEN concentrated both on the strengthening of the employees' competences with a view to securing the achievement of business objectives of the individual areas, and on the forming of the desired attitudes and organisational culture supporting strategy implementation and employee engagement.

To stimulate the development of leadership skills, the Group launched the Leader Zone program, i.e. a multi-module program for the development of leadership skills in the form of workshops shaping managerial abilities in the area of team management, team potential, commitment and innovativeness building, and managerial authority.

As part of the activities supporting strategy in 2016, the program called ORLEN Talent Academy was continued, dedicated to managers from the ORLEN Group, as well as the mentoring

program called Ex-Change, based on sharing knowledge within the organisation.

In 2016, publicly available thematic lectures were also held for employees, carried out as part of the Wektor program, extended by new forms of inspiration consisting of meetings with figures of authority and comprising for instance such aspects as stimulation of creativity and innovation, personal performance and self-motivation, diversity management, and stress management. In 2016, development-related activities were also continued with regard to personal performance and development, dedicated to women returning after maternity leave and combining the role of a mother with work.

PKN ORLEN also dedicated its teams to the Global Management Challenge, a motivational development program for outstanding employees, whose main goal is to develop broadly understood business orientation, and which is based on team rivalry.

In 2016, PKN ORLEN employees also had the possibility of attending specialized training, post-graduate studies, MBA studies, conferences and seminars organized in Poland and abroad. They continued to learn foreign languages as part of the following projects: the language academy: Akademia Językowa PKN ORLEN and English courses during the holidays. Training and development activities were carried out not only on a classroom basis, but also as e-learning courses. In 2016, over 4.5 thousand employees were trained at PKN ORLEN, and the average number of training hours per employee was 40.

#### Students and internship programmes

PKN ORLEN takes care of the professional development of not only its employees but also pupils, students, graduates of higher education institutions and secondary schools, giving them the opportunity to obtain first professional experience thanks to participation in traineeship and internship programmes. In 2016, PKN ORLEN organized for instance the trainee program Kurs na ORLEN, Energia, internship as part of the project Leopolis for future, as well as group and diploma traineeships in collaboration with secondary schools and higher educational institutions. In total around 200 students took part in internships and traineeships in PKN ORLEN.

#### HR Function Development

HR staff supported the consolidation, restructuring and divestment processes carried out in 2016 within the ORLEN Group. As part of the work, HR-payroll solutions and IT systems were adapted to support business processes in an appropriate and efficient manner. The SAP HR system and Self-Service are in place in 20 companies from the ORLEN Group, while 18 companies to which process services are provided have the CallCenter and HelpDesk Kadrowy service models in place. Competence Centres and HR Business

## 3.6. CORPORATE SOCIAL RESPONSIBILITY

The CSR Strategy in the ORLEN Group assumed that corporate value growth should converge with the interest of the environment and should be based on a sustainable and responsible use of the resources. In developing the document was carried out among of other internal and external trend analysis and diverse expectations of a large and diverse group of stakeholders of the ORLEN Group. CSR strategy indicated three basic fields of action. The first one is

CSR strategy indicated three basic fields of action. The first one is **Organisation**, where the goal is to build permanent relations with employees, basing diversity, the sense of safety, development

Partners within PKN ORLEN supported the Group Companies in the preparation of new solutions with regard to remuneration and bonus systems.

#### Social dialogue and benefits

Remaining in power PKN ORLEN principles of social dialogue are based on the regulations resulting from generally applicable laws and internal regulations, allowing you to build constructive and sustainable solutions in cooperation with employee representatives. The ORLEN Group provides its employees with social support in the form of various benefits and allowances, e.g. granting additional funds for holiday or stay in health resorts, child care, leisure time for children and youths, school sets, financial support for families with lower income, recreation and sport activities, and offering cultural and educational activities, non-reimbursable allowances, funding for rehabilitative tours, returnable housing loans, and purchase of Christmas gifts for the employees' kids.

#### Medical care

The Company provides a widely understood preventive care, including preventive medical care falling beyond the scope of occupational medicine: consultations with specialist physicians, ambulatory treatment, diagnostic tests, rehabilitation, vaccination, preventive health care programmes offered in cooperation with Centrum Medyczne Medica Sp. z o.o. in Plock and Military Institute of Medicine in Warsaw. In 2016, there were preventive medical examinations in the workplace organized within "Prevention for the asking" project.

#### Family Friendly Employer

Being a company, which implements modern solutions aimed at keeping balance between professional activity and family life, PKN ORLEN realised project "Family Friendly Employer" offering such solutions as: two additional days for taking care of a child up to 3 years old, an additional hour for breastfeeding a baby, quick access to the paediatrician, complex medical care during the pregnancy, rooms for breastfeeding mothers, gift for employees' new-born children, providing people staying on maternity and parental leaves with information on the firm's life.

#### Awards and certificates

Personnel policy and practices of PKN ORLEN were surveyed by independent organisations. Basic benefits, additional benefits, working conditions, trainings and development, professional career development and the company's organisational culture management were analysed. The assessments resulted in awarding the following distinctions: "Top Employers Poland 2016" certificate and "Employer for Engineer" title.

possibilities, and the combination of social and professional roles. In the **Direct Environment**, the priority is to develop social sensitivity and responsibility for business partners and clients by sharing good practices, knowledge and implementing the highest CSR standards. In terms of **Indirect Environment**, PKN ORLEN embarked on implementing a strategy and promoting the innovative attitude, setting the highest standards in the industry in terms of business ethics and environment protection.

## **ORLEN GROUP**

In the first of these areas, the ORLEN Group strives to create a climate of trust and equal opportunities, fair treatment of everyone regardless of gender, age, position, length of service, trade union membership, religion, nationality, world view, appearance, or sexual orientation. A transparent policy is pursued with regard to the respect of human rights and absence of discrimination, as well as work-life balance. Employment policy and human resources programs were further described in point 3.5.

Significant actions in the other strategy area, i.e. measures related to the development of social awareness and responsibility, include employee volunteering. The program's assumptions were updated and it was also opened up to accept initiatives submitted by the employees. The extension of the range of activities offered contributed to a systematic increase both in the number of charity actions carried out and of the volunteers engaged. 79 volunteer actions were performed in 2016, with a total of nearly 5 thousand of the Group's employees volunteering in them. A new project was implemented for the employees of the Production Plant in Plock under the name of Fabryka Dobrej Energii, as part of which 450 employees from the production area became involved to help 8 care centres in Plock and in the surrounding area.

Innovative projects reducing environmental impact constitute the third pillar of the CSR strategy. Environmental responsibility is not limited to compliance with the applicable legislative provisions with regard to environmental protection standards, or to educational activity addressed to Employees, customers, suppliers, and local communities. It is also about the implementation of environmental management systems and investing in innovative, environmentally friendly technologies assuring benefits and competitive advantage on the market. Participation in the Responsible Care program since 1997 has included the fulfilment of hundreds of voluntarily accepted commitments for the environment. Environmental protection aspects are described in more detail in point 3.7.

One of the fixed elements of the system of communication of PKN ORLEN pro-community initiatives is social reporting, which has been changing along with the changes taking place inside the Concern and its environment to meet the expectations of stakeholders.

The **Integrated Report of PKN ORLEN for 2015**, published for the second time, was awarded by the Warsaw Stock Exchange in the 10<sup>th</sup> edition of the "Raporty Społeczne" (Social Reports) contest. The Group was awarded for the presentation of its activity in an integrated formula, combining financial reporting with non-financial aspects of functioning. The report presents the ORLEN Group's activities, its business model, strategy, the process of building value and the financial results from the point of view of the key stakeholder groups, as well as the Group's development prospects.

The Integrated Report of the ORLEN Group was awarded with special prize as the best Integrated Report in 11<sup>th</sup> edition of "The Best Annual Report" contest.

## 3.7. ENVIRONMENTAL PROTECTION

#### Piotr Chełmiński, Member of the Management Board of PKN ORLEN, Power and Heat Generation Officer:

"As PKN ORLEN, not only do we limit the impact of industry on the environment, but also want to create the interest in ecology among all our employees. Our objectives for the next year will also include raising the environmental awareness of the employees as well as promoting attitudes that increase engagement and the actions aiming at the protection of environment."

"Concern for the safety and the environment is an absolutely crucial aspect of the new Strategy. In 2016, thanks to the commitment of all employees, we achieved the so-called TRR accident rate comparable with the last year, which means that PKN ORLEN is still a safe place to work. But this is not the end of our efforts – the "zero accidents at work" slogan is still valid."

For years, one of the priorities of the ORLEN Group is reducing the environmental impact. Implemented in 2016 projects were related mainly to the adaptation of production facilities to the new requirements and environmental standards. These included administrative activities related to the preparation of applications for change of integrated permits for the operation of the installation and investment work on the same production plants. Among the key initiatives in 2016 in the area of environmental protection was also a project development of photovoltaic modules on selected stations in Poland.

The most important environmental investment continued in 2016 in the Production Plant in Płock was the construction of systems for denitrification and dedusting systems for Power Plant and flue gas desulphurization installation. Its functioning allowed to reduce  $SO_2$  emissions from the CHP Plant in 2016 by over 95% (y/y).

The most important projects implemented in the other companies from the ORLEN Group included: building of DeNOx and DeSOx technological plants, installation of new constant monitoring of emissions at the T700 power plant and expansion of systems for constant monitoring of emissions from the refineries in Litvinov and Kralupy in the Unipetrol Group, as well as adaptation of the energy hub to meet the applicable regulations in force in terms of flue gas and dust emissions in ORLEN Południe S.A.

The ORLEN Group continued to implement the Responsible Care Program. Following the Program's idea, tasks were performed declared for 2016, involving the following projects: the photo contest "Catch the Hare", "I Care for the Environment", "Nature Watchers" and "Tree for a Bottle Campaign – New Edition". The last of these activities, carried out on "World Earth Day", involved employees and volunteers from the ORLEN Group and their families cleaning up the area of a slope on the Vistula River bank and rubbish gathered was subsequently handed over for disposal to a specialized company. Additionally, PKN ORLEN joined other initiatives promoting environmental knowledge and social activities, as well as continued to implement the program of restitution of the peregrine

The ORLEN Group implemented **ISO norms** with regard to the environment. **Environmental Management System in accordance** with **ISO 14001**, certified by Bureau Veritas Certification valid until 14 September 2018 in respect of the achievement of the highest possible ecological neutrality for the direct environment while limiting at the same time the influence of technological processes on the environment. PKN ORLEN also possesses the **Certification of the** 

Sustainable Production Chain of Biofuels and Bioliquids (ISCC EU), recognising the adoption and application of the sustained use of renewable energy sources. The aim of ISCC is to protect the biosphere and assure nor only the rational management of lands, but also the sustainable social development and the reduction of the greenhouse gases emission. Currently, the implementation of the Energy Management System in accordance with ISO 50001 is

## 3.8. OCCUPATIONAL HEALTH AND SAFETY

The main task of the occupational health and safety ("OSH") in the ORLEN Group is to create proper working conditions and continuous identification and elimination of occupational safety threats and improvement of work safety culture.

As part of the improvement of work safety culture in the ORLEN Group, two main lines of action were pursued. The first one involved assuring the highest possible standards of safety at work based on best practices, on the state of the art and on latest technologies. A Group Safety Manual was prepared in 2016 containing 15 work safety standards in force, which implementation in the companies across the Group will constitute a strategic goal for the coming years. As part of the Work Safety Strategy for the years 2017–2021, a change was also made in the structure of the work safety management system. Starting from 2017, the system is divided into main areas: personal safety and process safety.

taking place, the aim of which is the improvement of the energetic effectiveness leading to the costs decrease and the reduction of the greenhouse gases emission to the atmosphere. The implementation concerns the Production Facility in Płock, PTA facility in Włocławek and administration buildings in Płock and Włocławek as well as the terminals and fuel stations. The certification of the system is planned for 2018.

Another direction in which work safety culture is improved involves the building of awareness of safe working procedures and the creation of proactive attitudes among employees and contractors. The aim of these measures is to develop an attitude of shared responsibility among them for their own safety and for the safety of others. Important elements in this area include promotion of aspects related to work safety, of a healthy lifestyle and of work-life balance principles. In 2016, 54 employees of the ORLEN Group participated in the 16<sup>th</sup> edition of the Post-Graduate Studies in the field of Industrial Process Safety.

Activities carried out in 2016 in order in the area of work safety, enabled to maintain the TRR (Total Recordable Rate) at comparable to previous year level equalling 0.87.

The method of rate calculation is presented in <u>"Glossary of selected</u> <u>technical definitions"</u> in the last section of the Report.

## 4. FINANCIAL RESULTS OF THE ORLEN GROUP

#### Sławomir Jędrzejczyk, Vice-President of the Management Board of PKN ORLEN, CFO:

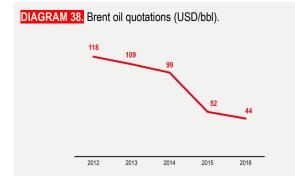
"In 2016, the ORLEN Group achieved a record EBITDA LIFO profit in the amount of PLN 9.4 billion before taking into account the positive impact of the reversal of net impairment on property, plant and equipment. It is mainly the effect of our consistent efforts in strengthening our competitive advantage, as the influence of macroeconomic environment was not as favourable as last year. We are also satisfied with the highest ever result in the retail segment, which reached PLN 1.8 billion thanks to high volume and retail profit margins.

High profits from operating activities resulted in PLN 9.3 billion of cash flow from operating activities in 2016. They enabled us to finance investment activities with the amount of PLN 4.1 billion, pay a dividend of PLN 2 per share to the shareholders in accordance with the current dividend policy and decrease net debt by PLN 3.4 billion.

As a result of this, at the end of 2016, net debt equalled PLN 3.4 billion and the net financial gearing decreased to 11%."

## 4.1. MACROECONOMIC SITUATION

The operating results of the ORLEN Group are largely dependent on the difference between **the market quotations of petroleum products** and **crude oil prices** and other raw materials needed for manufacturing process (so called "crack margin"). The purchase costs of raw materials are dependent on global trends in commodity



The indicator used for the directional assessment of the impact of macroeconomic factors on the ORLEN Group's results is the **Model Downstream Margin**, reflecting the base structure of the input

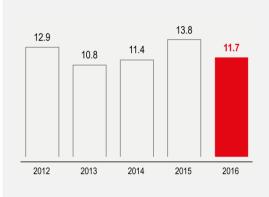
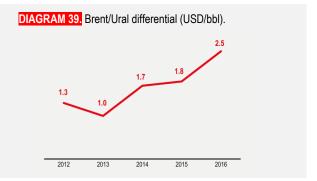


DIAGRAM 40. Model Downstream margin [USD/bbl].

markets and they are beyond the control of the Group. Brent/Ural differential is important, due to high share of oil with high sulphur content in processed crude oil. Commentary on changes in crude oil prices in 2016 and projected trends for the coming years is set out in point 3.2.



basket and of the refinery and petrochemical products obtained from the input material, calculated on the basis of market quotations.

TABLE 17. The Downstream margin product structure – crack margins	;
from quotations for base products.	

Product	2016	2015	2014	2013	2012
Refinery products (USD/t)					
Gasoline	142	177	167	167	191
Diesel oil	71	108	108	119	137
Heavy heating oil	(125)	(142)	(225)	(234)	(218)
SN 150	139	177	161	131	220
Petrochemical products (EUR/t)	_				
Ethylene	610	602	589	605	577
Propylene	359	488	543	467	455
Benzene	296	278	432	375	320
Paraxylene	431	416	382	519	512

Prices of refined products and petrochemical products offered by the ORLEN Group are determined mostly on the basis of their quotations on commodity markets denominated in foreign currencies.

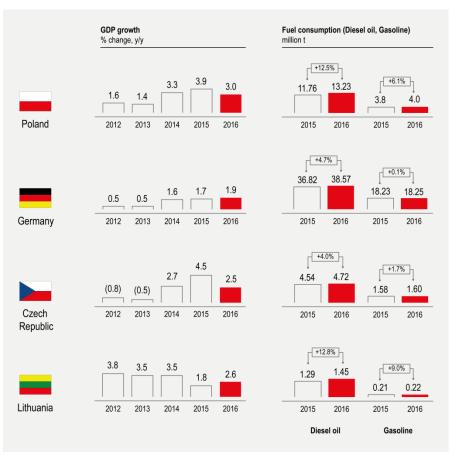
The costs associated with the purchase of basic raw materials, including crude oil and debt service are also primarily denominated in foreign currencies such as USD or EUR.

Consequently fluctuations in **exchange rates** have a significant impact on the financial results of the ORLEN Group.

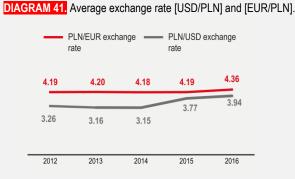
In the Downstream segment Model Refining Margin and Model Petrochemical Margin are also calculated.

The methodology of calculation of model Downstream, refinery and petrochemical margins is presented in the <u>Glossary of selected</u> <u>financial definitions</u> at the end of this report.

DIAGRAM 42. Key indicators influencing the ORLEN Group sales level on particular markets.



Source: GDP - based on EUROSTAT data and available IMF forecasts. Consumption: own preparation based on databases from: Energy Market Agency, the Lithuanian Statistical Office, the Czech Statistical Office and the German Oil Industry Association.

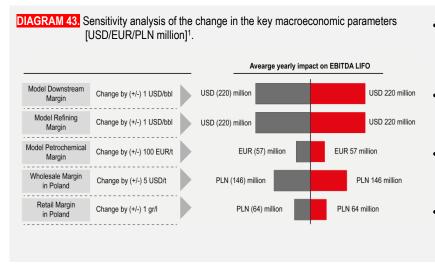


Source: Based on rates of the National Bank of Poland (NBP).

The economic situation on world markets has a significant impact on consumption of fuels and petrochemical products and ultimately on their sales level and prices.

## **ORLEN GROUP**

#### Sensitivity analysis



- Estimates of impact of changes in **the model Downstream and refining margin** were performed assuming yearly processing capacity of crude oil in the ORLEN Group around 220 million bbl in 2016.
- Estimates of impact of change in **the model petrochemical margin** were performed assuming sales of polymers from 2016 in the ORLEN Group at around 565 thousand tonnes per year<sup>2</sup>.
- Estimates of the impact of changes in wholesales margin have been made assuming diesel oil sales in the ORLEN Group in Poland approximately 7.4 million tonnes per year.
- Estimates of impact of changes in retail margin were performed on basis of fuel sales volume in the ORLEN Group of approximately 6.4 billion litres per year.

<sup>1</sup> The impact of changes in the above mentioned parameters has been estimated with the assumption of the lack of dependence between them and other parameters forming results of the ORLEN Group. The changes of macroeconomic factors may have additional effect on other parameters such as optimization of the structure of products, sales directions or the capacity utilization which can have an additional impact on the presented operating results.

<sup>2</sup> It includes about 245 thousand tonnes of polymers from Unipetrol Group and about 320 thousand tonnes from BOP (50% of BOP's volumes consistent with PKN ORLEN share's in BOP).

## 4.2. FINANCIAL RESULTS

Principles of presentation of the annual consolidated financial statements are described in <u>point 5.2.</u> of the Consolidated Financial Statements for year 2016.

#### 4.2.1. Overview of basic economic and financial figures and evaluation of the factors having a significant impact on the financial results.

TABLE 18. Selected data from the consolidated statement of profit or loss and other comprehensive income.

Item, PLN million	2016	2015	2014	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Sales revenues	79 553	88 336	106 832	(8 783)	(9.9%)
Profit/(Loss) from operations under LIFO increased by amortisation and depreciation (EBITDA LIFO) before impairment allowances <sup>1)</sup>	9 412	8 738	5 213	(674)	7.7%
Profit/(Loss) from operations increased by amortisation and depreciation (EBITDA)	9 642	6 235	(2 720)	3 407	54.6%
Profit/(Loss) from operations	7 532	4 340	(4 711)	3 192	73.5%

 The allowance for impairment of property, plant & equipment recognized in 2016 of PLN 145 million, includes mainly: reversal of allowance for impairment of Unipetrol Group's refining assets in the amount of PLN 316 million and allowance created for impairment of exploration assets of the ORLEN Upstream Group in Poland of PLN (73) million and assets of ORLEN Oil of PLN (55) million.

The impairment of non-current assets recognized in 2015 of PLN (993) million, includes mainly: the Unipetrol Group of PLN (111) million and the ORLEN Upstream Group of PLN (852) million.

The impairment of non-current assets recognized in 2014 of PLN (5 360) million, includes: ORLEN Lietuva of PLN (4 181) million, the Unipetrol Group of PLN (752) million, the Anwil Group (Spolana) of PLN (64) million, the Rafineria Jedlicze Group of PLN (42) million and the ORLEN Upstream Group of PLN (322) million.

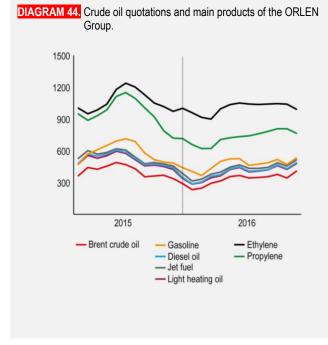
As at 31 December 2016, the ORLEN Group identified indicators for impairment tests in accordance with IAS 36 "Impairment of Assets" related to the adoption, on 15 December 2016, by the Management Board and Supervisory Board of PKN ORLEN, of the ORLEN Group Strategy for the years 2017–2021 ("Strategy"). The tests were performed of the ORLEN Group's assets as at 31 December 2016, and on the net cash flows predicted in the Medium-Term Plan

approved as part of the Strategy. The full methodology of the tests and of the impairment allowance recognised is presented in <u>point 7.2.4.</u> of the Consolidated Financial Statements for 2016. The full version of consolidated statement of profit or loss and other comprehensive income is available in <u>point 1</u>. of the Consolidated Financial Statements for year 2016.

## **ORLEN GROUP**

#### Sales revenues

Sales revenues of ORLEN Group amounted to PLN 79 553 million. The decrease by (9.9%) reflects the fall in crude oil prices, and



consequently, the quotations of products offered by the ORLEN Group.

- Sales revenues of Downstream segment decreased by (13.7%) (y/y) as the result of lower crude oil and, consequently, products market quotations. In comparison to the previous year, the ORLEN Group achieved a volume growth of 1.1% (y/y) to the level of nearly 31 million tonnes due to higher sales of refining products in all markets, with reduced sales of petrochemical products due to unavailability of installation for the production of ethylene after the failure of 2015 in Unipetrol Group, periodic Olefin installation maintenance overhaul in PKN ORLEN and overhaul of production installations in Anwil.
- Revenues of the Retail segment decreased by (3.2)% (y/y), mainly as a result of the prices decrease on fuel stations. The segment achieved higher by 2.5% (y/y) sales volumes on the Polish, Czech and Lithuanian markets as well as higher sales of fuel on ORLEN Deutschland's fuel stations at lower sales of medium distillates by the Company in wholesale formula.
- Upstream segment recorded a 105.6% (y/y) increase in sales revenues due to the strong increase in the production segment of 80.0% (y/y) including the effect of the acquisition of upstream companies Kicking Energy Horse Energy Ltd. and FX Energy in IV quarter of 2015.
- Revenues of Corporate Functions were higher by 21.9% (y/y).

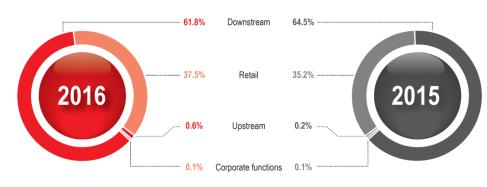


DIAGRAM 45. Revenues from sales of the ORLEN Group by segment.

Detailed information on the changes in sales volumes in individual segments are described in <u>point 3.2.</u>

The largest market of the ORLEN Group in terms of sales revenue is still the Polish market, where products and services worth PLN 33

731 million were located. On the German market revenues amounted to PLN 15 781 million. In the Czech Republic revenues amounted to PLN 9 861 million and the Baltic countries markets achieved sales value of PLN 6 216 million.

#### Operating costs by nature and functions

TABLE 19. Cost of goods sold in the ORLEN Group.

Item, PLN million	2016	2015	2014	structure 2016	structure 2015	structure 2014	change %
1	2	3	4	5	6	7	8=(2-3)/3
Materials and energy	(43 512)	(54 542)	(70 586)	59.0%	65.8%	67.3%	20.2%
Cost of merchandise and raw materials sold	(20 247)	(18 303)	(24 799)	27.4%	22.1%	23.7%	(10.6%)
External services	(4 073)	(4 352)	(4 316)	5.5%	5.3%	4.1%	6.4%
Employee benefits	(2 206)	(2 110)	(2 059)	3.0%	2.5%	2.0%	(4.5%)
Depreciation and amortisation	(2 110)	(1 895)	(1 991)	2.9%	2.3%	1.9%	(11.3%)
Taxes and charges	(1 129)	(1 152)	(653)	1.5%	1.4%	0.6%	2.0%
Other	(529)	(481)	(459)	0.7%	0.6%	0.4%	(10.0%)
Cost by nature	(73 806)	(82 835)	(104 863)	100.0%	100.0%	100.0%	10.9%
Change in inventories	(232)	(693)	(1 783)				66.5%
Cost of products and services for own use	264	213	204				23.9%
Operating cost	(73 774)	(83 315)	(106 442)				11.5%
Selling costs	4 125	3 971	3 920				(3.9%)
General and administrative costs	1 426	1 552	1 512				8.1%
Cost of goods sold	(68 223)	(77 792)	(101 010)				12.3%

The consumption of materials and energy costs, related mostly to consumption of crude oil in technological processes, accounted for the largest share of **costs by nature**. The decrease of costs level by (20.2%) (y/y) resulted from lower quotations of crude oil on global markets by around 8 USD/bbl.

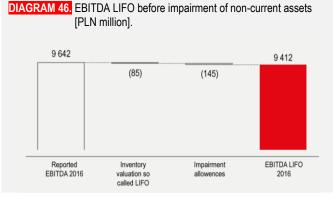
In 2016 share of raw material costs decreased by (6.8) percentage points (y/y) and share of merchandise costs purchased on the market increased by 5.3 percentage points (y/y). The above changes are due to maintenance overhauls in the ORLEN Group (Fluid Catalytic Crac and Ethylene installations in the Unipetrol

Group and periodic maintenance overhaul of Olefin installation in PKN ORLEN) and measures taken to execute trade contracts.

Increase of **selling costs** is due to higher transport cost due to growth in sales of merchandise purchased in the market because of the overhauls described above.

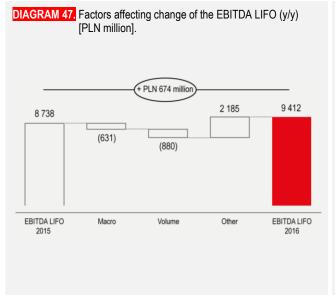
**General and administrative costs** decreased mainly from absence of mandatory reserves maintenance costs of service provided by third parties in 2016 and lower costs of mandatory reserves maintenance due to reduction of inventory level from 68 to 60 days.

Profit from operations increased by depreciation and amortisation according to inventory valuation under LIFO method – EBITDA LIFO 1



- The record EBITDA LIFO of the ORLEN Group in 2016 in the amount of PLN 9 412 million before taking into account the impact of impairment of fixed assets.
- After taking into account impairment allowances of fixed assets EBITDA LIFO of the ORLEN Group for 12 months of 2016 amounted to PLN 9 557 million.
- The positive impact of changes in oil prices on inventory valuation amounted to PLN 85 million.
- As a result EBITDA of the ORLEN Group for the year 2016 amounted to PLN 9 642 million.

<sup>&</sup>lt;sup>1</sup> ORLEN Group's inventories are valued in the financial statements in accordance with International Financial Reporting Standards at weighted average cost method or purchase price method. Therefore, an upward trend in crude oil prices has a positive effect and the downtrend has a negative impact on the reported results. As a result, the operating results based on LIFO method of inventory valuation are additionally presented in the foregoing report. In accordance with IFRS inventory valuation under LIFO is not acceptable and consequently it is not applied in the accounting principles as well as in the financial statements of the ORLEN Group.



#### EBITDA LIFO of the ORLEN Group was higher by PLN 674 million (y/y).

- The negative impact of macroeconomic aspects amounted to PLN (631) million (y/y) and consisted mainly of the effect of lower margins on fuels, with the positive impact of the Brent/Ural differential and of margins on petrochemical products, as well as of the depreciation of the Polish zloty against USD and EUR.
- There was a negative effect in terms of volume, amounting to PLN (880) million (y/y), despite the higher sales volume resulting mainly from the lower sales of high-margin petrochemical products in the Unipetrol Group as a result of the unavailability (until November 2016) of the ethylene production plant following the failure of August 2015.
- The positive impact of other aspects amounted to PLN 2 185 million (y/y) and consisted mainly of the following:
  - PLN 1 157 million (y/y) lack of negative effects from 2015 related to settlement of repurchase of the V and VI tranche of mandatory reserves.
  - PLN 1 252 million (y/y) positive change in the balance of other operating activities, after eliminating the revaluation write-downs on assets, related mainly to the recognition of revenue from insurers in relation to the failure of the ethylene production plant in August 2015 in the Unipetrol Group, in the amount of PLN 1 280 million.

#### Net financial revenues / expenses and net result

TABLE 20. Selected data from the consolidated statement of profit or loss and other comprehensive income.

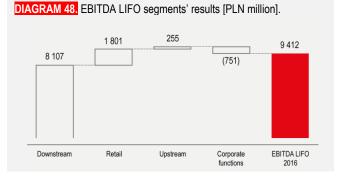
Item, PLN million	2016	2015	2014	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Financial revenues	248	390	354	(142)	(36.4%)
Financial expenses	(893)	(1 032)	(1 889)	139	13.5%
Net financial revenues and expenses	(645)	(642)	(1 535)	(3)	(0.5%)
Profit/(Loss) before tax	6 887	3 698	(6 246)	3 189	86.2%
Income tax	(1 147)	(465)	418	(682)	(146.7%)
Net profit/(Loss)	5 740	3 233	(5 828)	2 507	77.5%

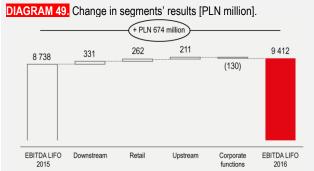
Net financial expenses in 2016 amounted to PLN (645) million and included mainly negative net exchange differences in the amount of PLN (542) million, net interest expense of PLN (157) million and settlement and valuation of financial instruments, in the net amount of PLN 58 million.

Taking into account tax charges of PLN (1 147) million net profit generated by the ORLEN Group for 2016 amounted to PLN 5 740 million.

Detailed information concerning financial revenues and expenses point 7.1.6. and income tax point 7.1.7. are available in the Consolidated Financial Statements for year 2016.

#### Segments' results of the ORLEN Group





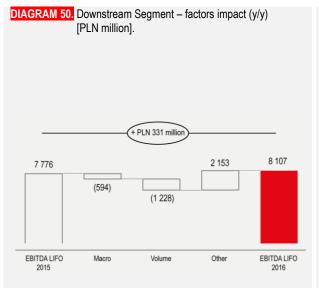
#### **Downstream Segment**

TABLE 21. Basic financial data of Downstream segment.

Downstream Segment, PLN million	2016	2015	2014	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Segment revenues, including:	60 094	69 611	85 941	(9 517)	(13.7%)
Sales revenues from external customers	49 202	56 987	70 549	(7 785)	(13.7%)
Sales revenues from transactions with other segments	10 892	12 624	15 392	(1 732)	(13.7%)
Segments expenses	(54 939)	(64 963)	(85 971)	10 024	(15.4%)
Other operating income/expenses, net	1 640	(40)	(4 861)	1 680	-
Share in profit from investments accounted for under equity method	298	253	58	45	17.8%
Profit from operations under LIFO increased by depreciation and amortisation (EBITDA LIFO) before impairment allowances <sup>1)</sup>	8 107	7 776	4 210	331	4.3%
Profit/(Loss) from operations under LIFO increased by depreciation and amortisation (EBITDA LIFO)	8 325	7 640	(852)	685	9.0%
Profit/(Loss) from operations increased by depreciation and amortisation (EBITDA)	8 410	6 130	(3 425)	2 280	37.2%
Profit/(Loss) from operations under LIFO	7 008	6 371	(2 260)	637	10.0%
Profit/(Loss) from operations	7 093	4 861	(4 833)	2 232	45.9%
CAPEX	3 533	2 242	2 714	1 291	57.6%

1) The allowance for impairment of tangible fixed assets for 12 month of year 2016 amounted to PLN 218 million and related mainly to reversal of allowance for impairment of Unipetrol Group's refining assets in the amount of PLN 316 million and allowance created for impairment of assets of OPLEN Oil of PLN (55) million.

The impairment of non-current assets recognized in 2015 of PLN (136) million, related mainly to the Unipetrol Group of PLN (111) million and Baltic Power Sp. z o.o. of PLN (18) million.



# In 2016 EBITDA LIFO of the ORLEN Group in Downstream segment, before impairment allowances of non-current assets, amounted to PLN 8 107 million and increased by PLN 331 million (y/y).

- The negative impact of macroeconomic aspects amounted to PLN (594) million (y/y) and consisted mainly of the effect of lower margins on fuels, with the positive impact of the Ural/Brent differential and of margins on petrochemical products, as well as of the depreciation of the Polish zloty against USD and EUR.
- The negative effect in terms of volume amounted to PLN (1 228) million (y/y) and resulted mainly from the lower sales of high-margin petrochemical products in the Unipetrol Group as a result of the unavailability (until November 2016) of the ethylene production plant following the failure of August 2015 and the planned shutdown for maintenance of the olefin plant at PKN ORLEN as well as other shutdowns for maintenance of the productions plants at Anwil.
- The positive impact of other factors amounted to PLN 2 153 million (y/y) and included mainly:
  - PLN 1 157 million (y/y) lack of negative effects from 2015 related to settlement of repurchase of the V and VI tranche of mandatory reserves of PLN (297) million in 2015 and of PLN (860) million (y/y) from August 2015.
- PLN 1 326 million (y/y) positive change in the balance of other operating activities, after eliminating the revaluation write-downs on assets, related mainly to the recognition of revenue from insurers in relation to the failure of the ethylene production plant in August 2015 in the Unipetrol Group, in the amount of PLN 1 280 million.
- PLN (330) million (y/y) other elements, including mainly the impact of lower sales margins in the area of refinery products, in part reduced by the positive impact of net changes in revaluation write-downs on inventories to the net realizable values.
- Taking into account impairment allowances of PLN 218 million EBITDA LIFO of the ORLEN Group for 2016 amounted to PLN 8 325 million.
- The positive impact of changes in oil prices on inventory valuation amounted to PLN 85 million and as a result EBITDA of the ORLEN Group for the year 2016 amounted to PLN 8 410 million.

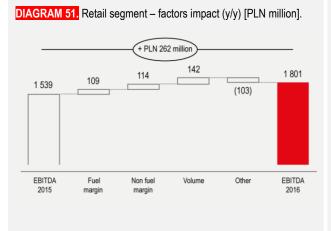
Segment capital expenditure increased by PLN 1 291 million (y/y) to the level of PLN 3 533 million - the most important capital expenditures were described in point 4.4.

## **Retail segment**

TABLE 22. Basic financial data for retail segment.

Retail Segment, PLN million	2016	2015	2014	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Segment revenues, including:	30 121	31 122	36 104	(1 001)	(3.2%)
Sales revenues from external customers	29 841	31 052	35 913	(1 211)	(3.9%)
Sales revenues from transactions with other segments	280	70	191	210	300.0%
Segment expenses	(28 681)	(29 934)	(35 015)	1 253	4.2%
Other operating income/expenses, net	(38)	(17)	(4)	(21)	(123.5%)
Profit from operations increased by depreciation and amortisation (EBITDA) before impairment allowances <sup>1)</sup>	1 801	1 539	1 416	262	17.0%
Profit/(Loss) from operations increased by depreciation and amortisation (EBITDA	1 794	1 539	1 440	255	16.6%
Profit/(Loss) from operations before impairment allowances	1 409	1 171	1 061	238	20.3%
Profit/(Loss) from operations	1 402	1 171	1 085	231	19.7%
CAPEX	479	448	345	31	6.9%

1) Impairment of tangible fixed assets recognized in 2016 amounted to net PLN (7) million. Impairment reversal of the non-current assets recognized in 2014 of PLN 24 million.



In 2016, EBITDA of the retail segment of the ORLEN Group, before impairment allowances of non-current assets, achieved record level of PLN 1 801 million and increased by PLN 262 million (y/y).

- The positive effect of fuel margins on the Polish and German markets accompanied by limitations on the Czech and Lithuanian markets.
- The increase of margins on sale of non-fuel products and services on all markets (y/y).
- The positive impact of higher retail sales volumes in all markets.
- The negative impact of the other factors related mainly to increased costs of operations of fuel stations resulting from the higher by 2.5% (y/y) sales volume.

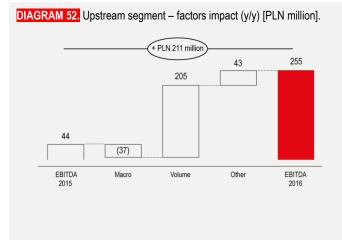
The segment's capital expenditures increased by PLN 31 million and amounted to PLN 479 million - the most significant capital expenditures in the segment are described in <u>point 4.4.</u>

#### Upstream

TABLE 23. Basic financial data for Upstream segment.

Upstream segment, PLN million	2016	2015	2014	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Segment revenues, including:	442	215	298	227	105.6%
Sales revenues from external customers	442	215	298	227	105.6%
Sales revenues from transactions with other segments	0	0	0	0	-
Segment expenses	(537)	(347)	(271)	(190)	(54.8%)
Other operating income/expenses, net	(23)	(849)	(319)	826	97.3%
Share in profit from investments accounted for under equity method	(1)	0	0	(1)	-
Profit from operations increased by depreciation and amortisation (EBITDA) before impairment allowances <sup>1)</sup>	255	44	152	211	479.5%
Profit/(Loss) from operations increased by depreciation and amortisation (EBITDA)	182	(808)	(170)	990	-
Loss from operations	(119)	(981)	(292)	862	87.9%
CAPEX	525	288	499	237	82.3%

1) The impairment of non-current assets recognized amounted to: PLN (73) million in 2016 in Poland, PLN (852) million in 2015, including PLN (429) million of assets in Poland and PLN (423) million of assets in Canada and PLN (322) million in 2014, including PLN (11) million of assets in Poland and PLN (311) million of assets in Canada.



In 2016, Upstream segment's EBITDA, before impairment allowances of non-current assets, amounted to PLN 255 million and increased by PLN 211 million (y/y).

- Negative impact of macroeconomic factors as a result of decreasing prices of crude oil and natural gas on world markets.
- The positive impact of higher production of hydrocarbons on Canadian and Polish markets including the effect of acquisition of companies Kicking Horse Energy Ltd. and FX Energy.
- Other factors include positive result on other operating activities in the amount of PLN 47 million (y/y), after elimination of impairment of assets, mainly related to the adjustment of the allocation of the purchase price when buying FX Energy.

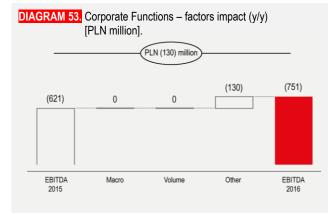
The segment's capital expenditure increased by PLN 237 million (y/y) and amounted to PLN 525 million - the most significant capital expenditures in the segment are described in point 4.4.

#### **Corporate Functions**

TABLE 24. Basic financial data for Corporate Functions.

Corporate Functions segment, PLN million	2016	2015	2014	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Segment revenues, including:	351	288	311	63	21.9%
Sales revenues from external customers	68	82	72	(14)	(17.1%)
Sales revenues from transactions with other segments	283	206	239	77	37.4%
Segment expenses	(1 072)	(971)	(1 007)	(101)	(10.4%)
Other operating income/expenses, net	(123)	(28)	26	(95)	(339.3%)
Share in profit from investments accounted for under equity method	0	0	(1)	0	-
Loss from operations increased by depreciation and amortisation (EBITDA) before impairment allowances <sup>1)</sup>	(751)	(621)	(565)	(130)	(20.9%)
Loss from operations increased by depreciation and amortisation (EBITDA)	(744)	(626)	(565)	(118)	(18.8%)
Loss from operations before impairment allowances	(851)	(706)	(671)	(145)	(20.5%)
Loss from operations	(844)	(711)	(671)	(133)	(18.7%)
CAPEX	136	205	230	(69)	(33.7%)

1) The impairment of fixed assets recognized in 2016 and 2015 respectively: PLN 7 million and PLN (5) million related to PKN ORLEN assets.

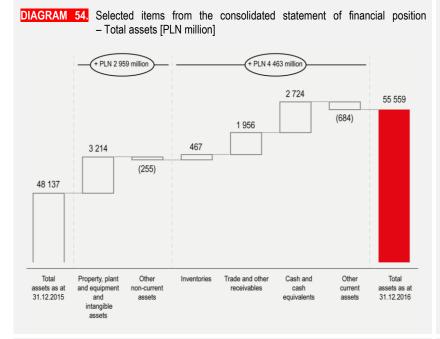


#### In 2016, EBITDA of Corporate Functions decreased by PLN (130) million (y/y).

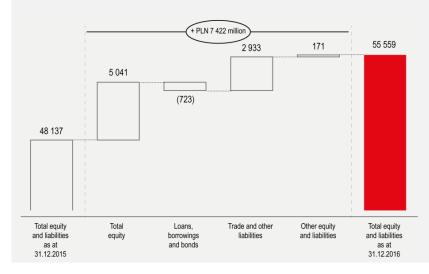
 Negative impact of changes in the balance of other operating activities in the amount of PLN (107) million (y/y), after elimination of impairment of assets, mainly comprising one-off effect of revaluation of provision.

 The capital expenditures of Corporate Functions in 2016 are described in point 4.4.

#### 4.2.2. Statement of financial position



#### DIAGRAM 55. Selected items from the consolidated statement of financial position – Total Liabilities [PLN million]



The ORLEN Group as at 31 December 2016 possessed land with an area of 31.6 million m2 and land in perpetual usufruct and lease with an area of 35.2 million m<sup>2</sup>. Surfaces of land used within the Upstream segment are presented in the <u>point 3.2.3.2</u>.

The most important living and housing objects include: the Srebrna Palace near Płock, commercial hotel and hotel facilities for employees in Płock, the House of Technology in Płock, the

# The increase in total assets of the ORLEN Group as at 31 December 2016 by PLN 7 422 million in comparison to 31 December 2015.

- The increase in current assets was mainly due to changes in the balance of tangible fixed assets and intangible fixed assets including mainly capital expenditures in the amount of PLN 4 673 million, depreciation in the amount of PLN (2 110) million, the positive effect of reducing net impairment allowances of tangible fixed assets and intangible fixed assets in the amount of PLN 145 million and foreign exchange differences on recalculation of balances of foreign entities of the ORLEN Group in the amount of PLN 481 million.
- The increase in current assets, mainly due to increase in the balance of cash and cash equivalents by PLN 2 724 million as well as trade receivables and other receivables by PLN 1 956 million and decrease of PLN (217) million of other financial assets including mainly the valuation of cash flow hedges combined with the increase of inventory value.

# The increase of total liabilities of the ORLEN Group as at 31 December 2016 by PLN 7 422 million in comparison to 31 December 2015.

- The increase off equity at the end of 2016 mainly due to net profit recognized for 2016 in the amount of PLN 5 740 million and distribution of net profit for year 2015 and dividend payment to the shareholders of the Parent Company in the amount of PLN (855) million.
- The decrease of the ORLEN Group debt as a result of net repayment of loans in the amount of PLN (1 052) million and the net impact of foreign exchange losses on the revaluation and valuation of debt in the total amount of PLN 329 million.
- The increase of trade and other liabilities at the end of 2016 mostly due to crude oil and biocomponents purchases.

Education Centre Schools in Płock, the ORLEN Club in Płock, the Bóbrka Holiday Resort (Separate Asset), the Sanatorium and Leisure Center in Ustka and the Holiday Resort in Zarzeczewo.

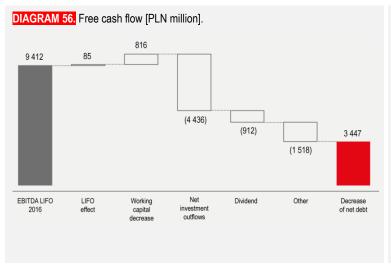
The full version of consolidated statement of financial position is available in <u>point 2</u> of the Consolidated Financial Statements for year 2016.

#### 4.2.3. Statement of cash flow

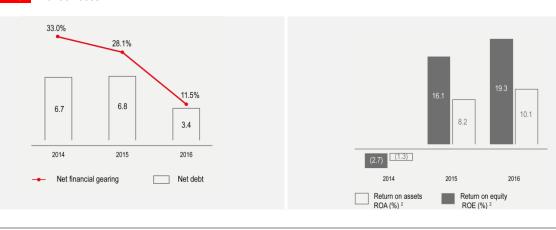
TABLE 25. Consolidated statement of cash flows.

Item, PLN million	2016	2015	2014	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Net cash from operating activities, including:	9 331	5 354	3 187	3 977	74.3%
Change in working capital	816	(1 320)	1 752	2 136	-
Net cash used in investing activities	(4 436)	(4 096)	(4 020)	(340)	(8.3%)
Net cash (used in) / provided by financing activities	(2 210)	(2 866)	2 083	656	22.9%
Net increase/(decrease) in cash and cash equivalents	2 685	(1 608)	1 250	4 293	-
Effect of exchange rate changes on cash and cash equivalents	39	19	(2)	20	105.3%
Cash and cash equivalents, beginning of the period	2 348	3 937	2 689	(1 589)	(40.4%)
Cash and cash equivalents, end of the period	5 072	2 348	3 937	2 724	116.0%

The cash balance in 2016 increased by PLN 2 724 million and as at 31 December 2016 amounted to PLN 5 072 million.

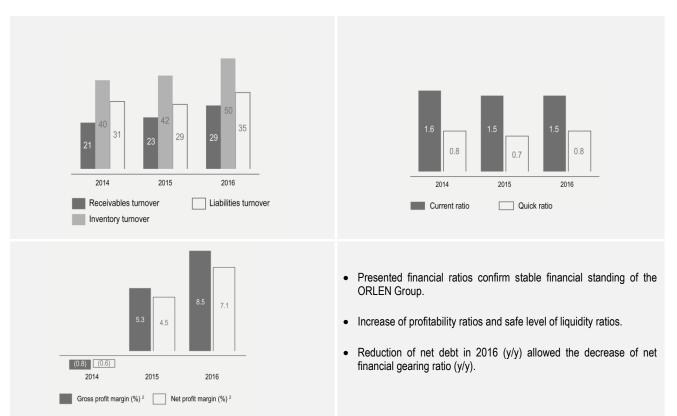


- The positive effect of net decrease of working capital of PLN 816 million, mainly due to increase of liabilities from crude oil and biocomponents purchases and tax liabilities with increase of trade liabilities resulting from termination of maintenance overhauls of production facilities in the Unipetrol Group.
- Investment expenditures comprised mainly net expenses for the acquisition of tangible fixed assets, intangible assets and rights of perpetual usufruct of land in the amount of PLN (4 892) million, proceeds from dividends received and sales of ORLEN Transport in the amount of respectively PLN 317 million and PLN 74 million.
- Dividends payments of PLN (912) million, including payment to shareholders of the Parent Company in the amount of PLN (855) million.
- Other include mainly the share in the net result of entities valued using the equity method of consolidation, paid income tax, payments of interests, foreign exchange differences (operating and from revaluation of debt) and due amounts from compensation for the installation breakdown in the Unipetrol Group in the amount of PLN (222) million.



#### 4.2.4. Financial ratios

DIAGRAM 57. Financial ratios.1



The methodology of calculating ratios is presented in <u>Glossary of selected financial term</u> in the last section of the foregoing Report.
 Before the impairment allowances of non-current assets.

#### 4.2.5. Differences between financial results disclosed in annual report and previously published forecasts of financial results for the year

The ORLEN Group did not publish forecasts of financial results for 2016.

The ORLEN Group operating results for 2016 did not change in comparison to the results published on 26 January 2017 in consolidated quarterly report for the IV quarter of 2016.

## 4.3. FINANCIAL RESOURCES MANAGEMENT

#### 4.3.1. General management rules

#### Liquidity management

The ORLEN Group takes advantage of a cash-pooling system to optimize finance costs and effectively manage the current financial liquidity within the ORLEN Group. In 2016 the following cash polling systems were in operation:

- PLN cash-pooling system which as at 31 December 2016 included 24 members of the ORLEN Group,
- International cash-pooling system for EUR, USD, CZK and PLN held for foreign companies of the ORLEN Group (ORLEN Finance, ORLEN Lietuva Group, ORLEN Deutschland, Unipetrol Group, Ventus Nafta, ORLEN Capital).

As a part of liquidity management, the Parent Company may issue bonds up to the agreed limits and to acquire bonds issued by the ORLEN Group companies. In 2016 the ORLEN Group invested funds in bank deposits. Decisions concerning bank deposits are founded on the maximum return on investment and current assessment of the financial standing of the banks based on the short-term rating assessment for deposits on the investment level.

#### Working capital management

The ORLEN Group manages the working capital in a flexible way in the unstable market conditions with a range of tools used to its level optimization. One of those tools were sale transactions of part of mandatory crude oil reserves connected with concluding the agreement to maintain those mandatory reserves for PKN ORLEN. In 2016, PKN ORLEN did not carry out such transactions.

The ORLEN Group uses also factoring limits agreements. PKN ORLEN uses factoring services without recourse that rely on discount sale of short-term trade receivables due to the Company

prior to their maturity and taking over its insolvency risk by the bank. In 2016, PKN ORLEN implemented a new system solution called "reverse factoring" giving its counterparties the possibility of obtaining payment for supplies or services rendered, in a shorter period than resulting from the trade agreements.

## 4.3.2. Loans, borrowings, and debt securities

PKN ORLEN uses services of banks proving high reliability as well as remarkable market position. Such approach allows to limit

The level of net working capital at the end of 2016 amounted to PLN 10 794 million and increased by PLN 112 million as compared to the level at the end of 2015.

banking costs with providing concurrent guarantee of high standard of financing sources.

#### TABLE 26. Sources of financing.

Item, PLN million	2016	2015	2014	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Bank loans	939	5 000	6 491	(4 061)	(81.2%)
Borrowings	1	3	5	(2)	(66.7%)
Debt securities	7 495	4 155	4 161	3 340	80.4%
Financial indebtedness	8 435	9 158	10 657	(723)	(7.9%)
By maturity:					· · ·
Non-current	7 446	8 131	9 670	(685)	(8.4%)
Current	989	1 027	987	(38)	(3.7%)

DIAGRAM 58. The debt structure [%].



#### TABLE 27. Credit facilities in force in the ORLEN Group in 2016 (excess PLN 100 million).

Company	Bank name	Loan amount <sup>1</sup>	Agreement date	Payment date	Base costs (interest rate)
PKN ORLEN	Bank consortium (BNP Paribas as agent)	EUR 1 500 million (PLN 6 636 million)	2014	2021	Floating rate + margin
PKN ORLEN	Bank Gospodarstwa Krajowego	PLN 800 million	2013	2025 <sup>2</sup>	Floating rate + margin
PKN ORLEN	European Bank for Reconstruction and Development	EUR 167 million (PLN 739 million)	2011	2018	Floating rate + margin
PKN ORLEN	PKO BP	PLN 700 million	2008	Revolving loan	Floating rate + margin
PKN ORLEN	Bank BPH (currently Alior Bank)	PLN 450 million	2008	Revolving loan	Floating rate + margin
PKN ORLEN	Bank Pekao	PLN 300 million	2007	Revolving loan	Floating rate + margin
PKN ORLEN	Bank Handlowy	PLN 300 million	2016	Revolving loan	Floating rate + margin

## **ORLEN GROUP**

Unipetrol Group	ING	CZK 4 000 million (PLN 655 million)	2014	2017	Floating rate + margin
Unipetrol Group	Ceska Sporitelna	CZK 4 000 million (PLN 655 million)	2014	Revolving loan	Floating rate + margin
Unipetrol Group	Commerzbank	CZK 1 000 million (PLN 164 million)	2007	Revolving loan	Floating rate + margin
ORLEN Finance	Nordea Bank, Niederlassung Frankfurt am Main	EUR 200 million (PLN 885 million)	2010	Revolving loan	Floating rate + margin
ORLEN Upstream Group	Citibank, Canadian branch	CAD 70 million (PLN 217 million)	2015	Revolving loan	Floating rate + margin
IKS Solino	Bank consortium (Pekao and PKO BP)	PLN 176 million	2004	2017	Floating rate + margin

1) The amounts recalculated to PLN according to the National Bank of Poland rates: EUR/PLN, CZK/PLN, USD/PLN, CAD/PLN from 31 December 2016. 2) In compliance with the agreement, PKN ORLEN made early repayment of the credit facility in March 2017.

None of the above credit facilities is secured with pledge, mortgage

or ownership transfer of non-current assets.

As regards the loan agreements in force, the ORLEN Group subsidiaries are obliged to maintain selected financial indicators within brackets agreed in the loan agreements. In 2016 the financial ratios assessed by the lending banks remained at the safe level. The covenant level included in loan agreements (net debt/EBITDA before impairment allowances of non-current assets) was 0.35.

## 4.3.3. Issue of bonds and usage of the proceeds from the issue

PKN ORLEN uses the non-public bond issue programme, which is in operation in accordance with agreement Bond Issue Programme ( "Programme Agreement"), executed with a consortium of Polish banks in November 2006 with a debt limit up to PLN 2 000 million. Funds obtained from the issue are allocated to financing ongoing operations.

In 2012, within the Programme Agreement PKN ORLEN issued 7year corporate bonds with variable interest rate, the nominal value of PLN 1 000 million and a maturity date on 27 February 2019. Whereas in 2016, as part of the Programme Agreement PKN ORLEN issued short-term bonds in PLN purchased by Anwil, ORLEN Asfalt, ORLEN KolTrans, ORLEN Oil, ORLEN Południe, ORLEN Paliwa, ORLEN Upstream and Ship-Service. Each time bonds profitability is determined on arm's length conditions.

In 2016 PKN ORLEN used the funds raised in 2013-2014 from the implementation of a public bond issue programme ("Programme") to finance the current operations. Acting on a basis of the agreement with UniCredit CAIB Poland S.A., Powszechna Kasa Oszczędności Bank Polski S.A. and Bank Pekao S.A., in 2013 PKN ORLEN directed 4 series of medium-term bonds (4-year) with a total nominal value of PLN 700 million to retail investors, and then, continuing the

#### 4.3.4. Borrowings granted and received

At the end of 2016 the following agreements of borrowings granted by the Parent Company to entities within the ORLEN Group were in force:

 loan granted to ORLEN Upstream Canada on 4 January 2016 in the amount of CAD 100 million. On 9 December 2016, the amount of the loan increased to CAD 276.5 million (PLN 857 million at the average National Bank of Poland exchange rate The financial indicators attained in 2016, presented in <u>point 4.2.4.</u> confirm the full ability to perform payment obligations resulting from the loan agreements and other agreements with banks and financial institutions.

Additional information on the debt structure of the ORLEN Group is presented in <u>point 7.2.6.</u> of the Consolidated Financial Statements for 2016.

Programme in 2014, the Company issued 2 consecutive series of 4year bonds with a nominal value of PLN 200 million and 6-year bonds with a nominal value of PLN 100 million and interest at a fixed interest rate. Rating of bonds issued under the Programme at the end of 2016 was at the level of 'A(pol)', after the increase of the national rating for PKN ORLEN in 2016.

In 2016, the ORLEN Group used the funds raised by ORLEN Capital through two issues of Eurobonds, held in June 2014 and 2016 in which the PKN ORLEN was the guarantor. The value of the issue amounted to respectively EUR 500 million and EUR 750 million and the maturity dated 30 June 2021 and 7 June 2023. Eurobonds have the ratings awarded by Fitch Ratings Ltd. At BBB- and the Moody's Investors Service agency (Moody's) at the level of Baa3. The funds raised by the ORLEN Capital from Eurobonds issue were loaned to PKN ORLEN. The nominal value of Eurobonds at the end of 2016 amounted to EUR 1 250 million (PLN 5 530 million at the average National Bank of Poland exchange rate for EUR/PLN as at 31 December 2016).

Additional information on the issue of debt securities is presented in <u>point 7.2.6</u> of the Consolidated Financial Statements for 2016.

for CAD/PLN as at 31 December 2016) and the maturity date has been set as of 31 December 2017. The balance of outstanding loans as at 31 December 2016 amounted to CAD 210 million (PLN 652 million at the average National Bank of Poland exchange rate for CAD/PLN as at 31 December 2016),

 long-term investment borrowing granted on 2 June 2014 to IKS Solino S.A. of PLN 50 million. The borrowing will be repaid in instalments, with the final maturity dated on 31 December 2024. As at 31 December 2016, the borrowing balance amounts to PLN 44 million,

 loans granted to ORLEN Finance in relation to international cash-pool system. As at 31.12.2016 the outstanding balance amounted to PLN 407 million.

At the end of 2016 in the ORLEN Group the following agreements of borrowings received by the Parent Company from entities within the ORLEN Group were in force:

 long-term loan agreement concluded on 7 June 2016 with ORLEN Capital in the amount of EUR 740 million, with the maturity date on 7 June 2023. The outstanding balance of the loan as at 31 December 2016 amounted to EUR 740 million (PLN 3 274 million at the average National Bank of Poland exchange rate for EUR/PLN as at 31 December 2016) - point 4.3.3.,

#### 4.3.5. Sureties, guarantees and other contingent liabilities

As at 31 December 2016 the ORLEN Group possessed off balance liabilities arising out of the issued guarantees and sureties for the overall of PLN 14 991 million, in comparison with PLN 9 109 million at the end of 2015. In 2016, the amount includes:

- sureties and guarantees issued to subsidiaries to the benefit of third parties of PLN 12 437 million, which related mainly to hedge of ORLEN Capital future liabilities resulting from two issuance of Eurobonds (see <u>point 4.3.4</u>) and timely payment of liabilities by the subsidiaries,
- securities for excise and excise duty on products and goods undergoing the procedure of suspended excise collection in the amount of PLN 2 066 million,

#### 4.3.6. Financial instruments

The ORLEN Group using financial instruments hedges its cash flows:

- from inflows from operating activities performing forward sales and purchases of currency in the formula without settlement (so called non-deliverable forwards),
- from sales of the ORLEN Group products and purchase of crude oil using commodity swaps,
- from periodic increase of operational inventory using commodity swaps,
- from interest payments concerning external financing using interest rate swaps (IRS) and Cross Currency Swap (CIRS),

#### 4.3.7. Ratings

In 2016 PKN ORLEN ratings at the investment level in two leading rating agencies: Fitch and Moody's remained unchanged, BBB- and Baa3 respectively (positive outlook). The above ratings reflects a consistent process of debt removal, of the ORLEN Group financing diversification and maintaining of the financial results at the safe level.

- long-term borrowing agreement concluded on 30 June 2014 with ORLEN Capital of EUR 496 million with the final maturity date on the 30 June 2021. As at 31 December 2016 the borrowing balance amounts to EUR 496 million (PLN 2 194 million at the average National Bank of Poland exchange rate for EUR/PLN as at 31 December 2016) - point 4.3.3.,
- short-term borrowing agreement concluded on 22 November 2013 with ORLEN Insurance of USD 15 million (PLN 63 million at the average National Bank of Poland exchange rate for USD/PLN as at 31 December 2016) with final maturity date on 21 November 2017 with extension possibility for the following year. As at 31 December 2016 the borrowing balance amounts to USD 10 million (PLN 42 million at the average National Bank of Poland exchange rate for USD/PLN as at 31 December 2016).

Borrowings granted to and received from the ORLEN Group are eliminated during standard consolidation procedures.

 guarantees concerning liabilities towards third parties issued in the course of normal business operations mainly relate to: guarantees and performance warranties, guarantee submitted as a security deposit for the purposes of the Article 105b of the Goods and Services Tax Act, guarantees providing security on property referred to the Article 38a of the Energy Law, customs guarantees, tender guarantees, payment guarantees of PLN 488 million.

Additional information on sureties and guarantees is presented in point 7.3.5.4 of the Consolidated Financial Statements for 2016.

Contingent liabilities are described in <u>point 7.4.4.</u> of the Consolidated Financial Statements for 2016.

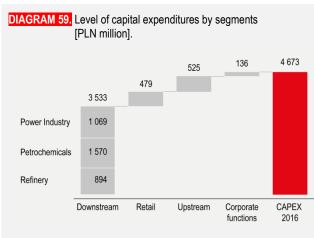
- from investment projects using foreign exchange forwards,
- related to payments made in foreign currencies, during spot or forward foreign exchange transactions,
- related to the obligation to account for CO<sub>2</sub> emissions, during spot or forward transactions involving the purchase of certificates for CO<sub>2</sub> emissions.

Financial instruments are presented in <u>point 7.3.</u> of the Consolidated Financial Statements for 2016.

In August 2016 the national rating of the Company was upgraded to A(pol), which reflected the recalibration of the Polish national rating scale by Fitch.

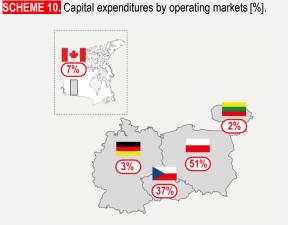
Ratings of bonds issued by the ORLEN Group are presented in point 4.3.3.

## 4.4. REALISATION OF INVESTMENT PLANS



## The most significant investments realised in 2016 comprised of:

- Construction of CCGT in Włocławek and Płock with infrastructure,
- Construction of Polyethylene (PE3) installation in Litvinov,
- Construction of Metathesis installation in Plock.
- Opening of 70 fuel station (incl. own stations: 35 in Poland, 10 in Germany and 25 in the Czech Republic),
- Modernization and rebranding of 67 fuel stations (incl. own station: 50 in Poland, 11 in the Czech Republic and 6 in Germany),
  - Opening of 133 new Stop Cafe, Stop Cafe Bistro and Stop Cafe 2.0 in Poland and the Czech Republic.
  - Canada PLN 344 million / Poland PLN 181 million.



## The Assessment of Investment Plan Realization

The ORLEN Group manages the capital expenditures structure depending on market situation and focuses on the most effective investment projects. The most relevant investment projects planned for completion in the following years are described in <u>point 4.5.</u>

The ORLEN Group maintains stable financial position. Generated cash flows and available funding sources will enable implementation of the planned investment projects.

The level of selected financial ratios confirming feasibility of completing investment plans is presented in <u>point 4.2.4.</u>

## 4.5. OUTLOOK – PROSPECTS FOR THE DEVELOPMENT OF THE OPERATIONS

Market prospects in 2017			
Expected macroeconomic environment	<ul> <li>GDP forecast for 2017 - Poland 3.6%, the Czech Republic 2.9%, Germany 1.5%, Lithuania 2.4%.</li> <li>Brent oil price – predicted oil price in baseline scenario at a comparable level with the average price in 2016. Factors that may affect the increase in oil prices is an increase in demand and arrangements of major producers concerning limiting of supply.</li> <li>Model Downstream margin – expected decrease of average margin level as compared to year 2016, mainly due to lower margins on petrochemical products (y/y). Despite the fall, high level of margin is expected due to favourable macroeconomic environment i.e. low oil prices and increase of fuel and petrochemical products consumption.</li> </ul>		
Projected market trends	• The expected growth in fuels demand, both gasoline and diesel oil in Poland, the Czech Republic and Baltic countries, stabilisation of demand in Germany.		
Legislative changes	<ul> <li>"Shadow economy" in the fuel market – implementation of the package of solutions, which aimed at reducing the "shadow economy": fuel package (from 1 August 2016), energy package (implementation at the end of Q1 2017), transport package (planned from Q2 2017).</li> <li>Mandatory reserves – gradual reserves reduction during 2017 from 60 to 53 days (approx. 0.3 million tonnes) and as a consequence decrease of net working capital.</li> <li>NIT – the level in 2017 for Poland will remain unchanged and will amount to 7.1%. NIT for PKN ORLEN will be reduced to 5.822%.</li> <li>Sales tax – legislative works are being conducted to introduce retail turnover tax, including fuel stations.</li> </ul>		
Investment activities of the ORLEN Group			

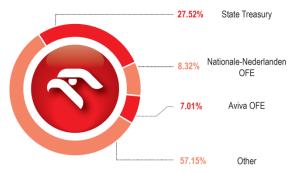
1) excludes potential expenditures on asset acquisition.

# 5. PARENT COMPANY OF THE ORLEN GROUP - PKN ORLEN

In accordance with the provisions of §83(7) of the Ordinance of the Minister of Finance of 19 February 2009 on the current and periodic information submitted by issuers of securities and on the conditions for considering as equivalent information required by the law of a

5.1. EQUITY AND SHAREHOLDING STRUCTURE IN PKN ORLEN

DIAGRAM 61. Shareholding structure in PKN ORLEN 1)



1) According to the Extraordinary General Meeting of PKN ORLEN held on 24 January 2017.

# 5.2. PKN ORLEN ON THE STOCK EXCHANGE

PKN ORLEN shares are quoted on the main market of the Warsaw Stock Exchange in the continuous quoting system and are included in WIG, WIG20, WIG30, WIG-Poland and WIG-FUELS – the industry index. Since 19 November 2009 PKN ORLEN's shares are included in the index of companies engaged in corporate social responsibility, called RESPECT Index.

non-member state, this Report of the Management Board on the activities of the ORLEN Group also includes elements of the Report of the Management Board of the Parent Entity, i.e. PKN ORLEN

- The share capital of PKN ORLEN is divided into 427 709 061 ordinary bearer shares with a nominal value of PLN 1.25. The ownership rights of PKN ORLEN's shares are fully transferable.
- The Management Board of PKN ORLEN has no information about agreements influencing the future change of current shareholding and bondholding structure.
- In 2016 no employee stock option scheme was implemented in PKN ORLEN.
- In 2016 PKN ORLEN and other entities of the ORLEN Group did not hold or not repurchase its own shares.
- Members of the Management Board of PKN ORLEN as at 31 December 2016 did not hold any shares of the Company Mr Artur Gabor from the Supervisory Board of PKN ORLEN held 3 200 shares of the Company at the end of 2016.

In 2016 the largest companies stock market index WIG20 increased by 4.8% (y/y), whereas WIG index increased by 11.4% (y/y). In this period PKN ORLEN's share price increased by 25.7% (y/y. In 2016, 265 965 219 shares changed their holders on the market, that is 18% less in comparison to 2015.

Key data	Unit	2016	2015	2014	change %
1	2	3	4	5	6=(3-4)/4
Net profit attributable to equity owners of the Parent Company	PLN mn	5 261	2 837	(5 811)	85.4%
Highest share price <sup>1)</sup>	PLN	87.17	85.25	49.50	2.3%
Lowest share price 1)	PLN	57.64	47.75	36.88	20.7%
Share price at the year-end 1)	PLN	85.30	67.85	48.92	25.7%
Average price in the period <sup>1)</sup>	PLN	68.56	65.84	42.26	4.1%
P/E ratio average <sup>2)</sup>		5.6	9.9	( 3.1)	(43.4%)
P/E ratio at the end of the year		6.9	10.2	(3.6)	(32.4%)
Number of shares	Item	427 709 061	427 709 061	427 709 061	0.0%
Capitalisation at the year end	PLN mn	36 484	29 020	20 924	25.7%
Average daily trading value	PLN mn	73	86	34	(15.1%)
Average daily trading volume	Item	1 059 622	1 288 482	796 614	(17.8%)

TABLE 28. Key data regarding PKN ORLEN's share.

1) Share price according to a closing share price.

2) P/E – stock market price / EPS.

Seated in Poland		Seated outsic	le of Poland
BDM	Haitong Bank	Bank of America Merrill Lynch	Morgan Stanley
BOŚ	Ipopema	Berenberg	Raiffeisen
BZ WBK	mBank	Concorde Securities	Renaissance Capital
Citi	PKOBP	Erste	Societe Generale
Deutsche Bank	Vestor	Goldman Sachs	UBS
		HSBC	UniCredit
		J.P. Morgan	Wood

TABLE 29. The list of financial institutions which issue recommendations and reports relating to shares of PKN ORLEN. 1)

1) As at the date of 3 February 2017.

Current list of recommendations issued for the Company's shares is available on the corporate website under: http://www.orlen.pl

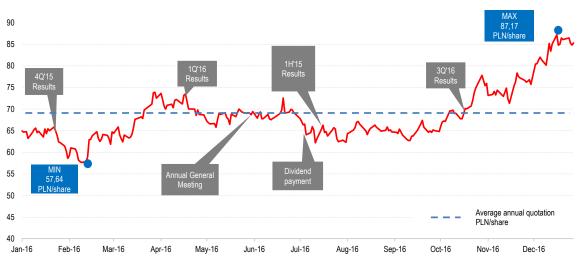


DIAGRAM 62. Key events on the background of quotations PKN ORLEN in 2016.

Source: Own calculations based on data from portal gpwinfostrefa.com.



DIAGRAM 63. Quotations of PKN ORLEN on WSE in 1999 – 2016.

Source: Own calculations based on data from portal gpwinfostrefa.com.

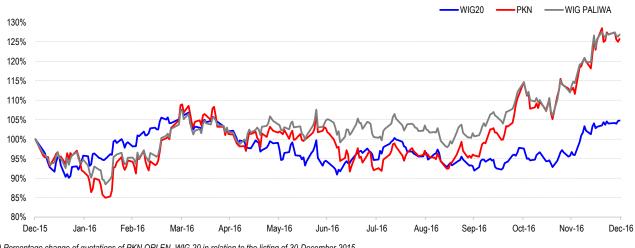


DIAGRAM 64. Quotations of PKN ORLEN, WIG20 and WIG-FUELS on WSE in 2016. 1)

1) Percentage change of quotations of PKN ORLEN, WIG 20 in relation to the listing of 30 December 2015. Source: Own calculations based on data from portal gpwinfostrefa.com.

# 5.3. DIVIDEND POLICY

The dividend policy assumed a gradual increase in the level of dividend per share by taking into account the implementation of strategic financial indicators and forecasts of the macroeconomic situation. This method does not relate the dividend to net profit, which in the ORLEN Group's area of operations is subject to high fluctuations and can include non-cash items, such as the revaluation of assets, inventories or loans and as a result does not fully reflect the Group's current financial situation.

The recommendation of profit distribution for PKN ORLEN for 2016 is presented in <u>point 7.2.7.6</u> of Consolidated Financial Statement for 2016.

# 5.4. OPERATIONAL ACTIVITIES

The stable growth of the Polish economy supported by a favourable situation on the labour market had a positive impact on the level of market fuel consumption and thus on the sales results of PKN ORLEN. Energy Market Agency data indicate a permanent reversal of downward trend, especially in the consumption of diesel oil in the Polish market. In 2016, the consumption of gasoline and diesel oil increased respectively by 6% and 12% (y/y). Low crude oil prices,

and consequently, prices of fuel in 2016 also had significant impact on the growth in demand.

In 2016, the total sales volume (after elimination of re-sale of crude oil to the ORLEN Group companies) reached 16 121 thousand tonnes and increased by 1.1% (y/y).

Salaa	201	6	201	2015		4	ahana	• 0/
Sales	value	volume	value	volume	value	volume	chang	e %
1	2	3	4	5	6	7	8=(2-4)/4	9=(3-5)/5
Downstream Segment	38 859	11 064	44 986	11 145	58 729	10 589	(13.6%)	(0.7%)
Light distillates 1)	3 112	1 595	3 457	1 516	4 352	1 464	(10.0%)	5.2%
Medium distillates 2)	10 242	5 294	10 957	5 020	12 891	4 417	(6.5%)	5.5%
Heavy fractions 3)	1 803	2 077	2 426	2 320	2 637	1 618	(25.7%)	(10.5%)
Monomers 4)	2 390	789	3 203	944	3 292	811	(25.4%)	(16.4%)
Aromas 5)	533	212	552	214	754	186	(3.4%)	(0.9%)
PTA	1 571	605	1 532	587	1 767	571	2.5%	3.1%
Other 6)	19 208	492	22 859	544	33 036	1 522	(16.0%)	(9.6%)
Retail Segment	14 712	5 057	15 420	4 796	18 166	4 620	(4.6%)	5.4%
Light distillates 1)	4 699	1 810	4 795	1 687	5 732	1 614	(2.0%)	7.3%
Medium distillates 2)	7 714	3 247	8 503	3 109	10 292	3 006	(9.3%)	4.4%
Other 7)	2 299	0	2 122	0	2 142	0	8.3%	-
Total	53 571	16 121	60 406	15 941	76 895	15 209	(11.3%)	1.1%

TABLE 30. Sales of PKN ORLEN in the Downstream and retail segments (in PLN million/thousands of tonnes).

1) Gasoline, LPG.

Diesel oil, light heating oil, jet fuel, in retail segment diesel oil.

3) Heavy heating oil, bitumen, oils.

4) Ethylene, propylene.

5) Benzene, toluene, paraxylene, orthoxylene,

6) Other (in value terms) – comprises revenue from the sale of crude oil to the ORLEN Group companies in the amount of PLN 17 968 million in 2016, PLN 21 084 million in 2015 and

PKN ORLEN sales in **Downstream Segment** in 2016 (after elimination of re-sale of crude oil to the ORLEN Group companies) reached a similar level to previous year and amounted to 11 064 thousand tonnes. The best results were achieved in the segment of light and medium distillates of which volume increased by 5.2% and 5.5% (y/y) respectively. The intensification of pro-consumer activities and integration of fuel companies within the ORLEN Paliwa from the end of 2015 had a positive impact on higher sales to foreign corporations and small and medium-sized companies.

In the light distillates business area the growth in sales was recorded in both gasoline and LPG. In middle distillates business area the biggest increase in sales occurred in case of diesel oil, which was mainly influenced by the sales situation, especially in IV quarter of 2016 as the result of the introduction of the so-called fuel package, which reduced the impact of the "shadow economy". In 2016 PKN ORLEN continued the growth of jet fuel sales, observed in the last few years, which allowed the strengthening of the leading position among its suppliers. In 2016 also the sales of light heating oil increased.

The sales of heavy fractions decreased by (10.5)% (y/y) mainly due to restriction on sales of heavy heating oil, with higher sales of more profitable oil fractions and comparable sales of bitumen.

Sales result in the petrochemical area were under strong pressure starting from September 2016, because of the cyclic maintenance overhaul of the Olefin installations – which is the most important petrochemical installation in PKN ORLEN.

The volume of fuel sales in the **Retail segment** in 2016 increased by 5.4% (y/y) and amounted to 5 057 thousand tonnes. The growth in sales was recorded for gasoline, diesel oil and LPG which was significantly influenced by a higher level of fuel consumption on the Polish market. Among the positive sales trend the increase of 12%

PLN 29 558 million in 2014. Also includes revenue from the sales of mandatory reserves for the total amount of PLN 2 236 million in 2014 as well as revenue from the sale of segment services. Other volume – consists mainly of acetone, butadiene, phenol, glycols, ethylene oxide and sulphur.

7) Other (in value terms) - includes revenues from sales of non-fuel goods and services.

(y/y) in premium fuels (Verva) and the results of fleet sales should be noted.

Sales trend and efficiency action in the retail segment in Poland are discussed in point 3.2.2.4.

**The supply sources** for Downstream and retail segment are described in <u>point 3.2.1.5</u>, and <u>point 3.2.2.5</u>.

In years 2016, 2015 and 2014, the Company earned revenues from sales to 3 customers of products and goods of the Downstream segment respectively in the amount of PLN 29 044 million, PLN 31 901 million and PLN 39 830 million, which individually exceeded 10% of total revenues. The recipients of these were related parties of PKN ORLEN.

Summary of significant transactions in 2016 (exceed PLN 100 million) between **Parent Company and related parties** is presented in the table below.

#### TABLE 31. Significant transactions in the ORLEN Group [PLN million].

Counterparty	Sales of Parent Company	Purchase of Parent Company
ORLEN Lietuva AB	10 911	935
ORLEN Paliwa Sp. z o.o. Unipetrol RPA s.r.o.	10 780 7 378	948 267
BOP	2 097	18
ORLEN Asfalt Sp. z o.o.	585	0
Anwil S.A.	395	84
ORLEN Oil Sp. z o.o.	154	87
ORLEN Południe S.A.	117	812
ORLEN Koltrans Sp. z o.o.	7	131
ORLEN Serwis S.A.	5	113

# 5.5. FINANCIAL RESULTS

Principles of presentation of the separate financial statements are described in point 5.2. of the Separate Financial Statements for year 2016.

# 5.5.1. Overview of basic economic and financial figures and evaluation of the factors having a significant impact on the financial result

TABLE 32. Selected data from the separate statement of profit or loss and other comprehensive income.

Item, PLN million	2016	2015	2014	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Sales revenues	53 633	60 466	76 972	(6 833)	(11.3%)
Profit from operations under LIFO increased by amortisation and depreciation (EBITDA LIFO)	4 846	4 376	2 920	470	10.7%
Profit from operations increased by amortisation and depreciations (EBITDA)	5 011	2 869	648	2 142	74.7%
Profit from operations	3 869	1 769	(380)	2 100	118.7%
Net financial revenues and expenses	2 200	(461)	(4 500)	2 661	-
Profit/(Loss) before tax	6 069	1 308	(4 880)	4 761	364.0%
Income tax	(705)	(260)	208	(445)	(171.2%)
Net profit/(Loss)	5 364	1 048	(4 672)	4 316	411.8%

The full version of separate statement of profit or loss and other comprehensive income is available in point 1. of the Consolidated Financial Statements for year 2016.

#### Sales from revenues

Total sales volumes (after elimination of re-sale of crude oil to the ORLEN Group companies) increased by 1.1% (y/y) to the level of 16 121 thousand tonnes.

Sales revenues of PKN ORLEN amounted to PLN 53 633 million and decreased by (11.3)% (y/y), as a result of lower quotations of crude oil and PKN ORLEN products.

- Revenues of **Downstream segment** decreased by (13.6)% (y/y) mainly due to lower market quotations of crude oil and products and decreased by (0.7)% (y/y) sales volume of petrochemical products due to periodic Olefin installation maintenance overhaul. In comparison to previous year average gasoline quotations decreased by (17.4)% (y/y), diesel oil by (20.3)% (y/y), Jet A-1 fuel by (19.2)% (y/y) and light heating oil by (19.7)% (y/y) and quotations of petrochemicals products, including ethylene by (5.6)% (y/y), propylene by (22.4)% (y/y) and benzene by (6.9)% (y/y).
- Revenues of Retail segment decreased by (4.6)% (y/y) mainly due to lower fuels prices on fuel stations accompanied by higher by 5.5% (y/y) sales volume.
- Revenues of Corporate Functions increased by 3.3% (y/y).

The largest market for PKN ORLEN in terms of revenue from sales was the Polish market (after elimination of re-sale of crude oil to the ORLEN Group companies), where the value of products and services amounted to PLN 31 886 million and the German market with revenues of PLN 1 001 million. and the Czech Republic market with revenues of PLN 684 million. The remaining sales value was realised to customers from Switzerland, Ukraine, the Netherlands and Ireland.

Detailed information concerning the changes in sales volume in individual segments are described in <u>point 5.4.</u> Data on sales revenues are also presented in point 7.1.1 and point 7.1.2 of the Separate Financial Statements for year 2016.

# Operating costs by nature and functions

# TABLE 33. Cost of goods sold in PKN ORLEN

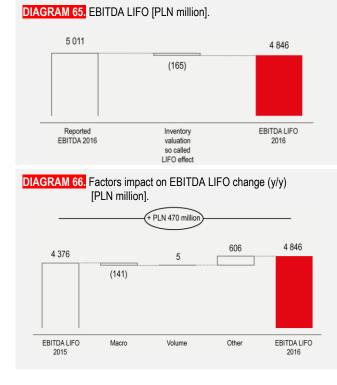
Item, PLN million	2016	2015	2014	structure 2016	structure 2015	structure 2014	change %
1	2	3	4	5	6	7	8=(2-3)/3
Materials and energy	(21 181)	(28 226)	(37 218)	43.0%	48.4%	48.8%	25.0%
Cost of merchandise and raw materials	(22 826)	(24 682)	(34 252)	46.3%	42.3%	44.9%	7.5%
External services	(2 243)	(2 439)	(2 366)	4.5%	4.2%	3.1%	8.0%
Employee benefits	(732)	(706)	(681)	1.5%	1.2%	0.9%	(3.7%)
Depreciation and amortisation	(1 142)	(1 100)	(1 028)	2.3%	1.9%	1.4%	(3.8%)
Taxes and charges	(919)	(929)	(429)	1.9%	1.6%	0.6%	1.1%
Other	(252)	(262)	(231)	0.5%	0.4%	0.3%	3.8%
Cost by nature	(49 295)	(58 344)	(76 205)	100.0%	100.0%	100.0%	15.5%
Change in inventories	(608)	(482)	(1 104)				(26.1%)
Cost of products and services for own use	190	88	26				115.9%
Operating cost	(49 713)	(58 738)	(77 283)				15.4%
Selling costs	2 310	2 306	2 177				(0.2%)
General and administrative costs	739	867	823				14.8%
Cost of goods sold	(46 664)	(55 565)	(74 283)				16.0%

The consumption of materials and energy costs, related mostly to consumption of crude oil in technological processes, accounted for the largest share of **costs by nature**. The decrease of costs level by 25.0% (y/y) resulted from lower quotations of crude oil on global markets by around 8 USD/bbl. In 2016, the share of raw material costs decreased by (5.4) percentage points (y/y) and share of merchandise costs purchased on the market increased by 4.0 percentage points.

The above changes are due to increased scope of maintenance overhauls of production installations (y/y) (including periodic overhaul of Olefin installation) as well as improvement of market situation resulting from reduction of "shadow economy" impact and measures taken to execute trade contracts.

**Selling costs** remained at the same level as in the previous year, however decrease in **general and administrative** costs resulted from lower costs of mandatory reserves maintenance due to reduction of inventory level from 68 to 60 days.

# Profit from operations increased by depreciation & amortisation according to inventory valuation under LIFO method (EBITDA LIFO)



- In 2016 PKN ORLEN's realised EBITDA LIFO amounted to PLN 4 846 million and increased by PLN 470 million (y/y).
- The positive impact of changes in oil prices on inventory valuation in 2016 amounted to PLN 165 million.
- As a result EBITDA of PKN ORLEN for 2016 amounted to PLN 5 011 million.

#### EBITDA LIFO of PKN ORLEN increased by PLN 470 million (y/y).

- The negative impact of macroeconomic factors amounted to PLN (141) million PLN (y/y) and consisted mainly of the effect of lower margins on fuels and positive impact in the Brent/Ural differential, petrochemical margins and depreciation of PLN exchange rate against foreign currencies.
- The positive volume effect in the amount of PLN 5 million (y/y) was achieved mainly due to higher sales of the retail segment besides reduced petrochemicals volumes resulting from maintenance overhaul of olefin installations.
- The positive impact of other factors amounted to PLN 606 million (y/y) and included:
  - PLN 1 157 million (y/y) lack of negative effects from 2015 related to settlement of repurchase of the V and VI tranche of mandatory reserves.
  - PLN (551) million (y/y) mainly the impact of lower sales margins in the area of refinery products and the negative impact of the change in the balance of other operating activities in the amount of PLN (92) million (y/y) due to revaluation of provision for environmental and economic risks.

#### Net financial revenues / costs and net result

In 2016, the net financial revenues amounted to PLN 2 200 million and included mainly revenues from dividends in total amount of PLN 1 610 million, the positive effect of reversing of impairment on ORLEN Lietuva shares in amount of PLN 1 150 million, foreign exchange losses on revaluation of loans and other items in foreign currencies in the amount of PLN (460) million and net interest in the amount of PLN (164) million.

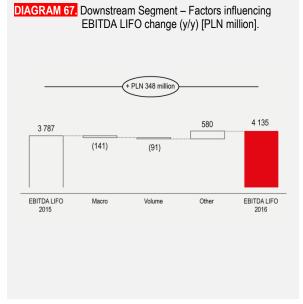
After consideration of tax charges in the amount of PLN (705) million net profit of PKN ORLEN for 2016 amounted to PLN 5 364 million, increased by PLN 4 316 million (y/y).

#### Segment results of PKN ORLEN

#### **Downstream Segment**

 TABLE 34.
 Basic financial data of Downstream segment.

Downstream Segment, PLN million	2016	2015	2014	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Segment revenues, including:	48 046	55 759	72 107	(7 713)	(13.8%)
Sales revenues from external customers	38 859	44 986	58 729	(6 127)	(13.6%)
Sales revenues from transactions with other segments	9 187	10 773	13 378	(1 586)	(14.7%)
Segment expenses	(44 642)	(54 330)	(72 654)	9 688	17.8%
Other operating income/expenses, net	85	51	(31)	34	66.7%
Operating Profit under LIFO increased by depreciation and amortisation (EBITDA LIFO)	4 135	3 787	2 427	348	9.2%
Operating Profit increased by depreciation and amortisation (EBITDA)	4 300	2 280	155	2 020	88.6%
Operating Profit under LIFO	3 324	2 987	1 694	337	11.3%
Profit/(Loss) from operations	3 489	1 480	(578)	2 009	135.7%
CAPEX	1 595	1 462	1 928	133	9.1%



# EBITDA LIFO of the Downstream Segment increased by PLN 348 million (y/y).

- The negative impact of macroeconomic factors amounted to PLN (141) million PLN (y/y) and consisted mainly of the effect of lower margins on fuels and positive impact in the Brent/Ural differential, petrochemical margins and depreciation of PLN exchange rate against foreign currencies.
- The negative volume effect in the amount of PLN (91) million (y/y) mainly as a result of reduced petrochemicals volume due to maintenance overhaul of Olefin installation.
- The positive impact of other factors amounted to PLN 580 million (y/y) and included:
  - PLN 1 157 million (y/y) lack of negative effects from 2015 related to settlement of repurchase of the V and VI tranche of mandatory reserves of PLN (297) million in 2015 and of PLN (860) million (y/y) from August 2015.
- PLN (577) million (y/y) mainly the effect of lower sales margins in the refinery products business area.
- The positive impact of changes in oil crude quotations on inventory valuation amounted to PLN 165 million and as a result the EBITDA of PKN ORLEN for 2016 amounted to 4 300 million.

The capital expenditure increased by PLN 133 million (y/y) to the level of PLN 1 595 million.

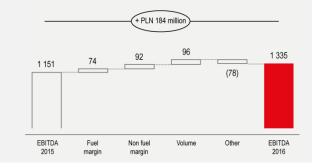
PKN ORLEN fulfils the obligations arising from the Act on energy law in respect of licensing (change and expansion of the license to produce electric energy and heating) and of classification according to tariff (submission of tariffs to the President of the Energy Regulatory Office for the purposes of heating production and trade, electric energy distribution and natural gas trade), support mechanisms (in respect of cogeneration) and regulatory liabilities (obligations arising from the sale of energy and the industrial consumer status), reporting (including reporting for the purposes of the Energy Regulatory Office) and settlement with recipients (in respect of service quality standards, possibility to change the vendor).

# **Retail Segment**

TABLE 35. Basic financial data for Retail segment.

Retail Segment, PLN million	2016	2015	2014	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Segment revenues, including:	14 712	15 420	18 166	(708)	(4.6%)
Sales revenues from external customers	14 712	15 420	18 166	(708)	(4.6%)
Sales revenues from transactions with other segments	0	0	0	Ó	-
Segment expenses	(13 589)	(14 476)	(17 282)	887	6.1%
Other operating income/expenses, net	(37)	(24)	(15)	(13)	(54.2%)
Profit from operations increased by depreciation and amortisation (EBITDA)	1 335	1 151	1 087	184	16.0%
Profit from operations	1 086	920	869	166	18.0%
CAPEX	276	282	214	(6)	(2.1%)

# DIAGRAM 68. Retail Segment - factors impact (y/y) [PLN million].



### EBITDA of the Retail Segment increased by PLN 184 million (y/y).

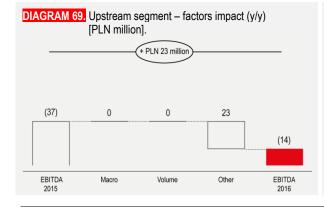
- The positive impact of fuel margins and increase of results on sale of non-fuel products and services (y/y).
- The positive impact of higher by 5.4% (y/y) retail sales volumes.
- The negative impact of the other factors related mainly to increased costs of operations of fuel stations resulting from the higher sales volume.

The segment's capital expenditures remained at a similar level (y/y) and amounted to PLN 276 million.

# **Upstream Segment**

TABLE 36. Basic financial data for Upstream segment.

Upstream Segment, PLN million	2016	2015	2014	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Segment revenues, including:	0	0	0	0	-
Sales revenues from external customers	0	0	0	0	-
Sales revenues from transactions with other segments	0	0	0	0	-
Segment expenses	(11)	(37)	(42)	26	70.3%
Other operating income/expenses, net	(3)	0	0	(3)	-
Loss from operations increased by depreciation and amortisation (EBITDA)	(14)	(37)	(42)	23	62.2%
Loss from operations	(14)	(37)	(42)	23	62.2%
CAPEX	0	0	0	0	-



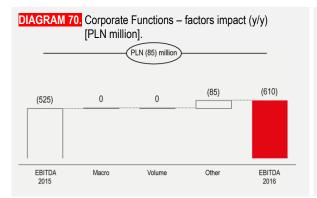
EBITDA of the Upstream segment increased by PLN 23 million (y/y).

• Lower costs due to change of PKN ORLEN's project financing method. The activities are funded directly by ORLEN Upstream Sp. z o.o.

# **Corporate Functions**

TABLE 37. Basic financial data for Corporate Functions.

Corporate Functions, PLN million	2016	2015	2014	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Segment revenues, including:	149	140	153	9	6.4%
Sales revenues from external customers	62	60	77	2	3.3%
Sales revenues from transactions with other segments	87	80	76	7	8.7%
Segment expenses	(745)	(748)	(759)	3	0.4%
Other operating income/expenses, net	(96)	14	(23)	(110)	-
Loss from operations increased by depreciation and amortisation (EBITDA)	(610)	(525)	(552)	(85)	(16.2%)
Loss from operations	(692)	(594)	(629)	(98)	(16.5%)
CAPEX	115	125	216	(10)	(8.0%)

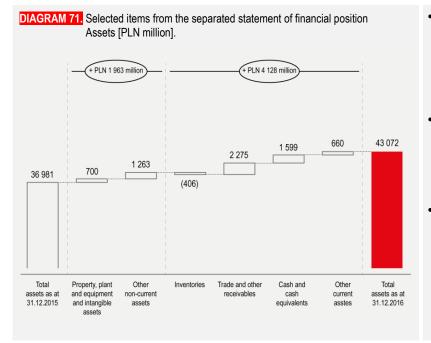


#### In 2016, EBITDA of Corporate Functions decreased by PLN (85) million (y/y).

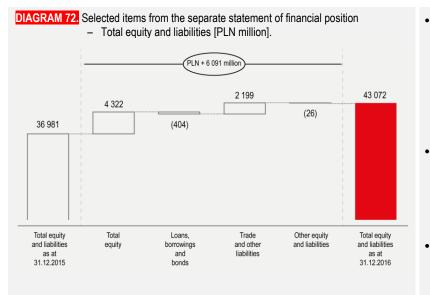
 The negative impact of changes in the balance of other operating activities in the amount of PLN (110) million (y/y), mainly involving revaluation of provision for environmental and economic risks.

 The segment's capital expenditures decreased by PLN (10) million (y/y) and amounted to PLN 115 million.

# 5.5.2. Statement of financial position



- The value of property, plant & equipment and intangible fixed assets increased by PLN 700 million (y/y) and amounted to PLN 15 965 million as at 31 December 2016 mainly due to capital expenditures of PLN 1 986 million, depreciation and amortisation in the amount of PLN (1 142) million and other elements of PLN (144) million including decrease in the balance of CO<sub>2</sub> emission rights by PLN (97) million.
- Other changes within non-current assets related mainly to increase of the value of shares in related companies of PLN 1 337 million as a result of the partly reversal of impairment on shares of ORLEN Lietuva in the amount of PLN 1 150 million and an increase of PLN 174 million of capital commitment in ORLEN Upstream Sp. z o.o.
- Current assets increased by PLN 4 128 million (y/y) and amounted to PLN 17 963 million as at 31 December 2016, mainly due to increase of trade receivables and other receivables by PLN 2 275 million; increase of cash by PLN 1 599 million and increase of other financial assets by PLN 254 million mainly due to recognition of loans granted to ORLEN Upstream Canada and ORLEN Finance AB in total amount of PLN 1 052 million and decrease by PLN (622) million of cash flow hedges valuation.



- Equity as at 31 December 2016 amounted to PLN 22 168 million and increased by PLN 4 322 million in comparison to the balance as at the end of 2015, mainly due to:
  - net profit for 2016 in the amount of PLN 5 364 million,
  - dividend payment for profit of the year 2015 in the amount of PLN (855) million,
  - hedging reserve balance decrease by PLN (184) million.
- Indebtedness as at 31 December 2016 decreased by PLN (404) million and amounted to PLN 8 838 million as a result of net loan, borrowings and bonds repayment in amount of PLN (705) million and the impact of foreign exchange losses from revaluation of loans and borrowings in foreign currencies and valuation of debt in total amount of PLN 301 million.
- The increase of trade and other liabilities at the end of 2016 mostly due to crude oil and biocomponents purchases.

The full version of separate statement of financial position is available in the point 2. of the Separate Financial Statements for year 2016.

# 5.5.3. PKN ORLEN's shares in related parties presented as long-term investments – synthetic financial data of the most significant entities.

#### **ORLEN Upstream Group**

ORLEN Upstream sp. z o.o. is a parent company of the ORLEN Upstream Group. The share capital of the Company is fully covered by PKN ORLEN as at 31 December 2016.

The business activities of the Company include: exploration and recognition of hydrocarbons reserves, extraction of crude oil and natural gas.

TABLE 38. Basic operation and financial data of the ORLEN Upstream Group (complaint with the data prepared for the purpose of the ORLEN Group consolidation).

ltem	Unit	2016	2015	2014	change	change %
1	2	3	4	5	6=(3-4)	7=(3-4)/4
Sales volume	'000 tonnes	558	310	258	248	80.0%
Sales revenue	PLN million	460	253	340	207	81.8%
Profit from operations increased by depreciation and amortisation (EBITDA) before impairment allowances <sup>1</sup>	PLN million	270	79	191	191	241.8%
Profit from operations increased by depreciation and amortisation (EBITDA)	PLN million	197	(773)	(131)	970	-
Net loss	PLN million	(189)	(802)	(139)	613	76.4%
Equity capital	PLN million	2 768	2 577	1 855	191	7.4%
Total assets	PLN million	3 946	3 745	2 549	201	5.4%
Employment	employees	146	126	112	20	15.9%

1) Impairment of allowances of non-current assets recognized in 2016, 2015, 2014 amounted to PLN (73) million, PLN (852) million and PLN (322) million respectively.

#### Unipetrol a.s. (including own Capital Group)

Unipetrol a.s. is a parent company of the Unipetrol Group, which was established in 1994 due to restructuring of the Czech oil industry. Then the Group consisted of, besides Unipetrol a.s.: Kaucuk, Chemopetrol, Benzina, Ceska Rafinerska, Unipetrol Trade,

Spolana, Paramo, Unipetrol Rafinerie. In 2005 PKN ORLEN acquired 62,99% of Unipetrol a.s. shares.

The core business activity of the Unipetrol Group is crude oil throughput, production and distribution of refining, petrochemical and chemical products.

TABLE 39. Basic operation and	financial data of	the Unipetrol Group	(complaint with the d	data prepared for the purp	ose of the ORLEN Group
consolidation).					

Item	Unit	2016	2015	2014	change	change %
1	2	3	4	5	6=(3-4)	7=(3-4)/4
Sales volume	'000 tonnes	7 321	7 222	6 042	99	1.4%
Sales revenue	PLN million	14 179	16 669	18 873	(2 490)	(14.9%)
Profit from operations under LIFO increased by depreciation and amortisation (EBITDA LIFO) before impairment allowances <sup>1</sup>	PLN million	1 652	1 764	1 230	(112)	(6.3%)
Profit/(Loss) from operations increased by depreciation and amortisation (EBITDA)	PLN million	1 939	1 615	200	324	20.1%
Net profit/(loss)	PLN million	1 308	1 072	(72)	236	22.0%
Equity capital	PLN million	6 794	5 571	4 336	1 223	22.0%
Total assets	PLN million	11 215	8 576	7 437	2 639	30.8%
Employment	employees	4 576	3 831	3 878	745	19.4%

1) Impairment of allowances of non-current assets recognized in 2016, 2015, 2014 amounted to PLN 300 million, PLN (111) million and PLN (752) million respectively.

# AB ORLEN Lietuva (including own Capital Group)

AB ORLEN Lietuva is a parent company of the ORLEN Lietuva Group and it was registered in the Lithuanian Register Court on 24 January 1991 under name of AB Mazeikiu Nafta. On 15 December 2006 PKN ORLEN purchased majority stake of the Company from Yukos International UK B.V., and on 29 April 2009 roku became the sole owner through purchase of stock from the Lithuanian Republic Government. Since 1 September 2009 the Company run its operations under AB ORLEN Lietuva name. The core business activity of AB ORLEN Lietuva is crude oil throughput, production of refining products and wholesale of the Company's product on local markets, land and sea export utilising Klajpedos Nafta terminal.

TABLE 40. Basic operation and financial data of the ORLEN Lietuva Group (complaint with the data prepared for the purpose of the ORLEN Group consolidation).

ltem	Unit	2016	2015	2014	change	change %
1	2	3	4	5	6=(3-4)	7=(3-4)/4
Sales volume	'000 tonnes	9 465	8 639	7 737	826	9.6%
Sales revenue	PLN million	14 279	15 578	19 589	(1 299)	(8.3%)
Profit from operations under LIFO increased by						
depreciation and amortisation (EBITDA LIFO)	PLN million	1 093	1 073	(194)	20	1.9%
before impairment allowances <sup>1</sup>						
Profit/(Loss) from operations increased by depreciation and amortisation (EBITDA)	PLN million	1 006	1 102	(4 365)	(96)	(8.7%)
Net profit/(loss)	PLN million	944	888	(4 575)	56	6.3%
Equity capital	PLN million	1 639	1 206	253	433	35.9%
Total assets	PLN million	3 485	2 291	1 918	1 194	52.1%
Employment	employees	1 582	1 569	1 650	13	0.8%

1) Impairment of allowances of non-current assets recognized in 2016, 2015, 2014 amounted to by PLN (10) million, PLN 1 million and PLN (4 181) million respectively.

#### **ORLEN Deutschland GmbH**

ORLEN Deutschland GmbH was established as the result of PKN ORLEN's purchase of fuel stations network in North and East Germany from Deutsche BP AG in December 2002. The share

capital of the Company was fully covered by PKN ORLEN as at 31 December 2016. ORLEN Deutschland GmbH carries out mostly activities related to retail sales of fuel activities in Germany.

# TABLE 41. Basic operation and financial data of ORLEN Deutschland GmbH (complaint with the data prepared for the purpose of the ORLEN Group consolidation).

Item	Unit	2016	2015	2014	change	change %
1	2	3	4	5	6=(3-4)	7=(3-4)/4
Sales volume	'000 tonnes	2 640	2 603	2 621	37	1.4%
Sales revenue	PLN million	13 704	13 924	15 965	(220)	(1.6%)
Profit from operations increased by depreciation and amortisation (EBITDA)	PLN million	294	236	230	58	24.6%
Net profit	PLN million	129	95	91	34	35.8%
Equity capital	PLN million	518	467	458	51	10.9%
Total assets	PLN million	1 622	1 423	1 567	199	14.0%
Employment	employees	146	140	143	6	4.3%

#### Anwil S.A.

Anwil S.A. was established on 15 March 1993 due to transformation of the State-owned company into a sole-owner, joint-stock company owned by the State Treasury. The share capital of the Company was fully covered by PKN ORLEN as at 31 December 2016. The business activities of Anwil S.A. include production of nitrogenous fertilisers, plastic materials (polivinyl chloride, granulates, mixtures and PVC sheets), as well as chemicals for processing industry and agriculture (ammonia, chlorine, nitric acid, industrial salt, caustic soda).

TABLE 42. Basic operation and financial data of Anwil S.A. (complaint with the data prepared for the purpose of the ORLEN Group consolidation).

Item	Unit	2016	2015	2014	change	change %
1	2	3	4	5	6=(3-4)	7=(3-4)/4
Sales volume	'000 tonnes	1 650	2 091	1 898	(441)	(21.1%)
Sales revenue	PLN million	2 474	3 385	3 291	(911)	(26.9%)
Profit from operations increased by depreciation						
and amortisation (EBITDA) before impairment	PLN million	578	571	297	7	1.2%
allowances <sup>1</sup>						
Profit/(Loss) from operations increased by	PLN million	575	564	79	11	2.0%
depreciation and amortisation (EBITDA)		575	504	19	11	2.0 /0
Net profit/(loss)	PLN million	533	408	2	125	30.6%
Equity capital	PLN million	1 234	1 095	863	139	12.7%
Total assets	PLN million	1 594	1 607	1 590	(13)	(0.8%)
Employment	employees	1 244	1 939	2 843	(695)	(35.8%)

 Impairment allowances of non-current assets in 2016, 2015 and 2014 amounted to PLN (3) million, PLN (7) million and PLN (218) million respectively. The allowances from 2014 amounting to PLN (154) million were reversed, as a consequence of the consolidation procedures due to which, on the ORLEN Group level, the Anwil assets are classified in Petrochemical segment and the impairment tests were conducted within the segment.

# 5.5.4. Statement of cash flows

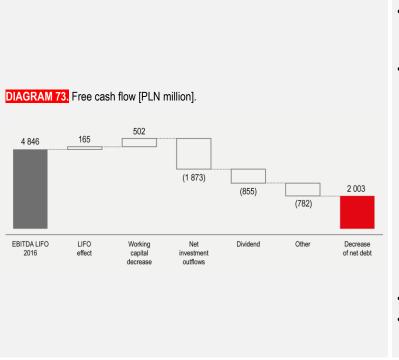
TABLE 43. Selected items from the separate statement of cash flows.

Item, PLN million	2016	2015	2014	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Net cash from operating activities	5 434	948	2 217	4 486	473.2%
Change in working capital	502	(1 892)	1 823	2 394	-
Net cash (used in) / provided by investing activities	(1 873)	(1 669)	(2 401)	(204)	(12.2%)
Net cash (used in) / provided by financing activities	(1 970)	(1 796)	1 592	(174)	(9.7%)
Net increase/(decrease) in cash and cash equivalents	1 591	(2 517)	1 408	4 108	-
Effect of exchange rate changes on cash and cash equivalents	8	6	(5)	2	33.3%
Cash and cash equivalents, beginning of the period	964	3 475	2 072	(2 511)	(72.3%)
Cash and cash equivalents, end of the period	2 563	964	3 475	1 599	165.9%

Taking into account the revaluation of cash due to exchange differences, the cash balance in 2016 increased by PLN 1 599

million and as at 31 December 2016 amounted to PLN 2 563 million.

The full version of the separate statement of cash flows is available in point 4. of the Separate Financial Statements for year 2016.



- Positive effect of net decrease of working capital by PLN 502 million mostly due to increase of trade liabilities from crude oil and biocomponents purchases, tax liabilities with the increase of trade receivables.
- Net cash flow from operating activities in 2016 amounted to PLN (1 873) million and included mainly:
  - net expenditure on acquisition of tangible fixed assets, intangible fixed assets and rights of perpetual usufruct of land in the amount of PLN (2 348) million,
  - expenses related to loans granted by PKN ORLEN to ORLEN Upstream Canada and ORLEN Finance AB in amount of PLN (1 052) million,
  - income from received dividends of PLN 1 623 million mainly from ORLEN Lietuva, Anwil S.A., Basell ORLEN Polyolefins Sp. z o.o., Unipetrol, ORLEN Deutschland, ORLEN Asfalt Sp. z o.o. and ORLEN Poludnie S.A.
  - net expenses related to shares acquisition of PLN (94) million, mainly relating to acquisition of shares in ORLEN Upstream Sp. z o.o. amounted to PLN (174) million in second quarter of 2016 and income from sales of ORLEN Transport S.A. amounted to PLN 85 million in the first quarter of 2016.
- The dividend payment of PLN (855) million
- Other include mainly paid income tax, payments of interests, foreign exchange differences (operating and from revaluation of debt) and net expenses within cash pool system.

#### 5.5.5. Differences between financial results disclosed in annual report and previously published forecasts of financial results for the year.

PKN ORLEN did not publish forecasts of financial results for 2016. Changes introduced to the quarterly financial Information published on the 26 January 2017 in the Consolidated quarterly Report of the ORLEN Group for the  $4^{th}$  quarter of 2016 are presented in point 5.4. of the Separate Financial Statements for year 2016.

# 5.6. DEBT AND FINANCING SOURCES

# 5.6.1. Loans, borrowings, and debt securities

PKN ORLEN uses services of banks proving high reliability as well as remarkable market position. Such approach allows to limit banking costs with providing concurrent guarantee of high standard of services provided and security of deposits of cash surplus.

# TABLE 44. Sources of financing.

Item, PLN million	2016	2015	2014	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Bank loans	757	4 213	5 538	(3 456)	(82.0%)
Borrowings	5 578	2 728	2 375	2 850	104.5%
Debt securities	2 503	2 301	2 229	202	8.8%
Financial indebtedness	8 838	9 242	10 142	(404)	(4.4%)
By maturity:					
Non-current	7 503	8 125	9 212	(622)	(7.7%)
Current	1 335	1 117	930	<b>`</b> 218́	19.5%

Detailed information on the parameters of credit agreements and financing banks are described in <u>point 4.3.2</u>. of this Report.

As regards the loan agreements in force, PKN ORLEN is obliged to maintain selected financial indicators within brackets agreed in the loan agreements.

After taking into account cash and cash equivalents, net financial indebtedness at the end of 2016 amounted to PLN 6 275 million. In 2016 the financial ratios assessed by the lending banks remained at the safe level and confirm the full ability to perform payment obligations resulting from the loan agreements and other agreements with banks and financial institutions.

#### 5.6.2. Guarantees, sureties and other contingent liabilities

As at 31 December 2016 PKN ORLEN possessed off-balance liabilities arising out of the issued guarantees and sureties for the overall of PLN 13 600 million in comparison with PLN 8 808 million at the end of 2015. In 2016 the amount includes:

- sureties and guarantees issued to subsidiaries to the benefit of third parties of PLN 11 888 million, which related mainly to hedge of ORLEN Capital future liabilities resulting from issue of Eurobonds with the principal of EUR 750 million and timely payment of liabilities by the subsidiaries,
- securities for excise and excise duty on products and goods undergoing the procedure of suspended excise collection in the amount of PLN 1 508 million,
- guarantees concerning liabilities towards third parties issued in the course of normal business operations mainly relate to:

Additional information on the debt structure of PKN ORLEN is presented in point 7.2.6.1 of the Separate Financial Statements for 2016.

PKN ORLEN may issue bonds within the set limits as well as purchase bonds issued by companies in the ORLEN Group. At the end of 2016, the total value of PKN ORLEN issued bonds amounted to PLN 2 503 million in comparison to PLN 2 301 million at the end of 2015. Detailed information concerning the bond issuance is set out in point 4.3.3.

Details on loans granted and obtained by PKN ORLEN within the ORLEN Group are presented in point 4.3.4.

civil law guarantees relating to the protection of performance of contracts and public guarantees under the generally applicable provisions of law which ensures the correctness of the management of business activities licensed in the liquid fuels and taxes, customs, etc. resulting from that activity of in the amount of PLN 204 million.

Additional information on sureties and guarantees is presented in point 7.3.5.4. of the Separated Financial Statements for 2016.

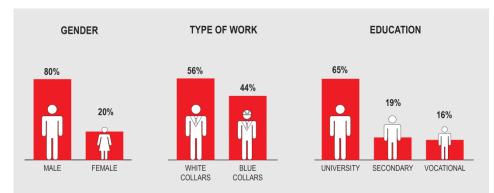
As at 31 December 2016 there were no significant contingent liabilities.

# 5.7. EMPLOYMENT

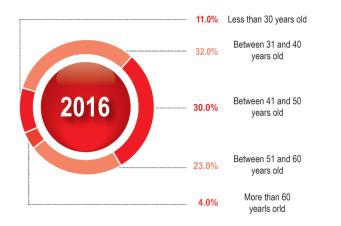
In regard with the dynamic development of power industry and projects of CCG-T Power Plant construction in Włocławek and

Plock, the employment in PKN ORLEN as of the end of 2016 increased by 135 employees.

DIAGRAM 74. Employment structure in PKN ORLEN in professional groups in 2016.



# DIAGRAM 75. Employees' age structure in PKN ORLEN in 2016.



Personnel programs realised in PKN ORLEN are described in point 3.5 of the foregoing Report.

# 5.8. REMUNERATION OF MANAGEMENT AND SUPERVISORY PERSONNEL

# 5.8.1. General terms of remuneration, conditions for granting annual bonuses and non-competition agreement

#### **Remuneration rules**

Remuneration for Members of the Board is determined by the Supervisory Board with consideration of recommendations of the Nomination and Remuneration Committee. The components of the Management Board remuneration system include:

- Monthly fixed-base salary,
- Annual bonus dependent on the accomplishment of qualitative and quantitative targets,
- Severance pay for dismissal from the Management Board Member position,
- Compensation for non-competition.

All elements of the remuneration and additional benefits are regulated by an agreement between the Member of the Management Board and the Company. On 24 January 2017, an Extraordinary General Meeting of Shareholders was held, during

which resolutions were adopted on the rules of determining the remuneration of Management Board and Supervisory Board members. The resolutions that were adopted were published here: <a href="http://www.orlen.pl/EN/InvestorRelations/RegulatoryAnnouncements/Pages/Regulatory-announcement-no-14-2017.aspx">http://www.orlen.pl/EN/InvestorRelations/RegulatoryAnnouncements/RegulatoryAnnouncements/Pages/Regulatory-announcement-no-14-2017.aspx</a>

# Rules for awarding bonuses to the key executive personnel (including members of the Management Board)

The regulations applicable to the PKN ORLEN Management Board, directors reporting directly to the Management Board of PKN ORLEN and other key positions have certain common features. The persons subject to the above mentioned systems are remunerated for the accomplishment of individual goals set at the beginning of the bonus period by the Supervisory Board for the and by the Management Boards for the key executive personnel

members. Bonus systems are consistent with the Company's Values, promote the cooperation between individual employees and motivate to achieve the best possible results for the ORLEN Group. The targets set are qualitative as well as quantitative and are settled after the end of the year for which they were set. Moreover, there is a possibility to honour employees, who significantly contribute to generated results.

**Members of the Management Board** are entitled to an annual bonus on the principles established in the Bonus System Regulations of the Management Board, which is part of the contract with the Board Member. The Supervisory Board approves the rules of appointing and assessment of individual bonus tasks for Board Members for the particular year. The level of annual bonus is determined by the performance of individual activities (qualitative and quantitative). Individual bonus tasks are recorded in Goals Charter of Board Member and approved by the Supervisory Board.

The assessment of individual bonus tasks' implementation (quantitative and qualitative) by the particular Member of Management Board is made annually by the Supervisory Board on the basis of the President of the Management Board's recommendation, report on the performance of bonus activities by the particular Member of the Management Board, the ORLEN Group's financial statements and other documents, the investigation of which the Supervisory Board deems appropriate.

The Supervisory Board adopts a resolution to grant or not Board Member of the annual bonus for the financial year, and its amount, by 30 April of the following year. The annual bonus will be paid if the Company's consolidated financial statements for the financial year will be approved by the General Meeting.

For 2016, the Supervisory Board set for all Members of Management Board the following six identical quantitative targets:

- Reported EBIT of the Concern,
- EBITDA LIFO of the Concern (% of plan realisation in real macro),
- Maintenance CAPEX of the Concern + overhead and personnel costs of the Concern (% of plan realisation in real macro),
- Development CAPEX of the Concern (% of plan realisation in real macro),
- Stock exchange rate: TSR of PKN ORLEN relative to the market,
- Accident rate: TRR of the Concern,

and attributed to them the relevant bonuses thresholds. The Supervisory Board also established for each of the Members of the Management Board qualitative objectives related to their areas of supervised activities.

## Non-competition agreements and agreements on termination of contract due to removal from the position held executed with the management personnel

In accordance with applicable agreements, members of the Management Board of PKN ORLEN are required for a period of 6 or 12 months from the date of termination or expiry of the contract, to refrain from competitive activities. During this period, the Board members are entitled to receive compensation in the amount of six or twelve monthly basic salary, paid in equal monthly instalments. The Company may dismiss the President, Vice President and Members of the Board of the non-competition clause applicable after the termination or expiration of the contract or reduce the duration of the ban. In the case of an exemption from the prohibition of competition, the Company does not pay compensation. In case of shortening the duration of the non-compliance clause, the payment of the compensation shall be in proportion to the duration of the non-compliance.

In addition, the agreements institute the payment of compensation in case of termination due to dismissal from the position. In this case the salary amounts to six or twelve months of remuneration. The Supervisory Board may authorize the use of these provisions also in case of resignation from the position of Member of the Management Board.

In case of resignation from a function of the Management Board Member, at the request of the Company, the Board Member shall be obliged to remain available to the Company for the time necessary to protect the interests of the Company, but not longer than for 30 days.

With respect to remaining available to the Company the Board Member shall be entitled to remuneration equal to the amount of the base salary, on the terms specified in the agreement.

With regard to calculation of the remuneration or compensation or other benefits due for an incomplete month, it is assumed that 1/30 of the amount due for the full month is payable for 1 calendar day.

Management Board Members from other ORLEN Group companies are required from the date of termination or expiry of the agreement to refrain from competitive activity for a period of six-months. During this period they receive remuneration in the amount of 50% of sixmonth basic salary, payable in six equal monthly instalments. In contrast, the severance allowance of appeal from the position is typically three or six monthly remuneration

# 5.8.2. Remuneration of management and supervisory bodies

TABLE 45. Remuneration paid to the Company's Management Board Members fulfilling their function in 2016 (PLN thousand).

Item	2016	2015
emuneration of Members of the Company's Management Board, including:		
- remuneration and other benefits	8 430	7 17
Wojciech Jasiński <sup>1)</sup>	1 715	6
Dariusz Krawiec <sup>2)</sup>	-	1 69
Sławomir Jędrzejczyk	1 586	1 58
Piotr Chełmiński	1 351	1 38
Mirosław Kochalski	1 368	
Zbigniew Leszczyński	1 049	
Krystian Pater	1 226	1 22
Marek Podstawa 3)	135	1 2:
- bonus for prior year	5 040	6 3
Dariusz Krawiec 4)	-	14
Sławomir Jędrzejczyk	1 500	14
Piotr Chełmiński	1 260	12
Krystian Pater	1 140	10
Marek Podstawa	1 140	1 0
otal:	13 470	13 5 <sup>.</sup>

Remuneration for holding the position of President of the Management Board for the period from 16 December 2015.
 Remuneration for holding the position of President of the Management Board for the period to 16 December 2015.
 Remuneration for holding the position of Member of the Management Board for the period to 8 February 2016.
 Bonus paid in 2016 (due for 2015) presented in a table with regard to former Management Board Members.

TABLE 46. Bonuses potentially due to Management Board Members in function in the given year to be paid in the following year (PLN thousand).

Item	2016	2015
Wojciech Jasiński	1 560	-
Dariusz Krawiec 1)		1 620
Sławomir Jędrzejczyk	1 500	1 500
Piotr Chełmiński	1 260	1 260
Mirosław Kochalski <sup>2)</sup>	1 303	-
Zbigniew Leszczyński 3)	977	-
Krystian Pater	1 140	1 140
Marek Podstawa 4)	113	1 140
Total:	7 853	6 660

1) Bonus potentially due for holding position for the period to 16 December 2015.

3) Bonus potentially due for holding position for the period from 8 February 2016. 2) Bonus potentially due for holding position for the period from 8 February 2016. 4) Bonus potentially due for holding position for the period to 8 February 2016.

# TABLE 47. Remuneration and other benefits paid to former Management Board Members (PLN thousand).

	ltem	2016	2015
Dariusz Krawiec 1)		3 160	1 820
Marek Podstawa 2)		1 140	-
ſotal:		4 300	1 820

1) In 2016 the bonus for 2015 and non-competition compensation paid; in 2015 severance pay and non-competition compensation paid.

2) In 2016 severance pay and non-competition compensation paid.

Remuneration of the Company's Management and Supervisory Board Members for holding functions in the Management or Supervisory Boards of subsidiaries, companies under joint control or associated companies (PLN thousand)

Members of PKN ORLEN Management Board who in 2016 and 2015 were acting as the Management and the Supervisory Boards of the subsidiaries, jointly controlled entities belonging and associate

of the ORLEN Group did not receive any remuneration, except for Unipetrol a.s., wherein the payments were transferred to the ORLEN'S DAR SERCA Foundation.

TABLE 48. Remuneration of the Members of the Supervisory Board of PKN ORLEN (PLN thousand).

Item	2016	2015
muneration of the Company's Supervisory Board members, including:		
Angelina Sarota	220	21
Adam Ambrozik <sup>1)</sup>	13	16
Maciej Bałtowski	-	14
Cezary Banasiński 1)	13	16
Mateusz Bochacik <sup>2)</sup>	157	
Grzegorz Borowiec <sup>1)</sup>	13	16
Adrian Dworzyński <sup>2)</sup>	157	
Artur Gabor	170	16
Agnieszka Krzętowska 2)	161	
Radosław Kwaśnicki	171	16
Cezary Możeński 1)	13	16
Remigiusz Nowakowski <sup>3)</sup>	120	
Leszek Pawłowicz 1)	13	1
Wiesław Protasewicz <sup>4)</sup>	98	
Arkadiusz Siwko <sup>5)</sup>	59	
al:	1 378	1 52

1) For the period of holding position to 29 January 2016

2) For the period of holding position from 29 January 2016

3) For the period of holding position since 23 November 2015 until 14 September 2016

4) For the period of holding position from 3 June 2016

5) For the period of holding position since 29 January until 3 June 2016.

#### Remuneration of key executive personnel of the ORLEN Group

TABLE 49. Remuneration of key executive personnel of the ORLEN Group (PLN thousand).

Item	2016	2015
Remuneration and other benefits of members of key executive personnel:		
- other key executive personnel of the Company	44 403	37 128
- key executive personnel of the subsidiaries of the ORLEN Group	165 524	140 365
Total:	209 927	177 493

An increase in costs of key personnel remuneration in PKN ORLEN in 2016 is due to change of the organisational structure, what resulted in an increase of managers reporting directly to the Management Board, filling the Management Boards of the Group companies with new members and one-off severance payments.

# 6. CORPORATE GOVERNANCE

# 6.1. CORPORATE GOVERNANCE RULES

In 2016, PKN ORLEN applied all principles included the "Code of Best Practice for WSE Companies ("Code of Best Practice") applicable on the Warsaw Stock Exchange.

The code is available on the website of the Stock Exchange <u>https://www.gpw.pl/regulations\_best\_practices</u> and on the corporate website of PKN ORLEN <u>www.orlen.pl</u> in the section dedicated to the Company's shareholders (<u>http://www.orlen.pl/</u>).

# Communication with the capital market

One of the basic tools for the communication with the representatives of the capital market is the Investor Relations section in the corporate website http://www.orlen.pl/, maintained in both Polish and English. The Investor Relations section gathers information mainly for the investors and analysts. It includes, among others:

- Regulatory announcements and annual reports,
- Presentations concerning the publication of the financial results and other events,
- Multimedia files containing teleconferences and videoconferences organized by the Company,
- Interactive charts and grids presenting Company's historical financial data in various periods, with the possibility of implementation to Excel,
- Stock-exchange quotations of PKN ORLEN shares and main indexes,
- Contact form,
- Newsletter and RSS channel,
- Interactive calendar, offering the possibility of setting a reminder, through a short text message or an e-mail, concerning the most important events in the Company,
- Section for Individual investors.

On the website, there is also a tab concerning the corporate governance. One can find there the Company's annual reports on complying with best practices rules and the "Code of Best Practice" and the "Code of Best Practice". There is also brief information on best practice applied by the Company and other information which are required through "Code of Best Practice" for the Companies quoted on the Warsaw Stock Exchange.

The General Meeting tab in the "Investor Relations" section contains set of corporate documents, information related to General Meetings including special online contact form.

The Company also supports its shareholders, investors, analysts to have the knowledge of the industries in which it operates. On a web portal of PKN ORLEN <a href="http://napedzamyprzyszlosc.pl/">http://napedzamyprzyszlosc.pl/</a> there are placed specialized publications and relations from industry conferences. There is also the blog of PKN ORLEN's Chief Economist (<a href="http://napedzamyprzyszlosc.pl/blog">http://napedzamyprzyszlosc.pl/</a> there are placed specialized publications and relations from industry conferences. There is also the blog of PKN ORLEN's Chief Economist (<a href="http://napedzamyprzyszlosc.pl/blog">http://napedzamyprzyszlosc.pl/blog</a>) on which comments on the current market situation are placed. The Company sends short messages through its account on Twitter (<a href="https://twitter.com/ORLEN\_FFbK">https://twitter.com/ORLEN\_FFbK</a> ).

As part of the direct contact with the representatives of the capital market, the Company regularly and actively participates in the meetings with investors and analytics, both in the country and abroad. It organizes press conferences open to anyone after each important event for the Company, such as publication of quarterly results or publication of the strategy. The conferences are transmitted live through the Internet, along with a simultaneous translation to English.

On a regular basis the Company actively participates in the meetings with investors and analysts both in Poland and abroad. Conferences, individual and group meetings, and teleconferences are organized with stakeholders on the capital market. The Company's representatives regularly conduct also roadshows – series of meetings with investors at their work place, in-country and abroad. For the capital market representatives interested in the Company's operations also so-called site visits are organized, i.e. visits of shareholders or analysts in the production plant and other trade and production activity places, what improves their knowledge about the Company specifics.

From time to time PKN ORLEN organizes the Investor and Analyst Days, including thematic workshops concerning various areas of activity of the Company, conducted by the representatives of the Management Board, executive directors and other, selected managers.

2016 was the fourth year in a row in which PKN ORLEN paid dividend to its shareholders in the amount of PLN 2 per share.

PKN ORLEN makes all efforts to publish periodic reports as soon as possible after the closing of the reporting period. In 2016, we published quarterly and half-year reports within 23 days on average following the closing of the relevant periods, and annual reports within 84 days following the end of the year.

Capital market participants appreciate the Company's activities, which is confirmed by the awards and other distinctions it won in 2016:

- The "Bulls and Bears" statuette in the WIG20 Index Company of the Year category according to "Parkiet", a daily newspaper addressed to stock market investors;
- Awards related to the assessment of investor relations in WIG 30 Index companies, a joint initiative of "Parkiet" and of the Chamber of Brokerage Houses:
  - Second place in the "Best Investor Relations among Individual Investors" category,
  - Second place in the "Best Investor Relations among Institutional Investors" category,
- The Company continued to be present in the 10th edition of the Respect Index project,
- For the fourth year in a row, PKN ORLEN obtained the special award called "The Best of The Best" in the competition for The Best Annual Report, organized by the Institute of Accounting and Taxes, and obtained other awards in the same competition for the following:
  - Best Integrated Report,
  - Best IAS/IFRS Application,

Best Reporting Team

# Company's reaction to appearing public opinions and information injuring its reputation

In PKN ORLEN, there is an internal regulation in force, concerning the rules of taking actions which create the image of the Company and contacts with the mass media representatives as well as passing the information, relevant for the PKN ORLEN's image, to the Corporate Communication Department's Executive Director. This regulation obliges to multistage verification of information concerning the Company and its representatives before it's made public.

The above regulation sets also the rules of reaction in a situation, when opinions and information expressed in public by third parties may harm the Company' reputation. The person responsible for the coordination of this process is the Executive Director of the Corporate Communication Department.

### **Corporate Social Responsibility Activities of PKN ORLEN**

In 2015, PKN ORLEN commenced the implementation of its corporate social responsibility strategy (CSR) for 2015-2017. The strategy assumes that goodwill growth should take place in harmony with the interest of the environment and should be based on sustainable and responsible use of resources. This means that corporate social responsibility principles are taken into account in the process of creation of business projects. Defining measurable CSR goals will allow for analysing and assessing the effects derived from these measures in the Concern and its environment. The strategy basing on "Values and principles of conduct adopted by PKN ORLEN S.A." is also to motivate employees to seek new ideas and innovative solutions.

# 6.2. CONTROL AND RISK MANAGEMENT SYSTEM

The Company's system of internal control and risk management in the process of financial statements preparation is implemented through:

- verification whether a uniform accounting policy is applied by the ORLEN Group companies as regards the recognition. measurement and disclosures in accordance with the International Financial Reporting Standards (IFRS) as adopted by the European Union,
- following accounting standards and monitoring compliance with them,
- following uniform separate and consolidated financial reporting standards and periodic verification whether these standards are properly applied in the ORLEN Group companies,
- verification of the ORLEN Group companies' financial reports compliance with the data placed into integrated IT system used to prepare the ORLEN Group's consolidated financial statements,
- auditor's review of financial statements published for I quarter, half-year, III quarter and audit of annual financial statements of PKN ORLEN and the ORLEN Group,
- procedures to authorize and give opinions about financial statements before they are published,
- carrying out an independent and objective evaluation of risk management and internal control systems.

In 2016, the CSR strategy was implemented according to the preassumed plan. In PKN ORLEN, 16 coordinators have been monitoring works on 55 projects. In the Capital Group, in turn, 488 measures has been implemented in the area. 27 coordinators have been supervising their timely completion. The Management Board of PKN ORLEN and the Supervisory Board CSR Committee periodically review its execution.

PKN ORLEN boasts rich traditions in pro-community initiatives and activities in this area. One of the most important elements of these measures is the ORLEN's Foundation - DAR SERCA established in 2001.

In community initiatives of PKN ORLEN and ORLEN'S DAR SERCA Foundation also participate PKN ORLEN's clients and the members of the VITAY loyalty program.

The principles of sponsoring activity conducted by PKN ORLEN are set forth in internal regulations codified in annual marketing plans and in a disposition defining the principles of purchase of sponsoring services. Selecting the projects to carry out, the Concern adheres to ethical principles in force in the company.

The Concern is focusing its sponsoring activities on selected thematic areas, such as: film, theatre, literature, music, education, local projects addressed at communities inhabiting areas of particular interest from the point of view of the activity of the Concern, and social projects. Our initiatives receive vast support on the "Niesamowici Ludzie" fanpage, followed by more than 72 thousand Facebook users.

PKN ORLEN communicates its social initiatives, among others, via the corporate website, in the "Responsible business" bookmark, containing the basic information on the principles of the sponsoring policy adopted by PKN ORLEN, as well as information on the procedure for applying to PKN ORLEN for sponsoring.

Recording of economic events in PKN ORLEN is conducted in an integrated financial - accounting system.

Security and availability of information contained in the financialaccounting system are controlled at all levels of the database, applications and presentations as well as at the level of operating system. System integration is ensured by the data entry control systems (validation, authorization, a list of values) and logs of changes. In case of system failure not completed transactions are withdrawn. Logs of changes give the possibility of path reviews.

In order to ensure that unified accounting standards are applied, the ORLEN Group companies have to follow, for the purpose of preparing the consolidated financial statements, the accounting policy adopted by PKN ORLEN and approved by ORLEN Group companies.

The consolidated financial statements are prepared based on the integrated IT system where consolidation process of entered data from reporting packages provided by the ORLEN Group companies is performed. The system is designed for financial management and reporting purposes. The system enables the unification of financial information. Results budgeted and forecasted data as well as statistics are gathered in one place, what ensures direct control and compatibility of the entered data.

The data is reviewed in terms of their cohesion, completeness and continuity, which is achieved thanks to controls implemented in the system, which check the compliance of data entered by the companies.

In order to reduce the risks relating to the process of the financial statements preparation on a current basis, they are quarterly verified by an auditor, i.e. more often than required under the applicable law. The financial statements for the I quarter, the half-year and the III quarter of the year are reviewed by the auditor, whereas the annual financial statements are subject to audit. The auditor presents the results of the reviews and audits to the Management Board and the Audit Committee of the Supervisory Board.

The Company has certain procedures to authorize the financial statements under which the periodical reports before the Management Board approval subject to auditor review and the Supervisory Board Audit Committee opinion. Once the financial statements are approved they are forwarded by the Investor Relations Office to public domain.

The Company has an Audit and Corporate Risk Management Department which has to ensure an independent and objective evaluation of the risk management and internal audit systems, and analyse business processes. The Department operates basing on the annual audit plans approved by the Management Board and accepted by the Audit Committee of the Supervisory Board and the Supervisory Board. The Audit and Corporate Risk Management Department can also carry out random audits as ordered by the Company's Supervisory Board or the Management Board.

Within the realised tasks and objectives, the Audit and Corporate Risk Management Department provides recommendations as to the implementation of solutions and standards for realised audit tasks, designed to mitigate the risk of PKN ORLEN not meeting the targets set, to improve the effectiveness of the internal control system and to increase the efficiency of business processes.

Twice a year the Audit and Corporate Risk Management Department prepares a report for the Management Board and the Audit Committee of the Supervisory Board on the implementation status of recommendations monitoring, which summarizes the conclusions regarding the audit tasks performed and monitors the realization of the Company's financial statements auditor's recommendations. Adhering to the principles set forth by the Institute of Internal Auditors Research Foundation, the Audit, Control and Corporate Risk Management Office has been also conducting consultancy projects.

# 6.3. SIGNIFICANT STAKE

In 2016 and until the date of authorization of this Report there was no change in the structure of shareholders with a stake of more than 5% in the PKN ORLEN share capital. The number of shares held by the shareholders is presented based on the most recent, official information acquired by the Company.

The ownership rights of PKN ORLEN's shares are fully transferable.

TABLE 50. Shareholding structure in PKN ORLEN as at 1 January 2016, 31 December 2016 and the date of the approval of this report.

Shareholder	Number of shares and votes at a general meeting (as at 01.01.2016*)	Share in share capital and in total number of votes at a General Meeting (as at 01.01.2016*)	Number of shares and votes at a General Meeting (as at 31.12.2016**)	Share in share capital and in total number of votes at a General Meeting (as at 31.12.2016**)	Number of shares and votes at a General Meeting (on the date of approval of the report***)	Share in share capital and in total number of votes at a General Meeting (on the date of approval of the report ***)
State Treasury	117 710 196	27.52%	117 710 196	27.52%	117 710 196	27.52%
Nationale- Nederlanden OFE	39 000 000	9.12%	39 785 564	9.30%	35 590 112	8.32%
Aviva OFE	34 000 000	7.95%	31 257 000	7.31%	30 000 000	7.01%
Others	236 998 865	55.41%	238 956 301	55.87%	244 408 753	57.15%
Total	427 709 061	100.00%	427 709 061	100.00%	427 709 061	100.00%

\* According to the information from the OGM PKN ORLEN held on 28 April 2015.

\*\* According to the information from the OGM PKN ORLEN held on 3 June 2016.

\*\*\* According to the information from EGM PKN ORLEN held on 24 January 2017.

# 6.4. SPECIAL CONTROL AND VOTING RIGHTS

The exercise of the voting right and special control have been regulated in detail in PKN ORLEN's Articles of Association. According to the provisions of the Articles, one share of PKN ORLEN entitles to one vote at the Company's General Meeting. The voting right of the shareholders has been restricted in the Statute of the Company to the extent that none of them can exercise more than 10% of the total votes existing in the Company as at the date the General Meeting is held. The restriction of the voting right does not apply to the State Treasury and the depositary bank which issued, on the basis of the agreement with the Company, depository receipts in connection with the Company's shares (in case this entity exercises the voting right from the Company's shares).

The shareholders whose votes are subject to accumulation and reduction are jointly referred to as 'the Shareholders Grouping'. The rules of accumulation and reduction are specified in detail in the Statute of the Company. The shareholders being a part of the Shareholders Grouping cannot exercise the voting right from more than 10% of the total votes existing in the Company as at the date the General Meeting is held.

If the cumulated number of shares registered in the General Meeting by the shareholders being a part of the Shareholders Grouping exceeds 10% of the total number of shares of the Company, the votes resulting from the number of held shares are subject to reduction, the rules of which have been specified in detail in the Statute of the Company.

The restriction of the voting right, described above, does not apply to the entities dependent on the State Treasury.

# 6.5. AMENDMENTS OF ARTICLES OF ASSOCIATION

Any amendment to PKN ORLEN's Articles of Association requires a resolution of the General Meeting of Shareholders and has to be entered in the companies register. The resolution of the General Meeting of Shareholders to amend the Company's Articles of Association is adopted by three quarters of votes. The General Meeting may authorize the Supervisory Board to formulate the

# 6.6. GENERAL MEETING OF SHAREHOLDERS

Proceedings and powers of PKN ORLEN's General Meeting of Shareholders are regulated in the Articles of Association and the Regulations of PKN ORLEN's General Meeting, available on PKN ORLEN website:

http://www.orlen.pl/EN/Company/Pages/CorporateBylaws.aspx

The Company determines the place and date of the General Meeting in a way to enable participation of the largest number of shareholders. The General Meetings of PKN ORLEN are held at the registered office of the Company in Plock, but it can also be held in Warsaw. The meeting of the General Assembly can be attended by the media representatives.

PKN ORLEN takes relevant measure to ensure that drafts of the resolutions of the General Assembly contained a justification facilitating the shareholders adopt resolutions with due discernment. All the materials are available to the shareholders at the Company's headquarters in Plock and office in Warsaw, as well as on the corporate website <u>http://www.orlen.pl</u> starting from the date of General Meeting convention.

Convening and calling off PKN ORLEN's General Meeting

The State Treasury is entitled to appoint and recall one Member of the Supervisory Board. Furthermore, one member of the Management Board of PKN ORLEN is appointed and recalled by the Supervisory Board upon the request of the State Treasury.

Additionally, in accordance with the Statute of the Company, as long as the State Treasury is entitled to appoint a member of the Supervisory Board, a resolution granting approval for activities related to sale or encumbrance in any way of shares or stock in the following companies: Naftoport Sp. z o.o., Inowrocławskie Kopalnie Soli S.A. as well as in the company that will be created in order to operate the pipeline transport of liquid fuels, require a vote in favour of their adoption by the Supervisory Board member appointed by the State Treasury.

Special rights for the State Treasury shareholder can be a result of the commonly applicable provisions of law, i.e.:

- the Act of 18 March 2010 on specific rights vested in the Minister in charge of energy and their execution in certain capital companies or capital groups conducting business activities in the electricity, crude oil and gas fuel factors,
- the Act of 24 July 2015 on the control of certain investments,
- the Act of 16 December 2016 on the rules of managing the national assets.

uniform text of the Articles of Association or make other editorial changes as set out in the resolution passed by the General Meeting.

Once the amendments to the Articles of Association are entered in the companies register. PKN ORLEN publishes a relevant regulatory announcement.

The General Meeting is convened through placing an announcement on the Company's website and by delivering a current report to the capital market institutions and public information.

The Ordinary General Meeting of Shareholders should be held no later than within six months from the end of every financial year. The Extraordinary General Meeting of Shareholders is convened by the Management Board on its own initiative, on the motion of the Supervisory Board or on the motion of a shareholder or shareholders representing no less than one twentieth of the Company's share capital, within two weeks from filing the motion. The Supervisory Board may convene the Extraordinary General Meeting if the Supervisory Board recognizes that it is advisable to do so The Supervisory Board may also convene the Extraordinary General Meeting if the Management Board fails to do so within two weeks following the submission of the relevant request by the Supervisory Board. The Extraordinary General Meeting may also be convened by the shareholders representing at least one half of the share capital or at least one half of the overall number of votes in the Company.

The Company arranges for an Internet broadcast of the Meeting and offers simultaneous translation into English.

In accordance with the General Meeting Regulations the cancellation and the change in the date of the General Meeting should be effected forthwith once the requirement for the cancellation and the change in the date has occurred but no later than seven days prior to the day when the General Meeting is to be held. If the cancellation or change in the date of the General Meeting cannot be effected within the deadline specified above. such a General Meeting should be held. If it is impossible or excessively hindered to hold such a meeting due to the circumstances. the cancellation and change in the date of the General Meeting may be effected at any time prior to the day when the General Meeting is to be held. The cancellation and the change in the date of the General Meeting is effected by announcement placed on the Company's website together with the reasons and complying with other legal requirements. Only the body or the person to have convened the General Meeting is competent to cancel the same. The General Meeting with the agenda containing specific issues put therein at the request of eligible entities, or which was convened at such a request, may be cancelled only with consent of such requesting entities.

# Competence of PKN ORLEN's General Meeting

The General Meeting of Shareholders is especially authorized to:

- consider and approve the Company's annual financial statements; the annual report on the Company's business operations; the consolidated financial statements of the ORLEN Group and the report on the ORLEN Group business operations for the previous financial year,
- acknowledge the fulfilment of duties by the Supervisory Board and Management Board Members,
- decide on the allocation of profit and the cover of losses as well as on the use of funds set up from profit,
- appoint the Supervisory Board Members, subject to the provisions of § 8 item 2 of the Articles of Association, and establish principles for their remuneration,
- increase and decrease in the share capital unless otherwise stated in the Commercial Code and the Company's Articles of Association,
- decide on claims for the rectification of damage caused when setting up the Company or exercising supervision or management,
- approve the sale and lease of the company or its organized part and establish a limited property right on such enterprise or an organized part thereof,
- grant consent to the sale of real estate, perpetual usufruct or interest in real estate which net book value exceeds one twentieth of the Company's share capital,
- amend the Company's Articles of Association,
- set up and dissolve reserve capitals and other capitals and the Company's funds,
- resolutions to redeem shares and buy shares to be redeemed and to establish the redemption rules,
- issue convertible bonds or bonds with pre-emptive rights and issue warrants,
- dissolution, liquidation, restructuring of the Company and merger with another company,

 holding contracts within the meaning of article 7 of the Commercial Companies Code.

#### Participation in PKN ORLEN's General Meetings

In accordance with the Commercial Companies Code, the right to participate in the Company's General Meeting is vested only in the persons that are the Company's shareholders sixteen days before the date of the General Meeting (date of registration in the General Meeting).

The shareholders of the Company may communicate with the Company via the corporate website. This way shareholders can send an electronic notice of proxy or proxy document allowing the identification of the principal and the proxy together with other related documentation. Special section dedicated to the Company's Meetings used for this General is purpose: http://www.orlen.pl/PL/RelacjeInwestorskie/WalneZgromadzenie/Str ony/default.aspx. The section includes also useful to the shareholders materials, among others, the guideline "How to participate in General Meeting" updated in accordance with changes that occur in the commonly applicable provisions of law, information about the planned shareholders" meetings along with materials relating to such meetings archive materials from the meetings held, including texts of resolutions adopted and video files with internet broadcasts of the General Meeting.

The General Meeting may be attended by the Members of the Management Board and the Supervisory Board, who can participate, even if they are not shareholders, without any invitations. An Ordinary General Meeting of Shareholders can be attended by the Members of the Management Board and the Supervisory Board whose mandates have expired before the date of the General Meeting and who exercised their functions in the financial year for which the Management Board report and the financial statements are to be approved by the Ordinary General Meeting of Shareholders.

General Meetings of Shareholders can also be attended by other persons invited by an authority convening the General Meeting or allowed to enter the meeting room by the Chairman, specifically, certified auditors. legal and financial advisers or the Company's employees. PKN ORLEN under the applicable law and with due consideration of the Company's interests allows media representatives to attend the General Meetings. The Management Board ensures that each General Meeting is attended by an independent expert specialized in commercial law.

#### Voting at PKN ORLEN's General Meetings

Unless stated otherwise in the Commercial Companies Code and the Articles of Association, resolutions of the General Meeting of Shareholders are passed with an absolute majority of votes cast. One PKN ORLEN share confers the right to one vote at the Company's General Meeting. The limitations of the Company's shareholders voting rights are described in <u>point 6.4.</u>

#### General Meetings in 2016

In 2016 two General Meetings were held: Extraordinary General Meeting on 29 January 2016 and Ordinary General Meeting on 3 June 2016.

The Extraordinary General Meeting determined the number of Supervisory Board members and adopted resolutions related to amendments in Supervisory Board composition.

During the Ordinary General Meeting the shareholders approved the annual reports on the operations of the Company and the ORLEN Group as well as the financial statements for 2015. They also decided on the fulfilment of duties by all the Supervisory and the Management Boards Members.

Management Board and the opinion of the Supervisory Board, decided to distribute the net profit for fiscal year 2015 amounting to PLN 1 047 519 491.84 PLN as follows: 1) the sum of PLN 855.418.122,00 dedicated for dividend payment

The General Meeting, familiarized with the motion of the

- the sum of PLN 855.418.122,00 dedicated for dividend payment (PLN 2.00 PLN per share)
- 2) the outstanding sum i.e. PLN 192 101 369.84 dedicated for the Company's supplementary capital.

The Ordinary General Meeting set 15 July 2016 as the dividend date and 5 August 2015 as the dividend payment date.

The Ordinary General Meeting also appointed the Supervisory Board Members for a new term of office.

# 6.7. MANAGEMENT AND SUPERVISORY BODIES

Apart from generally applicable laws, the rules of conduct for PKN ORLEN"s Supervisory Board, its Committees and the Management Board are regulated in PKN ORLEN's Articles of Association and the Supervisory Board and the Management Board Regulations,

respectively. The proceedings of the management and supervisory authorities in PKN ORLEN are also subject to the corporate governance principles set out by the Warsaw Stock Exchange.

#### 6.7.1 The Management Board

#### Composition of the PKN ORLEN's Management Board in 2016

 TABLE 51.
 Composition of the PKN ORLEN's Management Board as at 1 January 2016.

Name and surname	Position held in PKN ORLEN management board
Wojciech Jasiński	President of the Management Board, Chief Executive Officer
Sławomir Jędrzejczyk	Vice – President of the Management Board, Chief Financial Officer
Piotr Chełmiński	Member of the Management Board, Business Development/Power and Heat Generation Officer
Krystian Pater	Member of the Management Board, Production
Marek Podstawa	Member of the Management Board, Sales

The Supervisory Board at its meeting on 8 February 2016, dismissed Mr Marek Podstawa from the Management Board of PKN ORLEN and appointed Mr Mirosław Kochalski to the position of the Vice-President of the Management Board of the Company and Mr Zbigniew Leszczyński to the Management Board Member of the Company for a joint three-year term of the Management Board, which terminates on the date of the Ordinary General Meeting approving the financial statements of the company for 2016.

TABLE 52. Composition of the PKN ORLEN's Management Board as at 8 February 2016.

Position held in PKN ORLEN management board
President of the Management Board, Chief Executive Officer
Vice – President of the Management Board, Chief Financial Officer
Vice – President of the Management Board (Corporate Affairs since 12 February 2016)
Member of the Management Board, Business Development/Power and Heat Generation Officer
Member of the Management Board (Sales since 12 February 2016)
Member of the Management Board, Production

At the date of authorization of this Management Board Report on the Operations, the composition of Management Board has not changed.

#### Division of powers of the Company's Management Board

Mr Wojciech Jasiński, President of the Management Board of PKN ORLEN, also serving as the Chief Executive Officer, is in charge of the following areas: strategy and project management, crude oil and gas trade, marketing, corporate communication, audit, control and management of corporate risk, protection of information, critical infrastructure and defense matters, safety and head office.

Mr Sławomir Jędrzejczyk, Vice – President of the Management Board. Chief Financial Officer supervises the following areas: planning and reporting, business controlling, supply chain management, finance management, taxes, investor relations, capital investments and divestments, IT.

Mr Mirosław Kochalski, Vice-President of the Management Board, Corporate Affairs, performs supervision of such areas as: human resources, purchases, legal department, the capital group, management of regulatory risk, organisation and management systems.

Mr Piotr Chełmiński, Member of the Management Board. Business Development/Power and Heat Generation Officer supervises the following areas: implementation of property investments, power and heat generation development, health and safety, environmental protection.

Mr Zbigniew Leszczyński, Member of the Management Board in charge of Sales supervises the following areas: refining and petrochemical products, retail sale, logistics, efficiency and development of sales.

Mr Krystian Pater, Member of the Management Board in charge of Production supervises the following areas: refinery production, petrochemical production, investment and production efficiency, technology.

Responsibility division of Members of the Management Board of PKN ORLEN is available as well on the Company's website http://www.orlen.pl/EN/Company/ManagmentBoard/AreasOfResposi bility/Pages/default.aspx

#### Appointing and recalling PKN ORLEN's Management Board

The Management Board of PKN ORLEN consists of five to nine members, including the President, Vice-Presidents and other members of the Management Board. Members of the Management Board are appointed and recalled by the Supervisory Board. One member of the Management Board is appointed and recalled by the Supervisory Board upon the request of the Minister in charge of the State Treasury.

The term of office of the Management Board members is a joint term of office, ending on the day when the Ordinary General Meeting has been held, approving the financial statements for the whole second financial year of such term of office.

Should the Management Board President be suspended from duty or his/her mandate expires before the end of the term of office, all his/her powers, except for the right to the vote cast referred to in § 9 item 5 point 2 of the Articles of Association. are to be executed by the person appointed by the resolution of the Supervisory Board acting as President of the Management Board until the new Management Board President is appointed or the current one is restored to his/her position.

## Organisation of PKN ORLEN's Management Board activity

Detailed rules for the convening of Management Board are included in Constitution of Management Board, available on Company's website

(http://www.orlen.pl/EN/Company/Pages/CorporateBylaws.aspx).

Meetings of the Management Board are held when necessary, however, not less frequently than once every two weeks. For an effectiveness of resolution the scheduled meeting has to be notified to all Members of the Management Board and at least one half of the Management Board Members have to be present at the meeting. The Management Board resolutions are passed with a simple majority of votes (in the event of a voting deadlock, the President of the Management Board has the casting vote) provided that for resolutions to grant a procuration, unanimity of all Members of the Management Board is required. A Management Board Member who voted against a resolution that was adopted may communicate his/her dissenting opinion, however, such communication has to be justified.

Resolutions are adopted in an open vote. A secret ballot may be ordered at a request of each Member of the Management Board. Resolutions are signed by all Members of the Management Board who were present at the Management Board meeting on which the resolution was adopted. The resolution is also signed by the Member of the Management Board who filed a dissenting opinion, with a note: "dissenting opinion" or "votum separatum".

### Competences of PKN ORLEN's Management Board

All the members of the Management Board are obliged and authorized to handle the issues of PKN ORLEN.

All the maters going beyond the ordinary course of business are subject to resolutions of the Management Board. Activities falling within the scope of the ordinary course of business are activities related to fuels trading within the meaning of the Company's Articles of Association (i.e. crude oil, petroleum products, biocomponents. biofuels and other fuels including natural gas, industrial gas and fuel gas) or energy and any other activities not specified in the Constitution of Management Board.

Resolution of the Management Board is required, among others to:

- adopt and amend the Constitution of Management Board,
- adopt and amend the Organisational Rules and Regulations of PKN ORLEN,
- adopt motions to be submitted to the Supervisory Board and/or to the General Meeting of Shareholders,
- convene the General Meetings of Shareholders and adopt the proposed agenda of the General Meetings,
- approve annual and long-term financial plans as well as the Company's development strategy,
- approve investment tasks and corresponding liabilities if the resulting expenditures and encumbrances exceed PLN 10 000 000,
- incur liabilities, manage the property rights and any form of encumbrance on the Company's property where the total value exceeds PLN 20 000 000 (with certain exceptions to that rule),

- dispose and purchase real estate, perpetual usufruct or an interest in real estate and to establish a limited property right,
- dispose of, purchase and encumber stakes, shares or other interest in other entities, including shares admitted to public trading,
- issue the Company's securities,

6.7.2 The Supervisory Board

- approve Company's and the ORLEN Group's financial statements,
- adopt and change the Company's employees' remuneration scheme, as well as decisions regarding introduction and fundamentals of the incentive schemes,
- conclude amend and terminate a collective labour agreement applicable in the Company, and other agreements with trade unions,
- establish the principles of granting and revoking powers of attorney,

TABLE 53. Composition of PKN ORLEN's Supervisory Board in 2016

• formulate the so-called donation policy of the Company,

- grant a procuration,
- establish the internal segregation of duties among the members of the Management Board,
- set up establishments/offices abroad,
- handle other matters which at least one member of the Management Board requests to be handled in the form of a resolution,
- take decisions on the payment of interim dividends

The Management Board has to regularly provide the Supervisory Board with exhaustive information on all aspects of PKN ORLEN's business operations and the risks related to such operations as well as the methods of managing such risks.

Name and surname	Position held in PKN ORLEN supervisory board
Angelina Sarota	Chairman of the Supervisory Board
Leszek Pawłowicz	Vice – Chairman of the Supervisory Board from 1 January to 29 January 2016 (Independent Member of the Supervisory Board)
Adam Ambrozik	Secretary of the Supervisory Board from 1 January to 29 January 2016
Grzegorz Borowiec	Member of the Supervisor from 1 January to 29 January 2016
Artur Gabor	Member of the Supervisory Board (Independent Member of the Supervisory Board)
Cezary Banasiński	Member of the Supervisory Board from 1 January to 29 January 2016 (Independent Member of the Supervisory Board)
Cezary Możeński	Member of the Supervisory Board from 1 January to 29 January 2016
Radosław L. Kwaśnicki	Member of the Supervisory Board, Vice – Chairman of the Supervisory Board from 8 February to 3 June 2016 and from 28 June 2016
Remigiusz Nowakowski	Member of the Supervisory Board till 14 September 2016
Mateusz Henryk Bochacik	Member of the Supervisory Board from 29 January 2016 r., Secretary of the Supervisory Board from 8 February to 3 June 2016 and from 28 June 2016
Adrian Dworzyński	Member of the Supervisory Board from 29 January 2016 (Independent Member of the Supervisory Board)
Agnieszka Krzętowska	Member of the Supervisory Board from 29 January 2016 (Independent Member of the Supervisory Board)
Arkadiusz Siwko	Member of the Supervisory Board from 29 January to 3 June 2016
Wiesław Protasewicz	Member of the Supervisory Board from 3 June 2016

Indicated in the above table changes in the composition of the Supervisory Board are the result of a decision of the Extraordinary General Meeting of PKN ORLEN held on 29 January 2016 and the Annual General Meeting held on 3 June 2016 which appointed the Supervisory Board of PKN ORLEN for a new three-year term, as well as the resignation submitted by one of the Supervisory Board Members of PKN ORLEN.

In 2016 the Supervisory Board held 13 minuted meetings and adopted 120 resolutions.

#### The rules of conduct of PKN ORLEN's Supervisory Board

# Appointing and recalling members of PKN ORLEN's Supervisory Board

PKN ORLEN's Supervisory Board is composed of six to nine members. The State Treasury is authorized to appoint and recall one Member of the Supervisory Board, other Members of the Supervisory Board are appointed and recalled by the General Meeting of Shareholders Members of PKN ORLEN's Supervisory Board are appointed for a joint term of office, ending on the day when the Ordinary General Meeting has been held, approving the financial statements for the whole second financial year of such term of office. Individual Members of the Supervisory Board and the entire Supervisory Board can be recalled at any time before the end of the term of office. The General Meeting of PKN ORLEN appoints the Chairman of the Supervisory Board, whereas the vice-chairman and the secretary are appointed by the Supervisory Board from amongst the other members of the Board The current term of the Supervisory Board started on 3 June 2016.

At least two Supervisory Board members must meet the independence criteria specified in the PKN ORLEN Articles of Association in accordance with the "Best Practice of GPW Listed Companies", independent Supervisory Board members are not employees of the Company, its subsidiary or affiliate, as well as they are not associated with these entities based on a contract of similar nature, are also not tied to shareholder in a manner that excludes the independence.

Independent members of the Supervisory Board, before being appointed to the Supervisory Board, should submit to the Company a written statement of compliance with above mentioned provisions. The statement of compliance are submitted to remaining Supervisory Board Members and to the Management Board

If the mentioned provisions are not met, a member of the Supervisory Board is obliged to immediately notify the Company thereof. The Company informs the shareholders about the current number of independent members of the Supervisory Board.

If the number of independent members of the Supervisory Board is less than two, the Company's Management Board is obliged to immediately convene a General Meeting of Shareholders and put an issue concerning changes in the composition of the Supervisory Board on the agenda of the General Meeting. The Supervisory Board acts in its current composition until the changes in the composition of the Supervisory Board are made, i.e. the number of independent members is adjusted to the statutory requirements set in the Articles of Association whereas the provisions of § 8 item 9 of the Articles of Association (containing a list of resolutions which must be passed with consent of at least one half of independent Supervisory Board members) do not apply.

#### Organisation of PKN ORLEN's Supervisory Board's operations

Organisation of the Supervisory Board, in accordance with the principles outlined in the PKN ORLEN Articles of Association and the Constitution of the Supervisory Board, is available on the corporate website:

http://www.orlen.pl/EN/Company/Pages/CorporateBylaws.aspx.

# 6.7.3 Committees of Supervisory Board

The Supervisory Board of PKN ORLEN may elect permanent or ad hoc committees which act as its collective advisory and opinion making bodies.

The following permanent committees operate within the Supervisory Board of PKN ORLEN:

- Audit Committee,
- Strategy and Development Committee,

Meetings of the Supervisory Board are held when necessary, however, not less frequently than once every two months.

The Supervisory Board can pass resolutions if at least half of its members participate in the meeting. Subject to the provisions of the Commercial Code, a resolution of the Supervisory Board can be passed in writing or with the use of direct means of remote communication. Resolutions of the Supervisory Board are passed with an absolute majority of the votes cast in the presence of at least half of the members of the Supervisory Board. This does not apply to any members of the Management Board or the entire Management Board being recalled or suspended during the term of their office when at least two thirds of all the Supervisory Board members have to vote in favour of the resolution.

Passing resolutions on the following matters:

- any contribution to members of the Management Board provided by the Company or any related entities,
- giving permission to sign any significant agreement by the Company or a subsidiary with an entity related to the Company, a member of the Supervisory Board, or Management Board as well as with their related entities,
- appointing a certified auditor to audit the financial statements of the Company,

requires the consent of at least one half of the independent members of the Supervisory Board. Such provisions do not exclude applying art. 15 § 1 and 2 of the Commercial Code.

# Competence of PKN ORLEN's Supervisory Board

The Supervisory Board of PKN ORLEN exercises permanent supervision over the Company's operations, in all fields of its activity, specifically, the Supervisory Board is authorized to act as set out in the Commercial Code and the Company's Articles of Association. Given the best practice standards and in order to enable the shareholders to make a true and fair view of the Company, the Supervisory Board of PKN ORLEN is in charge of the additional duty to submit to the General Meeting of the Company:

- assessment of PKN ORLEN's standing, including internal control, risk management, compliance and internal audit function
- an annual report on its work
- assessment of how the company's disclosure obligations are fulfilled regarding the application of the principles of corporate governance
- assessing the reasonableness of the Company's sponsorship activities and charity.
- Nomination and Remuneration Committee,
- Corporate Governance Committee,
- Corporate Social Responsibility Committee (CSR Committee).

# TABLE 54. Composition of Supervisory Board Committees of PKN ORLEN in 2016.

Name and surname	Position held in PKN ORLEN supervisory board committee
Audit Committee	
Artur Gabor	Committee Chairman, Independent Member of the Supervisory Board
Leszek Pawłowicz	Committee Member till 29 January 2016, Independent Member of the Supervisory Board
Grzegorz Borowiec	Committee Member till 29 January 2016
Radosław L. Kwaśnicki	Committee Member from 1 January 2016 to 22 March 2016 and from 27 September 2016
Agnieszka Krzętowska	Committee Member from 8 February 2016, Independent Member of the Supervisory Board from 6 June 2016
Remigiusz Nowakowski	Committee Member from 8 February to 14 September 2016
Angelina Sarota	Committee Member from 8 February to 17 March 2016
Adrian Dworzyński	Committee Member from 8 February 2016, Independent Member of the Supervisory Board
Wiesław Protasewicz	Committee Member from 28 June 2016
Strategy and Development Committee	
Cezary Banasiński	Committee Chairman till 29 January 2016, Independent Member of the Supervisory Board
Leszek Pawłowicz	Committee Member till 29 January 2016, Independent Member of the Supervisory Board
Artur Gabor	Committee Member, Independent Member of the Supervisory Board
Cezary Możeński	Committee Member till 29 January 2016
Remigiusz Nowakowski	Committee Member, Committee Chairman from 8 February to 14 September 2016
Adrian Dworzyński	Committee Member from 8 February 2016, Independent Member of the Supervisory Board
Angelina Sarota	Committee Member from 8 February 2016
Arkadiusz Siwko	Committee Member from 8 February to 3 June 2016
Agnieszka Krzętowska	Committee Member from 28 June 2016, Independent Member of the Supervisory Board from 6 June 2016
Wiesław Protasewicz	Committee Chairman from 27 September 2016
Nomination and Remuneration Committee	
Angelina Sarota	Committee Chairman
Grzegorz Borowiec	Committee Member till 29 January 2016
Adam Ambrozik	Committee Member till 29 January 2016
Cezary Banasiński	Committee Member till 29 January 2016, Independent Member of the Supervisory Board
Mateusz Bochacik	Committee Member from 8 February 2016
Adrian Dworzyński	Committee Member from 8 February 2016, Independent Member of the Supervisory Board
Agnieszka Krzętowska	Committee Member from 8 February 2016, Independent Member of the Supervisory Board from 6 June 2016
Corporate Governance Committee	
Cezary Możeński	Committee Chairman till 29 January 2016
Angelina Sarota	Committee Member
Radosław L. Kwaśnicki	Committee Member
Adrian Dworzyński	Committee Chairman from 8 February 2016, Independent Member of the Supervisory Board

Mateusz Bochacik	Committee Member from 8 February 2016
Wiesław Protasewicz	Committee Member from 28 June to 27 September 2016
Corporate Social Responsibility Committee	
Artur Gabor	Committee Chairman till 15 December 2016, Independent Member of the Supervisory Board
Adam Ambrozik	Committee Member till 29 January 2016
Radosław L. Kwaśnicki	Committee Member
Mateusz Bochacik	Committee Member from 8 February 2016
Agnieszka Krzętowska	Committee Member from 8 February 2016, Independent Member of the Supervisory Board from 6 June 2016 Committee Chairman from 15 December 2016

### Audit Committee

The task of the Audit Committee is to advise the Supervisory Board of PKN ORLEN on the issues related to the proper implementation of budget and financial reporting rules and internal control within the Company and the ORLEN Group, as well as cooperation with the Company's certified auditors. The Audit Committee meetings are held at least once per quarter, each time prior to the publication of the Company's financial statements.

In 2016, the Audit Committee held 11 minuted meetings, including 2 shared meetings with the Strategy and Development Committee.

### **Corporate Governance Committee**

The task of the Corporate Governance Committee is to provide opinions and recommendations to the Supervisory Board on the implementation of corporate governance rules, assessment of reports concerning compliance with the corporate governance principles published by the Company and issuance of opinions on proposed changes to the corporate documents of the Company, as well as monitoring the Company management for compliance with legal and regulatory requirements, including compliance with the PKN ORLEN's Code of Ethics and the corporate governance principles.

In 2016, the Supervisory Committee of Corporate Governance held 3 minuted meetings.

# 6.8. REMUNERATION POLICY

Remuneration for Members of the Board is determined by the Supervisory Board taking into account the recommendations of the Nomination and Remuneration Committee. The components of the Management Board Members remuneration system include:

- monthly fixed-base pay,
- annual bonus dependent on the accomplishment level of quantitative and qualitative targets,
- severance pay for dismissal from the Management Board Member function,
- compensation for non-competition.

All elements of the remuneration and additional benefits are governed by an agreement between the Member of the Management Board and the Company.

Benefits for Management Board Members at PKN ORLEN may include a company car, life and endowment insurance, private medical insurance for the Management Board Members and for their

#### Strategy and Development Committee

The task of the Strategy and Development Committee is to issue opinions and submit recommendations to the Supervisory Board on planned investments and divestments which exert a material impact on the Company's assets.

In 2016 the Strategy and Development Committee held 10 meetings including 2 shared meetings with the Audit Committee.

#### Nomination and Remuneration Committee

The task of the Nomination and Remuneration Committee is to help to attain the strategic goals of the Company by providing the Supervisory Board with opinions and motions on how to shape the management structure, with regard to organisational solutions, remuneration schemes and selection of the staff with the skills required to ensure the Company's success. In 2016 Nomination and Remuneration Committee held 6 minuted meetings.

# Corporate Social Responsibility Committee (CSR Committee)

The task of the CSR Committee is to support the Company's strategic objectives by taking into account social, ethical and environmental issues in the Company's operations and in contacts with stakeholders (including employees, customers, shareholders, local communities).

In 2016, the Social Responsibility Committee held three minuted meetings.

closest family members, and potential coverage of reasonable costs of personal and property security.

Benefits for directors reporting to the Management Board at PKN ORLEN may include a company car, coverage of the costs of investment insurance premiums, right to use extra medical service for the directors and their family members, including preventive health care, sports activities and rehabilitation, co-financing of rent if the director is renting a flat, coverage of the costs of moving house during the employment period, possibility of enjoying the benefits described in the Rules of the Company Social Benefits Fund, and the right to participate in the Employee Pension Scheme in accordance with the rules in force at the Company.

The remuneration policy in place at PKN ORLEN supports the achievement of the Company's goals, including in particular the long-term increase of value for shareholders and stability of functioning of the company.

#### General terms and conditions of the annual bonuses

Members of the Management Board are entitled to an annual bonus on the principles established in the contract, which includes the Bonus System Regulations for the Management Board. The level of annual bonus depends on the performance of individual tasks (qualitative and quantitative), established by the Supervisory Board for the individual Members of the Management Board. The Supervisory Board appoints each year from four to seven individual bonus tasks that are recorded in Goals Charter of the Board Member. Assessment of the performance of individual bonus tasks (quantitative and qualitative) by particular Member of the Management Board is made each year by the Supervisory Board on the Chairman of the Management Board's recommendation, which contains assessment of individually performed bonus tasks of all Members of the Management Board, reports on the performance of bonus tasks by members of the Board, PKN ORLEN's financial statements and other documents the investigation of which the Supervisory Board deems appropriate.

The Supervisory Board adopts a resolution to grant or not the Board Member of the annual bonus for the financial year, and its amount, by 30 April of the following year. The annual bonus will be paid if the Company's consolidated financial statements for the financial year will be approved by the General Meeting.

For 2016, the Supervisory Board has set for all Members of the Management Board the following six quantitative objectives:

- EBIT reported of the Concern,
- EBITDA LIFO of the Concern,
- Maintenance CAPEX of the Concern + overhead and personnel costs of the Concern,
- Development CAPEX of the Concern,
- Stock exchange rate: TSR PKN relative to the market,
- Accident rate: the Concern's TRR.

and attributed to them relevant bonus thresholds. The Supervisory Board for each of the Members of the Management Board also established quality objectives associated with supervised by them unit.

# Rules for awarding bonuses for key management personnel (including Members of the Management Board)

The regulations applicable to PKN ORLEN Management Board, directors reporting directly to the Management Board of PKN ORLEN and other key positions have certain common features. Persons covered by the above-mentioned systems are remunerated for the implementation of individual goals set at the beginning of the bonus period by the Supervisory Board for the Management Board and the Management Board for the key executive personnel. The bonus systems are consistent with the Company's Values and promote cooperation between particular employees and motivate them to achieve the best possible results for the PKN ORLEN.

The targets set are qualitative and quantitative, and are settled for after end of the year for which they were set, based on the principles adopted in the applicable Bonus System Regulations. Regulations also gives the possibility to highlight employees who have a significant contribution to the achieved results.

The rules of paying bonuses to Management Boards Members of the ORLEN Group companies in 2017 will be adjusted to the requirements resulting from the Act on the principles of determining remuneration of managing persons in certain companies.

### Remuneration of the Members of the Management Board and the Supervisory Board of the Company due to sit on the Management or Supervisory Boards of subsidiaries, jointly controlled entities and associates

Members of the PKN ORLEN's Management Board in 2016, who were acting as the Management or Supervisory Boards Members of subsidiaries, jointly controlled entities and associates of the ORLEN Group did not receive any remuneration, with the exception of Unipetrol a.s. wherein the payments were transferred to ORLEN's Foundation "DAR SERCA". As at 31 December 2016, four members of the Management Board of PKN ORLEN sat on the Supervisory Board of Unipetrol a.s.

# The agreements with the Members about non-competition and termination on appeal from the position held

In accordance with applicable agreements, Members of PKN ORLEN's Management Board are required for a period of 6 or 12 months from the date of termination or expiry of the contract, to refrain from competitive activities. During this period, the Management Board members are entitled to receive compensation in the amount of six or twelve monthly basic salary, paid in equal monthly instalments. The Company may waive the President and Members of the Management Board of the non-competition clause applicable after the termination or expiration of the contract or reduce the duration of the ban. In the case of an exemption from the ban of competition, the Company does not pay compensation. If the period of the ban of competition was shortened, compensation shall be in proportion to the duration of non-competition.

In addition, the agreements provide for the payment of compensation in case of termination due to dismissal from the post. Salary in this case amounts to six or twelve basic monthly remuneration. The Supervisory Board may authorize the use of these provisions also in case of resignation from the position of Member of the Management Board as Board Member.

Directors directly subordinated to PKN ORLEN Management Board as well as the Board members of other ORLEN Group companies are normally required to refrain from competitive activities for a period of 6 months from the date of termination or expiry of the agreement. At that time they receive a salary equal to 50% of sixmonth basic salary, payable in 6 equal monthly instalments. The briefing for termination of contract by the Employer is typically three or six basic monthly remuneration.

The agreements between Members of the Management Boards of the ORLEN Group companies in 2017 will be adjusted to the requirements resulting from the Act on the principles of determining remuneration of managing persons in certain companies.

# **Diversity policy**

In PKN ORLEN S.A. issues related to diversity management are governed by the following documents applicable to the Company:

- The core values and standards of conduct of PKN ORLEN
- Corporate Collective Labour Agreement of PKN ORLEN SA
- Personnel policy of the ORLEN Group for the years 2013-2017.
- CSR Strategy for PKN ORLEN (in the range of development and diversity management).
- The separate internal organizational act on the implementation of policies defining the terms and conditions of work of persons with disabilities in PKN ORLEN SA

- The separate internal organizational act on the introduction of the PKN ORLEN SA the principles of providing support to employees in emergency situations.
- The separate internal organizational act on the Family Friendly Employer project.

These regulate such issues as:

- equal treatment in employment and the prohibition of discrimination,
- respect for diversity,
- management of cultural differences,
- openness for recruitment of socially excluded or marginalised in the labour market,
- supporting initiatives related to labour equality practices in the company,
- remuneration and bonus policy,
- standards of employment and remuneration of delegated workers, ie. expats and inpats,
- adapting workplace to the needs of employees (e.g. people with disabilities, breastfeeding mothers)
- supporting groups in difficult life situation,
- measures to support the reconciliation of private and professional life (i.e. Work-Life Balance Programs).

In addition, diversity policy in PKN ORLEN SA is also implemented through the following actions:

 organisation of open training courses and workshops for employees on diversity management,

- employee volunteering,
- considering diversity aspects in HR processes and tools (e.g. recruitment, training and development, remuneration) and shaping the organisational culture,
- workshops for expats on the cultural differences management,
- conducting research among employees on job commitment and satisfaction,
- appointment of a person and the team coordinating the fight against discrimination and harassment, and responsible for the management of diversity: Human Capital Committee, Ethics Ombudsman.

The Management Board and the Supervisory Board of PKN ORLEN include members with education in law, economics, chemistry and energy, with diverse work experience.

As at December 31, 2016, the Management Board consisted of six men and the Supervisory Board consisted of 2 women and 5 men. The age structure of Board Members is as follows: 40-50 years old - 2 persons, 50-60 years old - 3 persons, 60-70 old - 1 person, and the Supervisory Board Members as follows: 30-40 years old - 2 persons, 40-50 years old - 3 people , 50 to 60 years old - 1 person, 60-70 years old - 1 person.

# 7. STATEMENT OF THE MANAGEMENT BOARD AND APPROVAL OF MANAGEMENT BOARD REPORT ON THE OPERATIONS OF ORLEN GROUP AND PKN ORLEN

The Management Board of PKN ORLEN herby declares that to the best of its knowledge the foregoing Management Board Report on of the operations of

ORLEN GROUP and PKN ORLEN reflects true view on the financial position, including description of the main threats and risk.

# Glossary of selected technical definitions

	Glossary of definitions and abbreviations
ALKYLATION	Refinery process in PKN ORLEN, namely that olefin and paraffin fractions are merged in order to produce high-octane gasoline component (alkylate). The process is run on alkylation installation in the presence of hydrofluoric acid.
BARREL	Unit of liquid volume used mainly in the oil industry. 1 barrel of crude oil (1 bbl) = 42 American gallons = 158.96832 I.
BIG DATA	The tool assuring advanced analysis of the available data in order to adapt the offer, prepare efficient promotional campaigns, provide better station segmentation (as far as the offer and the price level are concerned).
BIOESTERS	Methyl esters of higher fatty acids produced from vegetable oils or animal fats. Used as a bio-component for diesel fuel or as a fuel for cars with diesel engines. Meets the quality standards set for the biofuel in the PN EN 14214. applicable both in Poland and other European Union markets.
BIOETHANOL	Ethanol derived from biomass or biodegradable waste.
BOE	Barrel of oil equivalent.
DISTILLATION	Method of physical separation of liquid mixtures. which uses the phenomenon of differences in boiling temperatures of particular components in the mixture undergoing distribution.
DIFFERENTIAL BRENT/URAL	Difference between the quotations of two kinds of crude oil. calculated as: Med Strip - Ural Rdam (Ural CIF Rotterdam).
HYDROCRACKING	Cracking of hydrocarbon raw materials in the presence of hydrogen. This process raises the efficiency of light products from crude oil.
HYDRODESULPHURIZATION	The process of removing sulphur compounds in the raw material by contact with hydrogen at the catalyst bed under high temperature and pressure.
CATALYST	Substance. which accelerates (initiates) the expected chemical reaction.
CRACKING	Thermal or catalytic conversion of heavy or more complex hydrocarbons into light products and coke. which increases the yields of light products from crude oil.
MED STRIP	Brent crude oil quotation.
MODEL DOWNSTREAM MARGIN	Calculated as: revenues from products sold (90,7% Products = 22.8% Gasoline + 44.2% Diesel +15.3% HHO + 1.0% SN 150 + 2.9% Ethylene +2.1% Propylene + 1.2% Benzene + 1.2% PX) – costs (input 100% = 6.5% Brent Crude + 91.1% URAL Crude + 2.4% Natural Gas).
MODEL REFINING MARGIN	Calculated as: revenues from products sold (93.5% Products = 36% Gasoline + 43% Diesel + 14.5% HHO) - costs (100% input: crude oil and other raw materials). Total input calculated acc. to Brent crude quotations. Spot market quotations.
MODEL PETROCHEMICAL MARGIN	Calculated as: revenues from products sold (98% Products = 44% HDPE + 7% LDPE + 35% PP Homo + 12% PP Copo) - costs (100% input = 75% naphtha + 25% LS VGO). Contract market quotations.
MODEL PETROCHEMICAL OLEFINS MARGINS	Calculated as: revenues (100% Products = 0.85 * Ethylene * 54% + 0.92 * Propylene * 28% + 0.84 * Glycols * 9% + 0.81 * Butadiene 6% + 0.8 * Ethylene oxide * 3%) minus costs (100% input = 100% Naphtha); product prices according to market quotations.
MONOMERS	Molecules of the same type or number of different kind of compounds characterize not very high molecular weight. which can form polymers during polymerization reaction: ethylene and propylene
NET DRILLINGS	The number of drillings corrected with the share of other partners.
POLYMERS	Chemicals of very high molecular weight. which consist of many repeated units called mers. polyethylene and polypropylene.
TOE	Tonne Oil Equivalent (toe) - energy equivalent of one metric ton of crude oil with a calorific value equal to 10 000 kcal/kg.
TRR	Total Recordable Rate = international accident rate in enterprises determined as follows: (number of accidents in a given period/number of hours worked in the period) x 1 000 000.
T1 PSER	The number of events with greater consequences in relation to the release substance into the environment x 1 000 000 / number of hours worked.
T2 PSER	The number of events with smaller consequences in relation to the release substance into the environment x 1 000 000 / number of hours worked.
UPSTREAM	Oil exploration and mining.
URAL RDAM (URAL CIF ROTTERDAM)	Ural crude oil quotation in Rotterdam.
WHITE PRODUCT YIELD	The yield of gasoline, diesel and heating fuel, fuel fractions, dry and liquefied petroleum gas compared to the amount of processed crude oil.
HYDROCARBONS	Organic compounds made of carbon and hydrogen. Crude oil and natural gas are mixtures of hydrocarbons.
HIGH-PERFORMANCE COGENERATION	The production of electricity or mechanical energy and heat in cogeneration what allows savings of primary energy used in cogeneration unit in amount not lower than 10% in comparison to production of electricity and heat in separated systems or in cogeneration unit of installed electric capacity below 1 MW in comparison to production of electricity and heat in separated systems.
	cogeneration unit in amount not lower than 10% in comparison to production of electricity and heat in separated systems or

Glossary is also available on the Company website: http://www.orlen.pl.

# Glossary of selected financial definitions

Financial glossary	
ADR	American Depository Receipt = certificate issued by an American bank representing a share of a foreign stock that the bank holds in trust but that is traded on an American stock exchange.
EURIBOR	Interbank Offered Rate – interest rate of interbank credit on the interbank market in euro zone.
GDR	Global Depositary Receipt = security issued outside of Poland by the Depositary Bank in relation to shares.
LIBOR	London Interbank Offered Rate – interest rate on the London market that apply to interbank credits.
WIBOR	Warsaw Inter Bank Offered Rate - interest rate on the Polish interbank market that apply to interbank credits.

Financial ratios	
ROA	net profit/ total assets x 100%
ROE	net profit / equity x 100%
GROSS MARGIN ON SALES	profit before tax / sales revenues x 100%
NET MARGIN ON SALES	net profit / sales revenues x 100%
LIQUIDITY RATIOS	
CURRENT LIQUIDITY	current assets/short-term liabilities
QUICK LIQUIDITY	(current assets- inventories - prepayments) / short-term liabilities
NET WORKING CAPITAL	trade receivables + inventories - trade liabilities
TURNOVER RATIOS	
RECEIVABLES TURNOVER	average amount of trade receivables / sales revenues x 365 days
LIABILITIES TURNOVER	average amount of trade liabilities / cost of goods sold x 365 days
INVENTORY TURNOVER	average amount of inventories / sales revenues x 365 days
DEBT SERVICE COVERAGE RATIO	
FINANCIAL GEARING	net debt / equity x 100%

The Management Board Report on the Operations of the ORLEN Group and PKN ORLEN was approved by the Management Board of the Parent Company on 14 March 2017.

Wojciech Jasiński President of the Board rosław och ski womir Jędrzejczyk e-President of the Boa Vice-President of the Board Hen. 6 Plot Chelmiński Member of the Board Zbigniew Leszczyński Krystian Pater Membe r of the Boar Member of the Board