2018

MANAGEMENT BOARD REPORT ON THE OPERATIONS OF ORLEN GROUP AND PKN ORLEN S.A. FOR THE YEAR 2018

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1. THE ORLEN GROUP

1.1. INTRODUCTION

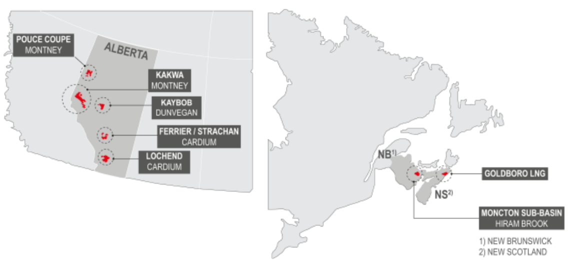
Polski Koncern Naftowy ORLEN S.A. („PKN ORLEN", „the Parent Company", „the Company") together with the companies establishing the Polski Koncern Naftowy ORLEN S.A. Capital Group („the ORLEN Group"; „the Group"; „the Concern") is one of the largest refinery-petrochemical companies in the Central and Eastern Europe.

Key facts and figures 2018

8.3 PLN billion EBITDA LIFO[1]	**2.8 PLN billion** Record-high retail EBITDA	**42.9 million tonnes** Record-high sales	**5.0 PLN billion** Cash flow from operations	**4.3 PLN billion** CAPEX
33.4 million tonnes Record-high throughput **95%** Capacity utilization		**1.3 PLN billion (3.00 PLN/share)** Dividend payment	**15.7%** Financial gearing	**5.6 PLN billion** Net debt

UPSTREAM

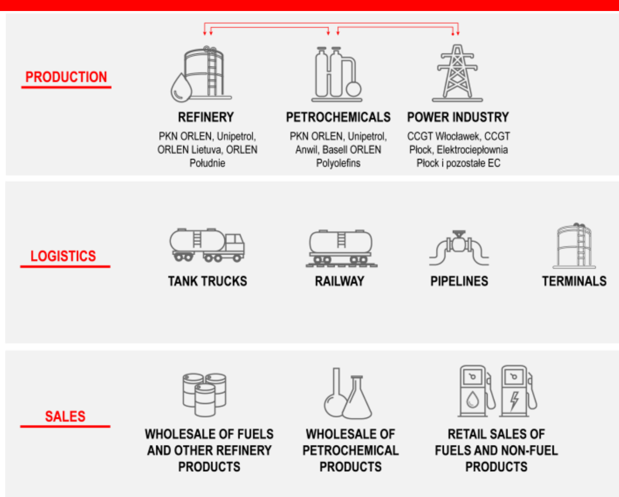
CANADA



POLAND

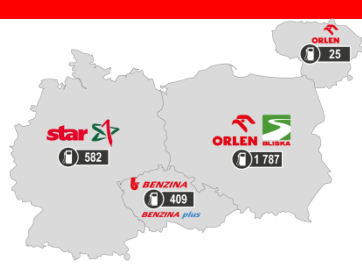
- Exploration and production projects in Poland and Canada.
- **211 million boe**[2] of 2P[3] crude oil and natural gas reserves.
- **18 thousand boe/d** average extraction in 2018.

DOWNSTREAM



- Over **35 million tonnes** of production capacities in 6 ORLEN Group refineries[4] in Poland, the Czech Republic and Lithuania.
- **3.7 thousand kilometres** of pipeline network and **39** storage facilities.
- Development projects:
  - Building of Polyethylene installation in the Czech Republic
  - Building of Metathesis installation in Plock
  - Building of PPF Spliter installation in Lithuania.

RETAIL



- Over **2.8** thousand of fuel stations.
- **17.7%** of total retail market share (Poland, Germany, the Czech Republic, Lithuania)
- **1.7 thousand** Stop Cafe and Stop Cafe Bistro locations in Poland, the Czech Republic and Lithuania.

1) Before write-downs for impairment of assets in the amount PLN 0.7billion. Definitions of presented financial indicators and described in „Glossary of selected financial and industry concepts".
2) Barrel of oil equivalent.
3) Proven&probable reserves
4) Rafineries in Plock, Trzebinia,, Jedlicze, Mazeikiu, Kralupy and Litvinov.

1.2. MANAGEMENT AND SUPERVISORY BOARDS OF THE PARENT

The Management Board of the Parent Company

Composition of the Management Board as at 31 December 2018:

DANIEL OBAJTEK
President of the Management Board, Chief Executive Officer

Mr Daniel Obajtek is a President of the Management Board, Chief Executive Officer of PKN ORLEN since February 6th 2018.

In 2017-2018, Daniel Obajtek served as President of the Management Board of Grupa Energa S.A. In 2017, Energa S.A.'s net profit soared fivefold, and the company was granted the title of the "Company of the Year" among the companies included in the WIG20 index. Energa S.A.'s stock price jumped by 38%.

In 2016-2017, as the head the Agency for Restructuring and Modernisation of Agriculture, Mr Obajtek streamlined the processes related to the disbursement of billions of złotys worth of EU and national funds and optimised the costs of the Agency's operations.

From July 2016 to February 2018, he was a member of the Supervisory Board of LOTOS Biopaliwa.

Daniel Obajtek has initiated a number of projects and investments crucial for strengthening PKN ORLEN's position in Poland and abroad, as well as enhancing Poland's energy security.

In February 2018, a letter of intent concerning the acquisition of Grupa LOTOS was signed. In the middle of 2018, the Petrochemicals Development Programme was launched, whose implementation will bring measurable financial benefits to PKN ORLEN.

The Company is implementing a policy to diversify its oil supply sources – at the moment about 30% of the feedstock is sourced from directions other than east.

PKN ORLEN has been steadily consolidating its position abroad, including by developing ORLEN Lietuva (Lithuania) and Unipetrol (Czech Republic), and also by investing in the fuel station chain.

Mr Obajtek has management experience in a number of areas, including management of local government units and private businesses, as well as in restructuring projects and ownership supervision.

Daniel Obajtek has completed the Executive MBA programme run by the Gdańsk Foundation for Management Development and validated by IAE Aix-Marseille Graduate School of Management. He is also a member of the Programme Council of the Economic Forum in Krynica and chairman of the Board of the Polish Olympic Committee.

ZBIGNIEW LESZCZYŃSKI
Member of the Management Board, Development

Mr Zbigniew Leszczyński has been a Member of the PKN ORLEN Management Board since February 8th 2016. At the meeting held on June 29th 2017, the Supervisory Board appointed Mr Leszczyński as Management Board Member for another term of office.

Zbigniew Leszczyński graduated from the Warsaw University, the Faculty of Accounting and Finance. He also completed the following postgraduate courses: 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 Leon Koźmiński Academy of Entrepreneurship and Management in Warsaw.

Mr Leszczyński has extensive managerial experience in the fuels industry. During his more than a decade long career with the ORLEN Group, he was responsible for such areas as logistics, construction and development of the service station chain, wholesale of refinery and petrochemical products and development of the wholesale business. He has also implemented many strategic projects for the Company. In addition to his roles at PKN ORLEN, Mr Leszczyński also served as President of the Management Board of Wodociągi 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 ran his own business providing project management, supervision and advisory services.

Mr Leszczyński has served as Chairman of the Supervisory Board of ORLEN Deutschland GmbH, Chairman and Member of the Supervisory Board of Unipetrol, and Chairman of the Supervisory Board of ORLEN Paliwa.

At present, Zbigniew Leszczyński serves as Deputy Chairman of the Board of the Polish Chamber of Chemical Industry, member of the Board of Directors of the Polish Organisation of Petroleum Industry and Trade, and member of the Board of the European Petroleum Refiners Association.

WIESŁAW TOMASZ PROTASEWICZ

Member of the Management Board, Chief Financial Officer

Mr Wiesław Tomasz Protasewicz has been a Member of the PKN ORLEN Management Board since July 1st 2017.

Mr Protasewicz is a graduate of the Warsaw School of Planning and Statistics (currently Warsaw School of Economics), Faculty of Production Economics. He completed post-graduate studies in accounting at the Leon Koźmiński Academy of Entrepreneurship and Management in Warsaw. Mr Protasewicz holds a qualification certificate issued by the Minister of Finance authorising him to provide bookkeeping services.

In 1982-1990, Wiesław Protasewicz was employed at Mostostal Siedlce, where he was responsible for production planning and, later, for exports. From 1990 to 1994, Mr Protasewicz worked at the Siedlce Provincial Authority as Head of the Economic Development Department, and from 1993 he was the Siedlce Province Governor. In 1994, he started working as Chief Financial Officer at commercial law companies in Warsaw. In 1998, he was appointed to the Management Board of Polish national railway operator PKP, later PKP S.A., where he served as Vice President of the Management Board responsible for finance, among other matters. From 2003, he sat on the Management Board of Miejskie Zakłady Autobusowe Sp. z o.o. of Warsaw and was in charge of the 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. of Warsaw.

In 1992-2009, he served on the supervisory boards of a number of commercial law companies, including Hydrobudowa-6 S.A. of Warsaw, WARS S.A. of Warsaw, PKP Przewozy Regionalne Sp. z o.o. of Warsaw, and PSE Centrum S.A. of Warsaw, mostly in the capacity of the Chairman. From June 3rd 2016 to June 29th 2017, Wiesław Protasewicz was a member of the Supervisory Board of PKN ORLEN S.A.

JÓZEF WĘGRECKI

Member of the Management Board responsible for operations

Mr Józef Węgrecki is a Member of the PKN ORLEN Management Board since March 23rd 2018. Between February 5th and March 23rd 2018 a Member of the Supervisory Board temporarily delegated to perform the duties of the PKN ORLEN Management Board Member responsible for Investments and Procurement.

He is a graduate of the AGH University of Science and Technology in Kraków, Faculty of Mining and Metallurgical Machines.

Mr Węgrecki holds qualifications to serve on the supervisory boards of companies in which the Polish State Treasury has interests.

In 1978-1990, Józef Węgrecki worked at Zakład Remontowy Energetyki Kraków, where he held the position of Member of the Management Board, Chief Technical Officer. In 1990-1993, Mr Węgrecki served at employee-owned company Remak Opole as its Vice President. From April 1993 to June 2017, he was President and Member of the Management Board of Remak-Krak Sp. z o.o.

In 2017, Mr Węgrecki was appointed Vice President of the Management Board of Energa Wytwarzanie S.A., where his management responsibilities covered water and wind turbine operation, photovoltaic farms, cogeneration and coal-fired power plants, innovation, heating asset acquisitions and setting development directions.

On February 5th 2018, Mr Węgrecki was delegated to temporarily serve as Member of the PKN ORLEN Management Board for Investment and Procurement, and then in April he was appointed Member of the Management Board, Chief Operating Officer.

He is interested in monitoring and analysing the latest technical solutions in the field of power generation: alternative energy sources and their potential industrial applications.

Mr Józef Węgrecki has received a number of awards, including the Galicia Construction Grand Award for his contribution to the advancement of the construction industry, a Badge of Merit for exceptional services to the construction industry, a Gold Medal for long service, and an Honoris Gratia badge for charity and community service.

PATRYCJA KLARECKA

Member of the Management Board, Retail Sales

Mrs Patrycja Klarecka is a Member of Management Board of PKN ORLEN since June 24th 2018.

Patrycja Klarecka graduated from the Poznań University of Economics and Business in Economic Policy and Corporate Strategy.

Since June 2018, as Member of the PKN ORLEN Management Board, she has been responsible, among others, for retail sales and retail chain development. She has also supervised marketing, innovation and the IT area.

Since July 2018, Ms Klarecka has chaired the Supervisory Board of ORLEN Deutschland GmbH.

In 2016-2018, Patrycja Klarecka served as President of the Polish Agency for Enterprise Development (PARP), Poland's largest government agency supporting the development of SMEs.

Ms Klarecka has professional experience in the financial, media and education sectors, including 17 years of working in managerial positions at such companies as the Warsaw Stock Exchange (2014-2016), Bank Zachodni WBK (2010-2014), Telewizja Polska (2004-2010), and PZU (2002-2004).

She has successfully implemented complex business, marketing and innovation projects. Earlier in her career, she was a lecturer at the Melchior Wańkowicz School of Journalism in Warsaw and a consultant at the Poznań School of Banking.

Ms Klarecka served on the supervisory boards of the WSE Foundation and IAB Polska and on the management board of the PZU Charitable Foundation. She represented the Polish Television in the Crossmedia Group at the European Broadcasting Union.

MICHAŁ RÓG

Member of the Management Board for Wholesale and International Trade

Mr Michał Róg is a Member of Management Board of PKN ORLEN since September 1st 2018.

Michał Róg is a graduate of the Cracow University of Economics, majoring in management and marketing, and of the Canadian International Management Institute and Harvard Business School. Mr Róg has over 20 years of professional experience gained working for TELE-FONIKA KABLE S.A., where he served as: Vice President for Sales – Distribution and Power Generation Sector, Director for Sales and Development of High and Medium Voltage Products, Director for Sales on the Balkan Market, Director for Sales in the Home Market, and Head of the Home Market Office.

Since March to August 2018 he has been a Management Board Member for Trade at ORLEN OIL Sp. z o.o. of Kraków. Since April to August 2018 Mr Róg has also been a Member of the Management Board of Paramo a.s. based in Pardubice in Czech Republic.

ARMEN KONRAD ARTWICH

Member of the Management Board for Corporate Affairs

Mr Armen Konrad Artwich is a Member of Management Board of PKN ORLEN since September 1st 2018.

Armen Konrad Artwich is a legal counsel. He graduated with honours from the Faculty of Law and Administration at the University of Warsaw, as well as from the Warsaw School of Economics, where he majored in finance and accounting. He also studied corporate law and commercial law at the University of Sheffield, School of Law. He completed his legal counsel apprenticeship at the Warsaw Bar Association.

From January to August 2018, Mr Artwich served as Head of the Legal Department of the Chancellery of the Prime Minister. Earlier, between 2016 and 2018, as Deputy Director of the Department for Improvement of Economic Regulations at the Ministry of Development, Mr Artwich was responsible, among others, for legislative projects in economic law and for supervision of the Central Office of Measures and the Polish Centre for Accreditation. At the same time, in 2016-2018, Mr Artwich served as member of the Polish Financial Supervision Authority (a representative of the minister in charge of economy).

Between 2011 and 2016, Armen Artwich worked in the Legal Area at Bank Zachodni WBK S.A., where he was in charge of legal services for investment banking in the Global Banking & Markets Division. Armen Artwich is a graduate of the 18th School of Civil Society Leaders. For his *pro publico bono* activity, he received, among other distinctions, the Gold Cross of Merit and the Polcul Foundation award.

Armen Artwich also serves as Chairman of the ORLEN Group Board.

Changes in the composition of the PKN ORLEN Management Board

Date	Change
February 5th 2018	The PKN ORLEN Supervisory Board removed the following persons from the Management Board, with effect as of February 5th 2018: – **Wojciech Jasiński**, President of the Management Board, – **Mirosław Kochalski**, Vice President of the Management Board, – **Maria Sosnowska**, Member of the Management Board, Investments and Procurement.
February 5th 2018	At the request of the Minister of Energy, the Supervisory Board appointed **Daniel Obajtek** as President of the PKN ORLEN Management Board, with effect as of February 6th 2018. The Supervisory Board also decided to delegate **Józef Węgrecki** to temporarily (for up to three months) perform the duties of a Management Board member responsible for Investments and Procurement, with effect as of February 5th 2018.
March 22nd 2018	The PKN ORLEN Supervisory Board removed **Krystian Pater** from the Management Board, with effect as of March 22nd 2018. The Supervisory Board decided to delegate **Jadwiga Lesisz**, with effect as of March 23rd 2018, to temporarily perform the duties of a Management Board member responsible for Investments and Procurement, for a period not longer than three months, until a new Management Board member is appointed to that position. In addition, the Supervisory Board appointed the following persons to the Management Board: **Ryszard Lorek –** as member of the Management Board, Chief Sales Officer, with effect from April 10th 2018; **Józef Węgrecki –** as member of the Management Board, Chief Operating Officer, with effect from March 23rd 2018.
March 29th 2018	**Ryszard Lorek** decided not to take up, as of April 10th 2018, the position of the Management Board Member, Chief Sales Officer.
June 19th 2018	The Supervisory Board of PKN ORLEN S.A. appointed **Patrycja Klarecka** as Member of the Management Board, Chief Sales Officer, with effect from June 24th 2018.
August 10th 2018	The PKN ORLEN Supervisory Board appointed the following persons to the Management Board, with effect from September 1st 2018: **Michał Róg –** as member of the Management Board for Wholesale and International Trade, **Armen Konrad Artwich** – as member of the Management Board for Corporate Affairs.

Supervisory Board of the Parent Company

Composition of the Supervisory Board as at 31 December 2018:

IZABELA FELCZAK-POTURNICKA
Chairman of the Supervisory Board

Ms Felczak-Poturnicka graduated from the Faculty of International Trade and the Faculty of Global Economics of the Łazarski University in Warsaw and holds a PhD studies in Management and Finance at the Warsaw School of Economics. She also completed post-graduate studies in company valuation methods at the Warsaw School of Economics. Since 2005, she is a member of the Centre of Information and Organization of Research on Public Finances and Tax Law in the Countries of Central and Eastern Europe by the Department of Law of the University of Białystok. She is also an author and a co-author of science publications in economics. Ms Felczak-Poturnicka is a certified internal auditor of ISO 9001 quality management systems.

At present, she is Deputy Head of the State Treasury Department at the Chancellery of the Prime Minister. From January 2017, she served as adviser to the Minister, coordinating the work of the Ownership Policy Team at the Ministry of Energy. In 2005–2016, she held various positions at the Ministry of State Treasury. In 2016, she was acting President of the Management Board of Polski Holding Nieruchomości S.A. She is the Chairperson of the Supervisory Board of Polski Holding Nieruchomości S.A. As a representative of the State Treasury, she served on the Supervisory Boards of Jastrzębska Spółka Węglowa S.A., ZEW Niedzica S.A., MERAZET S.A., Z.Ch. ZACHEM S.A., and MERITUM BANK ICB S.A.

She has extensive experience in corporate governance of strategic companies. She participated in the execution of numerous transactions on the capital market, including floatation of GPW S.A., JSW S.A. and PZU S.A. on the Warsaw Stock Exchange. She is experienced in corporate governance, implementation of restructuring plans and assessment of investment project effectiveness.

RADOSŁAW LESZEK KWAŚNICKI
Vice-chairman, Independent Member of the Supervisory Board

Mr Kwaśnicki is a Doctor of Law and a legal counsel. He specialises in corporate law, capital market law, M&A transactions and court proceedings. He completed the AMP course at the IESE Business School of the University of Navarra and a programme for Supervisory Board members 'Value Creation Through Effective Boards' at Harvard Business School and IESE Business School.

In 2014, he was appointed to the Supervisory Board of PKN ORLEN S.A. and is currently Chairman of its Strategy and Development Committee and a member of its Audit, Corporate Governance and CSR Committees.

Mr. Kwaśnicki obtained a prestigious recommendation of the Global Law Experts in the area of commercial law. His expertise in corporate law was also recognised by European Legal Experts and Legal 500. He won 1st place in the competition "Forbes Professionals – Professions of Public Trust".

He was President of the Court of Appeals at the Regional Chamber of Legal Advisers in Warsaw, and now he is its arbitrator. He has been an arbitrator of the Court of Arbitration at the Polish Chamber of Commerce, the Court of Arbitration at the Lewiatan Confederation, the International Court of Arbitration at the International Chamber of Commerce in Paris, and the Conciliatory (Arbitration) Court affiliated with the Polish Bank Association.

He is an editor, author and co-author of several books and commentaries as well as a few hundred of publications on commercial law, and a member of the Programme Board of the Monitor Prawa Handlowego magazine. He is the editor-in-chief of the Prawo Biznesu – Law in Action blog. He teaches at the National School of Judiciary and Public Prosecution. Fluent in English and German.

MATEUSZ HENRYK BOCHACIK
Secretary, Independent Member of the Supervisory Board

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 Paweł Kowal.

MAŁGORZATA NIEZGODA

Member of the Supervisory Board

Ms Małgorzata Niezgoda is a graduate of the Environmental Engineering Faculty of the Warsaw University of Life Sciences (SGGW).

She has worked in the public administration for 23 years, including as civil servant since 2005. Currently, she heads the Ownership Supervision and Policy Department at the Ministry of Energy, which supervises key state-owned companies operating in the oil, gas and energy sectors. From February to December 2015, she worked for the Ministry of the State Treasury, first as Deputy Director in the Restructuring and State Aid Department, and then at the Key Companies Department, where she was responsible for the supervision of restructuring processes in the hard coal mining sector. From November 2014 to February 2015, she headed the Mining Department of the Ministry of Economy.

From 1996 to 2014, Ms Niezgoda worked for the Ministry of the State Treasury, from 2008 at the departments responsible for owner supervision of state-owned companies, including as Division Head (Second Owner Supervision Department, Key Companies Department, Strategic Projects Department) from 2009. She supervised mainly energy companies (TAURON Polska Energia S.A., ENERGA S.A., ENEA S.A., and PGE Polska Grupa Energetyczna S.A.), but also construction, metal, shipbuilding, publishing and printing companies, as well as Mennica Polska S.A., KGHM Polska Miedź S.A. , ARP S.A., and PWPW S.A. She was responsible for oversight of all economic and legal aspects of exercising rights attached to shares held in these entities, including for document analysis and preparation of recommendations and decisions concerning ownership of the companies.

After graduation in 1996, she was employed at the Ministry of Ownership Transformation.

From 2001, she served on the supervisory boards of the following state-owned companies: ENEA S.A. (chairperson), Kompania Węglowa S.A. (chairperson), RADIO GDAŃSK S.A. of Gdańsk (deputy chairperson), Zespół Elektrowni Wodnych Niedzica S.A., PERN S.A., Lurgi Bipronaft S.A., Wydawnictwo Poznańskie Sp. z o.o. (deputy chairperson).

Currently, she is a member of the Supervisory Board of PGE TFI S.A.

WOJCIECH KRYŃSKI

Independent Member of the Supervisory Board

Mr Wojciech Kryński graduated from the University of Lodz, Finance and Banking, as well as post-graduate studies in Accounting and Financial Management (University of Lodz) and holds a certificate of ACCA (Association of Chartered Certified Accountants).

Mr Wojciech Kryński has many years of experience in the application of international and American accounting principles. He has been related with international accounting since 1998. He led numerous projects in Poland, Ukraine, Croatia, Greece, Romania, Ghana and Nigeria.

In the past, he worked in the international auditing company and in the financial departments of international companies.

At Ground Frost Mr Wojciech Kryński coordinates consulting in accounting according to the IFRS and US GAAP, financial modeling, and relationships with key clients. On daily basis Mr Kryński deals with business valuations, estimation of fair value of intangible assets, share-based payments and financial instruments. He participated in advisory projects aimed at creating accounting structures and accounting procedures for hedge accounting in Polish and Romanian companies.

He is responsible for formulating of the accounting policies of listed companies and also participates in preparation of agreements that are later reflected in accounting. Mr Wojciech Kryński also participates in the transactions of mergers and acquisitions, in which he overviews valuations, the processes of due diligence and preparation of share purchase agreements (SPA). He is a regular advisor to many listed companies.

JADWIGA LESISZ

Independent Member of the Supervisory Board

Mrs Jadwiga Lesisz is a graduate of Wrocław University of Economics from the Faculty of International Relations in Foreign Trade. She completed a postgraduate course in Real Estate Management at the Wrocław University of Technology. Graduate of Master of Business Administration programme run by the WSB University of Wrocław in partnership with Franklin University, USA. She has over 20 years of professional experience, including extensive practical experience for the SME sector.

Long-term participation in business life as an owner or manager, where she created and organized business processes.

In 2012–2016, at PKO Bank Polski S.A. she was in charge of real estate operations, supervised negotiations. She was involved in business controlling of the branch network optimisation.

In 2016–2017, she was Director of the Project Management Department and member of the Audit Committee at the Polish Ministry of Development. She was tasked with implementing a project management methodology and culture, as well as monitoring and coordinating the execution of key projects.

She was employed as Vice President of the Polish Agency for Enterprise Development, responsible for areas concerning public tasks in the field of implementation of business innovation. She initiated cooperation of start-up ecosystem in Poland. She supervised public procurement processes and management of the Agency's assets and IT resources.

AGNIESZKA BIERNAT-WIATRAK
Member of the Supervisory Board

She studied at the University of Warsaw's Faculty of Management (where she obtained both MA and postgraduate diplomas), and at Universite Libre de Bruxelles (Solvay Business School).

Competent Manager with 15 years of professional experience in business process optimisation, team management and strategic client relationships. Her key area of expertise is in modern technologies. She has comprehensively run a number of IT projects, both in Poland and elsewhere in Europe.

She has served as a supervisory board member at state-controlled companies. She is a professional negotiator and leader, actively supporting business growth by developing effective sales, marketing and investment strategies. She has command of three foreign languages: English, French and Spanish. She has authored a number of specialist publications, particularly on business process support with dedicated IT solutions.

ANDRZEJ KAPAŁA
Independent Member of the Supervisory Board

Graduate of the School of Banking and Management in Poznań, with an MA in business management. Mr Kapała has also completed MBA studies and post-graduate courses in human resources management and financial management at the Wrocław University of Economics.

Mr Kapała spent 10 years working for the Local Democracy Development Foundation, as Head of its Wrocław Branch, where he focused on advising local authorities and municipal utilities on management strategy. Then, for more than a decade he worked for private and municipal companies where he was responsible for investment and financial analysis and project management. Andrzej Kapała is an author of several dozen feasibility studies for infrastructure projects.

As Head of the Administration Office of PKO Bank Polski for six years, he has been responsible for management of approximately 300 properties and bank investments in south-western Poland.

Anna Wójcik
Member of the Supervisory Board

Mrs Anna Wójcik is a graduate from School of Banking and Management in Poznań in Administration – bachelor's degree and Faculty of Law and Administration of the Warsaw University – master's degree. She completed post-graduate studies at Management Department of Warsaw University of Business where she received the Master of Business Administration title.

Since 2018, the Head of the Prime Minister's Office in the Prime Minister's Chancellery. From 2016-2018 the Head of the Minister's Office in the Ministry of Development and from 2017-2018 the Head of the Minister's Office in the Ministry of Finance. From 2013-2016 the Chief Operations Officer at EXEQ Sp. z o.o. in Warsaw. Since 2009 till 2013 she worked as an Assistant to the President of the Management Board at Grupa Handlowa Sangroup Sp. z o.o. of Warsaw. From 2006-2008 an Assistant to the President of the Management Board at Reescon Sp. z o.o. (developer) of Warsaw. Since 2003 to 2006 an Administration Specialist at the Foreign Trade Company Universal S.A. (in bankruptcy) of Warsaw. From 1998 to 2002 an Assistant to the President of the Management Board at an advertising agency Cardinall Agency Ltd of Warsaw.

Changes in the composition of the PKN ORLEN Supervisory Board

Date	Change
January 5th 2018	On behalf of the State Treasury, the Minister of Energy, acting pursuant to Art. 8.2.1 of the Company's Articles of Association, appointed **Małgorzata Niezgoda** to the PKN ORLEN Supervisory Board.
February 1st 2018	**Małgorzata Niezgoda** resigned from the position of a Supervisory Board Member pursuant to Art. 386.2 in conjunction with Art. 369.5.
February 2nd 2018	The PKN ORLEN Extraoridnary General Meeting removed the following persons from the Supervisory Board: **Agnieszka Krzętowska, Angelina Sarota and Adrian Dworzyński,** and appointed the following persons to the Supervisory Board: **Izabela Felczak-Poturnicka, as Chairwoman of the Supervisory Board, Agnieszka Biernat-Wiatrak, Jadwiga Lesisz, Małgorzata Niezgoda.**
February 5th 2018	On behalf of the State Treasury, the Minister of Energy, acting pursuant to Art. 8.2.1 of the Company's Articles of Association, appointed **Józef Węgrecki** to the PKN ORLEN Supervisory Board. On February 5th 2018, the Supervisory Board of PKN ORLEN S.A. delegated **Józef Węgrecki** to temporarily perform the duties of a Management Board member responsible for Procurement and Investment, for a period not longer than three months.

March 1st 2018	**Agnieszka Biernat-Wiatrak** ceased to be an independent member of the Supervisory Board and notified the Company and the Supervisory Board of this fact at the Supervisory Board meeting held on February 26th 2018.
March 22nd 2018	**Józef Węgrecki** resigned as Member of the Supervisory Board.
March 22nd 2018	The Supervisory Board delegated **Jadwiga Lesisz**, Member of the Supervisory Board, to serve, with effect from March 23rd 2018, as a Management Board member responsible for Investments and Procurement, for a period not longer than three months.
March 22nd 2018	**Radosław Kwaśnicki**, Deputy Chair of the Supervisory Board, submitted a representation to the effect that he met the independence criteria.
June 23rd 2018	The delegation of **Jadwiga Lesisz**, Member of the Supervisory Board, to temporarily perform the duties of a Management Board Member, expired.
June 26th 2018	On June 26th 2018, at the request of the State Treasury as a shareholder, the Annual General Meeting of PKN ORLEN S.A. appointed **Andrzej Kapała** to the Supervisory Board. On June 26th 2018, acting on behalf of the State Treasury and pursuant to Art. 8.2.1 of the Company's Articles of Association, the Head of the State Treasury Department at the Chancellery of the Prime Minister appointed **Anna Wójcik** to the PKN ORLEN Supervisory Board.
February 15th 2019	On February 15th 2019, **Mateusz Henryk Bochacik** resigned as member of the Supervisory Board of PKN ORLEN S.A. Mr Bochacik resigned citing personal reasons for his decision, preventing him from effectively serving on the Supervisory Board.

1.3. ORGANISATION AND DEVELOPMENT POLICY

The ORLEN Group companies are engaged in the following types of activity:

- production and trade: crude oi processing, production of refining, petrochemical and chemical products and semi-products, wholesale and retail sale of fuels and other products,
- services: crude oil and fuels storage, transport, maintenance and repair services, laboratory, security, design, administrative, insurance and finance services,
- exploration for and extraction of hydrocarbons, production, transmission and distribution of and trade in electrical and heat energy.

For management purposes, the ORLEN Group's business is divided into three operating segments of Downstream, Retail, Upstream, as well as Corporate Functions.

For description of these segments, see section 3.2., and for the segments' financial results – section 4.2.

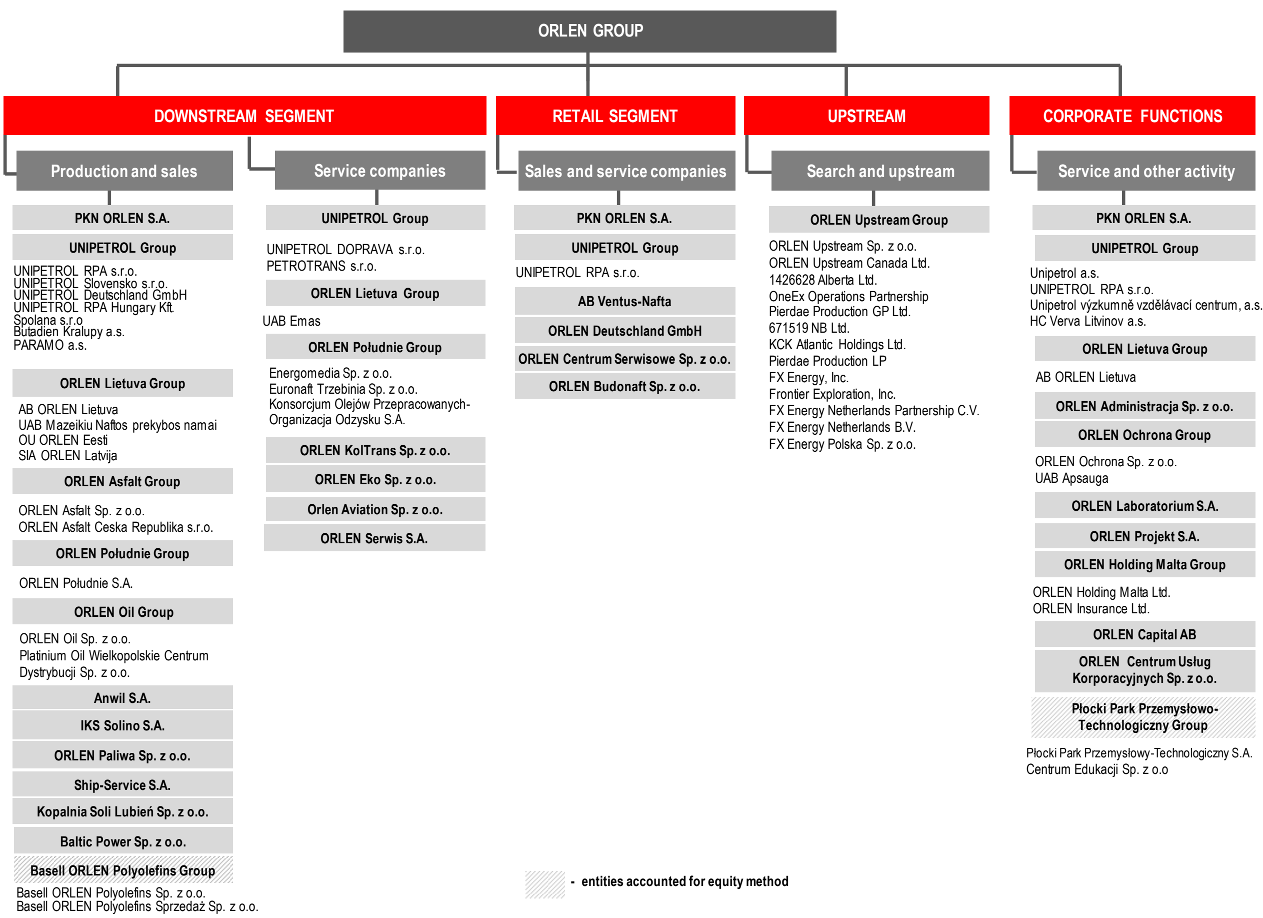
The ORLEN Group comprises PKN ORLEN, the Group's Parent and entities operating in Poland, Germany, the Czech Republic, Lithuania, Malta, Sweden, the Netherlands, Slovakia, Hungary, Estonia, Latvia, the US and Canada.

As at 31 December 2018 the State Treasury owned 27.52% of the ORLEN Group Parent Company's shares – PKN ORLEN and has ability to exert a significant influence on it. For the shareholding structure in PKN ORLEN see section 5.1.

As at 31 December 2018, the ORLEN Group consisted of 67 companies, including 57 subsidiaries.

For description of the organisational and cross-equity links between the Parnt and the ORLEN Group companies, and the applied consolidation methods, see section 7.1 of the Consolidated Financial Statements for 2018**.**

SCHEME 1. Allocation of the Parent Company and the ORLEN Group companies to the operating segments and corporate functions as at 31 December 2018.



The Parent's policy with respect to the ORLEN Group focuses on reinforcing the position of the core-business companies, developing power generation and the Upstream segment, as well as improving management, consolidating assets, and divesting of non-core assets.

The purpose of the measures undertaken by the Group is to increase its market value, to strengthen its position on home markets, and to expand its product offering and geographical reach. The Group's key development investments are aimed at further expanding the product portfolio, deeper conversion, construction of new electricity generating capacities, and continuation of the hydrocarbon exploration and production projects. To ensure effective management, holding management policies have been implemented and comprise solutions designed to achieve Parent-defined shared goals across the ORLEN Group.

The policies are based on the ORLEN Group Constitution which stipulates three key regulations: the Cooperation Agreement, the Group Rules, and provisions of respective articles of association of the ORLEN Group companies.

The Constitution provides for uniform information exchange standards and effective monitoring of key business decisions. It also defines the legal basis for establishing a coherent strategy for the ORLEN Group. PKN ORLEN's effective corporate supervision relies on formal and legal supervision as well as on supervision of the companies' operating and finance activities.

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

The key changes in PKN ORLEN's organisational structure and management policies in 2018 included:

- winding up the division of the Vice President of the Management Board and the division of the Management Board Member for Investment and Procurement
- establishment of new divisions supervised by members of the Management Board for Retail Sales, for Wholesale and International Trade, and for Development,
- establishment of new organisational units: the Community Relations Office and the Sports Marketing, Sponsorship and Events Office, and winding up of the ORLEN Group Sales Efficiency and Growth Office and the Management Systems and Organisation Office.

On September 3rd 2018, following the appointment of two new members of the Management Board – for Corporate Affairs and for Wholesale and International Trade, the Management Board adopted a new division of powers and responsibilities among the Management Board members, which was in effect until the end of 2018 and is presented below.

SCHEME 2. Responsibility areas of Members of the PKN ORLEN Management Board as at 31 December 2018.

PRESIDENT OF THE MANAGEMENT BOARD, CHIEF EXECUTIVE OFFICER DANIEL OBAJTEK	MEMBER OF THE MANAGEMENT BOARD, CORPORATE AFFAIRS ARMEN ARTWICH	MEMBER OF THE MANAGEMENT BOARD, CHIEF FINANCIAL OFFICER WIESŁAW PROTASEWICZ	MEMBER OF THE MANAGEMENT BOARD, DEVELOPMENT ZBIGNIEW LESZCZYŃSKI	MEMBER OF THE MANAGEMENT BOARD, OPERATIONS JÓZEF WĘGRECKI	MEMBER OF THE MANAGEMENT BOARD, RETAIL SALES PATRYCJA KLARECKA	MEMBER OF THE MANAGEMENT BOARD, WHOLESALE AND INTERNATIONAL TRADE MICHAŁ RÓG
Strategy	Administration	Planning and Reporting	Procurement	Refinery Production	IT	Wholesale of Refinery Products
Human Resources	Environmental Protection	Business Controlling	Implementation of Investments	Petrochemical Production	Retail Sale	Sale of Petrochemical Products
Marketing	Capital Group	Finance Management	Development and Technology	Power Engineering	Innovation	Logistics
Corporate Communication	Financial Controlling, Risk Management and Compliance	Taxes	Health and Safety	Production Efficiency and Optimisation	Efficiency and Development of Sale	Supply Chain Management
Trade of Crude Oil and Gas		Investor Relations		Technics		
Management Board Office		Security of Infrastructure and Data Supervision Office, Critical Infrastructure Protection Officer		Water and Wastewater Management		
Control and Security						
Audit						
Legal						
External Relations						

For a description of changes in the composition of the Management and Supervisory Boards in 2018 and by the issue date of this Report, see Section 1.2 of this Report.

Furthemore, in 2018, changes were made to the rules of corporate governance over the ORLEN Group companies in which PKN ORLEN S.A. holds shares. As a result of the changes, the President of the PKN ORLEN Management Board or the PKN ORLEN Management Board members designated by the President will, upon consultation with the Member of the Management Board for Corporate Affairs, independently exercise business supervision over the companies.

In addition, the ORLEN Group companies introduced organisational and management changes as described below.

Unipetrol Group
During its meeting held on March 10th 2018, the Supervisory Board appointed Tomasz Wiatrak as Vice President of the Company's Management Board. On March 14th 2018, the Supervisory Board appointed Katarzyna Woś and Maciej Andrzej Libiszewski as Members of the Company's Management Board. On October 1st 2018, Mr Przemysław Wacławski was appointed to the Management Board. The scope of responsibilities of the individual Management Board members did not change substantially.

ORLEN Lietuva Group
In 2018, the ORLEN Lietuva Group's management policies were stable and focused on process optimisation in the refining segment in the context of weaker macroeconomic environment. On January 1st 2018, Michał Rudnicki was appointed as President of the Management Board, replacing Eugeniusz Fąfara, who stepped down on December 31st 2018. On March 23rd 2018, Krystian Pater was removed from the Management Board and replaced by Przemysław Cezary Hartliński. On April 30th 2018, Michał Rudnicki, Jarosław Roman Szaliński, Marek Paweł Gołębiewski, Przemysław Cezary Hartliński, Paweł Wysocki, Andrzej Mieczysław Stegenta, and Krzysztof Witkowski were appointed for a new four-year term of office.

ORLEN Południe
At the end of 2018, the company had in place the Organisational Rules of ORLEN Południe S.A., introduced on December 1st 2018. The key changes in 2018 included the establishment of the Development and Investment Director Area, as well as the combination of the logistics, power and wastewater management departments of the Jedlicze and Trzebinia refineries into a single department reporting to the Management Board Member responsible for support.

Support functions
In 2018, accounting and HR/payroll processes were handled at the ORLEN Group by ORLEN Centrum Usług Korporacyjnych Sp. z o.o. At the end of 2018, ORLEN Centrum Usług Korporacyjnych Sp. z o.o. provided a complete range of accounting services to 21 ORLEN Group companies and HR/payroll services to 25 ORLEN Group companies.

There were no material changes in the organisation and management policies of the **other ORLEN Group companies** in 2018. For information on the existing organisational structure of the ORLEN Group companies and their governing bodies, go to https://www.orlen.pl/PL/Strony/default.aspx

1.3.2. Changes in cross-equity links

For a description of changes in cross-equity links in 2018, see section 7.2 of the Consolidated Financial Statements for 2018.

1.4. SELECTED OPERATING AND FINANCIAL DATA

TABLE 1. Selected operation and financial data for the years 2014-2018.

Item	Unit	2018	2017	2016	2015	2014
I. MACROECONOMIC DATA (average value for the period)						
Brent oil	USD/bbl	71.3	54.2	43.7	52.4	98.9
Ural oil	USD/bbl	69.9	52.8	41.7	51.0	97.2
WTI oil	USD/bbl	65.0	50.8	43.5	48.8	94.0
Brent/URAL differential[1]	USD/bbl	1.5	1.4	2.5	1.8	1.7
Model Downstream margin[1 2]	USD/bbl	12.2	12.8	11.7	13.8	11.4
Model refining margin[1]	USD/bbl	5.1	6.4	5.3	8.2	3.4
Model petrochemical margin[1]	EUR/t	885	933	960	968	781
Average exchange rate USD/PLN	PLN	3.6117	3.7782	3.9435	3.7730	3.1537
Average exchange rate EUR/PLN	PLN	4.2617	4.2583	4.3637	4.1843	4.1845
Average exchange rate EUR/USD	USD	1.1800	1.1271	1.1066	1.1090	1.3269
II. OPERATING ACTIVITY						
Sales of products and goods, including:	**'000 tonnes**	**42 892**	**42 382**	**39 453**	**38 676**	**35 740**
Downstream	'000 tonnes	32 716	32 925	30 708	30 380	27 706
Retail	'000 tonnes	9 448	8 819	8 187	7 986	7 776
Upstream	'000 tonnes	728	638	558	310	258
Crude oil throughput ORLEN Group, of which:	**'000 tonnes**	**33 380**	**33 228**	**30 147**	**30 908**	**27 276**
Crude oil throughput in PKN ORLEN	'000 tonnes	15 855	15 220	15 130	15 674	14 278
Crude oil throughput in Unipetrol Group	'000 tonnes	7 555	7 894	5 422	6 495	5 130
Crude oil throughput in ORLEN Lietuva Group	'000 tonnes	9 690	9 821	9 323	8 486	7 497
III. FINANCIAL ACTIVITY						
3.1. Consolidated statement of profit or loss and other comprehensive income						
Sales revenues	**PLN million**	**109 706**	**95 364**	**79 553**	**88 336**	**106 832**
Profit from operations under LIFO[3] increased by depreciation and amortization ("EBITDA LIFO") before impairment allowances[4], including:	**PLN million**	**8 324**	**10 448**	**9 412**	**8 738**	**5 213**
Downstream	PLN million	6 031	8 720	8 107	7 776	4 210
Retail	PLN million	2 781	2 049	1 801	1 539	1 416
Upstream	PLN million	305	293	255	44	152
Corporate Functions	PLN million	(793)	(614)	(751)	(621)	(565)
Profit from operations under LIFO increased by depreciation and amortization, including:	**PLN million**	**9 028**	**10 279**	**9 557**	**7 745**	**(147)**
LIFO correction[3]	PLN million	**(860)**	**799**	**85**	**(1 510)**	**(2 573)**
Profit from operations increased by depreciation and amortization ("EBITDA[3]"), including:	**PLN million**	**9 888**	**11 078**	**9 642**	**6 235**	**(2 720)**
Amortisation	**PLN million**	**2 673**	**2 421**	**2 110**	**1 895**	**1 991**
Profit / (loss) from operations ("EBIT[3]")	**PLN million**	**7 215**	**8 657**	**7 532**	**4 340**	**(4 711)**
Net profit / (loss)	**PLN million**	**5 604**	**7 173**	**5 740**	**3 233**	**(5 828)**
3.2. Balance sheet data						
Total assets	PLN million	64 141	60 664	55 559	48 137	46 725
Equity capital	PLN million	35 739	35 211	29 285	24 244	20 386
Net debt[3]	PLN million	5 599	761	3 363	6 810	6 720
3.3. Consolidated cash flow statement						
Net cash from operating activities	PLN million	4 980	8 050	9 331	5 354	3 187
Net cash (used in) investing activities, including:	PLN million	(3 798)	(3 925)	(4 436)	(4 096)	(4 020)
Capital expenditures ("CAPEX[3]")	PLN million	4 280	4 602	4 673	3 183	3 788
Free cash flow[5]	**PLN million**	**1 182**	**4 125**	**4 895**	**1 258**	**(833)**
Net cash from / (used in) financing activities	PLN million	(3 237)	(2 832)	(2 210)	(2 866)	2 083
Dividends paid	PLN million	(1 284)	(1 384)	(912)	(706)	(617)
3.4. Key indicators						
Return on capital employed (ROACE) [3]	%	13.6	20.8	18.8	14.9	1.8
Return on capital employed LIFO (ROACE LIFO)[3]	%	11.8	19.0	18.6	19.1	8.8
Net financial gearing[3]	%	15.7	2.2	11.5	28.1	33.0
Profit/(Loss) attributable to shareholders of the Parent Company per share (EPS[3])	PLN/share	12.99	15.56	12.30	6.63	(13.59)

1) The method of calculating the margin is placed at the end of this report, in „Glossary of selected financial and industry concepts".

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.

3) The definitions of applied parameters and financial indicators as well as LIFO method of inventories valuation are presente in „Glossary of selected financial and industry concepts"

4) The results from operations for the years 2014, 2015, 2016, 2017and 2018 include write-downs for impairment of assets in the amount of: PLN (5 360) million, PLN (993) million, PLN 145 million and PLN (169) million and PLN 704 million.

5) Free cash flow = net cash from operating activities + net cash from / (used in) investment activities.

1.5. THE MOST SIGNIFICANT EVENTS, AWARDS AND HONOURS

Year 2018

QUARTER 1	
Convening of the Extraordinary General Meeting of PKN ORLEN	On 4 January 2018 the Management Board of PKN ORLEN S.A., acting pursuant to Article 399 § 1, Article 402(1) of the Commercial Companies Code and § 7 item 4 point 1 of the Company's Articles of Association in conjunction with the motion of the Minister of Energy, informed about convening the Extraordinary General Meeting of Polski Koncern Naftowy ORLEN S.A on 2 February 2018. Regulatory announcement no. 1/2018.
Changes in the composition of the PKN ORLEN Supervisory Board	On 5 January 2018 the Minister of Energy acting on behalf of the shareholder the State Treasury, according to § 8 item 2 point 1 of the Company's Articles of Association appointed Mrs Małgorzata Niezgoda to the PKN ORLEN S.A. Supervisory Board. Regulatory announcement no. 3/2018.
Approval of the annex to the prospectus relating to bond issue programme by Polish Financial Supervision Authority	On 12 January 2018 the Polish Financial Supervision Authority approved the annex to the prospectus relating to the public bond issue programme directed to the individual investor ("Annex"). The Annex was prepared in connection with the start of the procedure of the announcement and execution of a voluntary tender offer to acquire shares of Unipetrol a.s. by PKN ORLEN S.A. Regulatory announcement no. 7/2018.
Changes in the composition of the PKN ORLEN Supervisory Board	On 1 February 2018 Mrs Małgorzata Niezgoda resigned from the position of PKN ORLEN Supervisory Board Member. On 2 February 2018 the PKN ORLEN Extraordinary General Meeting of Shareholders dismissed from the Supervisory Board Ms Agnieszka Krzętowska, Ms Angelina Sarota and Mr Adrian Dworzyński and appointed Ms Izabela Felczak-Poturnicka as the Chairman of the Supervisory Board, Ms Agnieszka Biernat-Wiatrak, Ms Jadwiga Lesisz and Ms Małgorzata Niezgoda as members of the Supervisory Board. On 5 February 2018 the Minister of Energy acting on behalf of the shareholder the State Treasury, according to § 8 item 2 point 1 of the Company's Articles of Association appointed Mr Józef Węgrecki to the PKN ORLEN S.A. Supervisory Board. Regulatory announcement no. 12/2018. Regulatory announcement no. 14/2018. Regulatory announcement no. 16/2018.
Changes in the composition of the PKN ORLEN Management Board	On 5 February 2018 the Supervisory Board has dismissed the following persons from the Company's Management Board: - Mr Wojciech Jasiński, - Mr Mirosław Kochalski, - Ms Maria Sosnowska. At the same meeting the Supervisory Board, pursuant to § 9 item 1 point 3 of the Company's Articles of Association, acting on the basis of the motion of the Minister of Energy as of 5 February 2018, appointed with the effect from 6 February 2018 Mr Daniel Obajtek to the position of the President of the PKN ORLEN S.A. Management Board. The Supervisory Board decided also to delegate with the effect from 5 February 2018 Mr Józef Węgrecki for temporary acting as the Member of the PKN ORLEN S.A. Management Board, Investments and Procurement. Regulatory announcement no. 17/2018.
Polish Financial Supervision Authority approved the annex no 2 to the prospectus relating to bond issue programme	On 15 February 2018 the Polish Financial Supervision Authority approved the annex no 2 to the prospectus relating to the public bond issue programme directed to the individual investor ("Annex"). The prospectus was initially approved by the Polish Financial Supervision Authority on 20 July 2017 and the annex no 1 to that prospectus on 12 January 2018. The Annex was prepared in connection with the changes in composition of the PKN ORLEN S.A. Management Board that took place on 5 February 2018. Regulatory announcement no. 22/2018.
Signing a letter of intent concerning taking capital control over Grupa Lotos S.A. by PKN ORLEN S.A.	On 27 February 2018 it signed a letter of intent between PKN ORLEN and the State Treasury concerning taking capital control over Grupa Lotos S.A. ("Lotos Group") by PKN ORLEN, understood as a purchase by PKN ORLEN directly or indirectly minimum 53% stake in Lotos Group share capital ("Transaction"). By signing the letter of intent, PKN ORLEN and the State Treasury agreed to start, in a good faith, discussions with the intent to conclude the Transaction. The Transaction assumes the purchase of Lotos Group shares from its shareholders by PKN ORLEN, in particular from the State Treasury, in line with the requirements of the Act on Public Offering, Conditions Governing the Introduction of Financial Instruments to Organised Trading, and Public Companies of 29 July 2005 (unified text Journal of Laws of 2016, item 1639, as amended), governing the requirement of announcement of a tender offer to acquire or exchange shares. PKN ORLEN informed that the Transaction model, the schedule and detailed rules of its finalisation require detailed analysis. Finalisation of the Transaction will be possible, among others, after receiving appropriate corporate approvals and approvals of the competition protection authorities regarding the concentration. According to the assumptions of both parties of the letter of intent, the Transaction is aimed at creating of a strong, integrated company capable of better competing internationally, resistant to market fluctuations, among others through utilization of operating and costs synergies between PKN ORLEN and Lotos Group. PKN ORLEN indicated that the letter of intent is not a binding commitment to execution of the Transaction. Regulatory announcement no. 26/2018.
Polish Financial Supervision Authority approved the annex no 3 to the prospectus relating to bond issue programme	On 6 March 2018 the Polish Financial Supervision Authority approved the annex no 3 to the prospectus relating to the public bond issue programme directed to the individual investor ("Annex no 3"). The Annex no 3 was prepared in connection with signing, on 27 February 2018, a letter of intent between PKN ORLEN S.A. and the State Treasury concerning taking capital control over Grupa Lotos S.A. by PKN ORLEN S.A. Regulatory announcement no. 29/2018.
Changes in the composition of the PKN ORLEN Supervisory Board	On 22 March 2018 Mr Józef Węgrecki submitted to the Company a statement of resignation from the position of PKN ORLEN S.A. Supervisory Board Member with the effect from 22 March 2018. Regulatory announcement no. 35/2018.

Changes in te composition of the PKN ORLEN Management Board	On 22 March 2018 the Supervisory Board of PKN ORLEN S.A. has dismissed Mr Krystian Pater from the Company's Management Board with the effect from 22 March 2018. At the same meeting the Supervisory Board decided to delegate with the effect from 23 March 2018 Ms Jadwiga Lesisz for temporary acting as the Member of the PKN ORLEN S.A. Management Board, Investments and Procurement. Moreover the Supervisory Board appointed the following persons to the Company's Management Board: - Mr Ryszard Lorek to the position of the Member of the PKN ORLEN S.A. Management Board, Trade, with the effect from 10 April 2018, - Mr Józef Węgrecki to the position of the Member of the PKN ORLEN S.A. Management Board, Operations, with the effect from 23 March 2018. Regulatory announcement no. 36/2018.
Resignation of Mr Ryszard Lorek from taking up of the position of PKN ORLEN S.A. Management Board Member	On 29 March 2018 the Company received a resignation of Mr Ryszard Lorek from taking up, with the effect from 10 April 2018, of the position of the Member of the PKN ORLEN S.A. Management Board responsible for Trade. Regulatory announcement no. 38/2018.

QUARTER 2

The issue of PKN ORLEN Series C bonds within the programme from 2017	On 24 April 2018 the Company's Management Board decided to launch the issue of Series C of bearer bonds within the bond issue programme directed to the individual investors ("Programme"), included in the prospectus approved by the Polish Financial Supervision Authority on 20 July 2017. The bond issue programme assumes the issue of several bond series up to the total amount of PLN 1 billion during 12 months from the date of approval of the prospectus. The subsequent series of bonds will be offered in a public offering. PKN ORLEN plans to introduce the bonds to trading on the Catalyst regulated market operated by the Warsaw Stock Exchange. Series A and B bonds issued within the Programme are listed on the Catalyst market. Terms and conditions of issue of Series C: 1. Subscription Period: from 7 May 2018 to 21 May 2018 (the period may be shortened when the oversubscription occurs) 2. Date of bonds allocation: 22 May 2018 3. Expected bonds issue date: 5 June 2018 4. Final redemption date: 5 June 2022 5. Number of C series bonds issued: up to 2 000 000 6. The total nominal value of C series bonds: up to PLN 200 000 000 7. Interest rate: variable 8. Margin for variable rate bonds: 1.2 % 9. Base for variable rate bonds: 6M WIBOR 10. Nominal value of one bond: PLN 100 11. Issue price: dependent on the day of subscription; in the range from PLN 100.00 to PLN 100.11 12. Rating to the bond issue programme: A (pol) 13. Bond's allocation mechanism: the detailed terms of allocation are available in the final terms of the offer. On 8 May 2018 PKN ORLEN informed that the subscription period for the Series C bonds within the bond issue programme directed to the individual investors was shortened. The last day of subscription, defined in the final terms and conditions of the offer on 21 May 2018, was moved for 8 May 2018. Date of Series C bonds allocation has also changed. PKN ORLEN S.A. will allocate Series C bonds on 10 May 2018. On 21 May 2018 the Central Securities Depository of Poland ("KDPW") has issued a statement on conclusion of the agreement with PKN ORLEN S.A. regarding registration in a securities depository of 2 000 000 series C bonds, with the unit nominal value of PLN 100. The registration date was set for 23 May 2018. On 29 May 2018 the Management Board of the Warsaw Stock Exchange has adopted a resolution regarding admission of 2 000 000 series C bonds to exchange trading on the Catalyst regulated market. On 30 May 2018 the Management Board of the Warsaw Stock Exchange has adopted a resolution determining the first day of trading of PKN ORLEN series C bonds on 4 June 2018. Regulatory announcement no. 46/2018.
Polish Financial Supervision Authority approved the annex no 4 to the prospectus relating to bond issue programme	On 17 May 2018 the Polish Financial Supervision Authority approved the annex no 4 to the prospectus relating to the public bond issue programme directed to the individual investors ("Annex no 4") due to signing a non-disclosure agreement in connection with the intent to cooperate in potential sales transaction of the part of PKN ORLEN logistic assets as well as due to coming into force the Regulation (EU) 2016/1011 of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds and amending Directives 2008/48/EC and 2014/17/EU and Regulation (EU) No 596/2014. Regulatory announcement no. 56/2018.

The issue of PKN ORLEN Series D bonds within the programme from 2017	On 15 May 2018 the Company's Management Board decided to launch the issue of Series D of bearer bonds within the bond issue programme directed to the individual investors, included in the prospectus approved by the Polish Financial Supervision Authority on 20 July 2017. Terms and conditions of issue of Series D: 1. Subscription period: from 21 May 2018 to 4 June 2018 (the period may be shortened when the oversubscription occurs) 2. Date of bonds allocation: 6 June 2018 3. Expected bonds issue date: 19 June 2018 4. Redemption date: 19 June 2022 5. Number of Series D bonds issued: up to 2 000 000 6. The total nominal value of Series D bonds: up to PLN 200 000 000 7. Interest rate: variable 8. Margin: 1.2 % 9. Base rate: 6M WIBOR 10. Nominal value of one bond: PLN 100 11. Issue price: dependent on the day of subscription; in the range from PLN 100.00 to PLN 100.11 12. Rating to the bond issue programme: A (pol) 13. Bond's allocation mechanism: the detailed terms of allocation are available in the final terms of the offer. On 13 June 2018 the Central Securities Depository of Poland has issued a statement on conclusion of the agreement with PKN ORLEN regarding registration in a securities depository of 2 000 000 series D bonds, with the unit nominal value of PLN 100, issued within the public bond issue programme. The registration date was set for 15 June 2018. On 18 June 2018 the Management Board of the Warsaw Stock Exchange has adopted a resolution regarding admission of 2 000 000 series D bonds to exchange trading on the Catalyst regulated market, operated by the WSE. On 19 June 2018 the Management Board of the Warsaw Stock Exchange has adopted a resolution determining the first day of trading of PKN ORLEN series D bonds on 21 June 2018. Regulatory announcement no. 54/2018.
Decision regarding the purchase of all of Unipetrol a.s. shares held by minority shareholders	On 22 May 2018 Company's Supervisory Board approved the purchase of all shares of Unipetrol a.s. ("Unipetrol") held by Unipetrol minority shareholders, i.e. 10 827 673 shares, constituting ca. 5.97% of the Unipetrol's share capital.. Regulatory announcement no. 59/2018.
Petrochemical segment development program by 2023	On 12 June 2018 the Company's Management Board approved the program of petrochemical segment development by 2023 ("Program"), which will be a ground for the update of the Company's strategy in the area of petrochemical assets development. The estimated budget necessary for realization of investments constituting the Program, in the amount of ca. PLN 8.3 billion, will be provided in the Company's middle-term financial plan that was being prepared. The estimated annual increase of PKN ORLEN S.A. EBITDA after finalization of the investments included in the Program may amount to ca. PLN 1.5 billion. The Program of petrochemical segment development approved, assumes realization of three key investments: - building of Aromatics Compound complex - development of Olefins complex - development of Phenol capacity which will be supported by extension of research and development facilities, necessary for its realization. Regulatory announcement no. 69/2018.
The issue of PKN ORLEN Series E bonds within the programme from 2017	On 12 June 2018 the Company's Management Board decided to launch the issue of Series E of bearer bonds within the bond issue programme directed to the individual investors ("Programme"), included in the prospectus approved by the Polish Financial Supervision Authority on 20 July 2017. W dniu 12 czerwca 2018 roku Zarząd Spółki zdecydował o uruchomieniu emisji serii E obligacji na okaziciela w ramach programu publicznych emisji obligacji skierowanych do inwestorów indywidualnych („Program"), objętego prospektem emisyjnym zatwierdzonym przez Komisję Nadzoru Finansowego w dniu 20 lipca 2017 roku. Terms and conditions of issue of Series E bonds: 1. Subscription period: from 18 June 2018 to 29 June 2018 (the period may be shortened when the oversubscription occurs) 2. Date of bonds allocation: 3 July 2018 3. Expected bonds issue date: 13 July 2018 4. Redemption date: 13 July 2022 5. Number of Series E bonds issued: up to 2 000 000 6. The total nominal value of Series E bonds: up to PLN 200 000 000 7. Interest rate: variable 8. Margin: 1.2 % 9. Base rate: 6M WIBOR 10. Nominal value of one bond: PLN 100 11. Issue price: dependent on the day of subscription; in the range from PLN 100.00 to PLN 100.09 12. Rating to the bond issue programme: A (pol) 13. Bond's allocation mechanism: the detailed terms of allocation are available in the final terms of the offer. On 25 June 2018 PKN ORLEN informed that the subscription period for the Series E bonds within the bond issue programme directed to the individual investors has been shortened. The last day of subscription, defined in the final terms and conditions of the offer on 29 June 2018, has been moved for 25 June 2018. Date of Series E bonds allocation has also been changed. PKN ORLEN allocated Series E bonds on 27 June 2018. On 2 July 2018 the Central Securities Depository of Poland has issued a statement on conclusion of the agreement with PKN ORLEN regarding registration in a securities depository of 2 000 000 series E bonds, with the unit nominal value of PLN 100, issued within the public bond issue programme, included in the prospectus approved by the Polish Financial Supervision Authority on 20 July 2017. The registration date was set for 3 July 2018.

	On 2 July 2018 the Management Board of the Warsaw Stock Exchange has adopted a resolution regarding admission of 2 000 000 series E bonds to exchange trading on the Catalyst regulated market, operated by the WSE. On 3 July 2018 the Management Board of the Warsaw Stock Exchange has adopted a resolution determining the first day of trading of PKN ORLEN series E bonds on 4 July 2018. Regulatory announcement no. 70/2018.
Polish Financial Supervision Authority approved the annex no 5 to the prospectus relating to bond issue programme	On 14 June 2018 the Polish Financial Supervision Authority approved the annex no 5 to the prospectus relating to the public bond issue programme directed to the individual investors ("Annex no 5"). The Annex no 5 was prepared in connection with the program of petrochemical segment development by 2023, approved on 12 June 2018 by the Management Board, which will be a ground for the update of PKN ORLEN strategy in the area of petrochemical assets development. Regulatory announcement no. 73/2018.
Changes in te composition of the PKN ORLEN Management Board	The Supervisory Board of PKN ORLEN, following its meeting on 19 June 2018 appointed, with the effect from 24 June 2018, Ms Patrycja Klarecka to the Company's Management Board, responsible for trade. Regulatory announcement no. 75/2018.
Czech National Bank approval regarding the purchase of Unipetrol a.s. shares held by minority shareholders	On 20 June 2018 the Czech National Bank approved the purchase of all shares of Unipetrol a.s. ("Unipetrol") held by Unipetrol minority shareholders, i.e. 10 827 673 shares, constituting ca. 5.97% of the Unipetrol's share capital ("Buyout"). As the Czech National Bank accepted the Company's application in whole, on 20 June 2018 the Company formally waived its right to appeal against the decision of the Czech National Bank. Regulatory announcement no. 77/2018.
Changes in the composition of the PKN ORLEN Supervisory Board	PKN ORLEN informed that on 26 June 2018 the Director of the State Treasury Department in the Prime Minister Chancellery acting on behalf of the shareholder the State Treasury, according to § 8 item 2 point 1 of the Company's Articles of Association appointed Ms Anna Wójcik to the PKN ORLEN Supervisory Board. At the same time, the PKN ORLEN Ordinary General Meeting on 26 June 2018 appointed to the Supervisory Board Mr Andrzej Kapała. Regulatory announcement no. 79/2018.
Realisation of the Power plant in Płock investment process completed	On 29 June 2018 PKN ORLEN signed with the consortium of companies: Siemens AG and Siemens Spółka z o.o. a certificate on the base of which the realisation of investment process of the Power plant in Płock ("Power plant") building has been completed. The total CAPEX spent by PKN ORLEN for the project of the Power plant building amounted to ca. PLN 1.7 billion. Regulatory announcement no. 88/2018.
QUARTER 3	
Filing the statement of claim for repealing of the resolutions of Ordinary General Meeting	On 9 August 2018 PKN ORLEN informed that it has received the Shareholder's statement of claim for repealing of the following resolutions of PKN ORLEN Ordinary General Meeting dated 26 June 2018: - to receive the Directors' Report on the activities of the ORLEN Group and PKN ORLEN for the year ended 31 December 2017, - to receive the financial statements of PKN ORLEN for the year ended 31 December 2017, - to grant discharge to Management Board members for performance of their duties for the year ended 31 December 2017, - to grant discharge to the Chairman of the Supervisory Board for performance of her duties for the year ended 31 December 2017. On 17 October 2018 the District Court in Lodz Commercial Division No X has announced the decision in which it dismissed in whole the shareholder's statement of claim. In justification of the announced decision the Court pointed that the statement of claim, in whole, did not deserve acceptance and shared the Company's statement that there was no reason to repeal the resolutions. Regulatory announcement no. 96/2018.
Changes in te composition of PKN ORLEN Management Board	The Supervisory Board of PKN ORLEN, following its meeting on 10 August 2018 appointed to the Company's Management Board: - Mr Michał Róg to the position of Management Board Member responsible for wholesale and international trade, - Mr Armen Konrad Artwich to the position of Management Board Member responsible for corporate affairs, with the effect from 1 September 2018. Regulatory announcement no. 97/2018.
Shutdown of the CCGT unit in Włocławek	On 8 September shutdown of the CCGT unit in Włocławek took place. The process of verification of damage and necessary repairs was carried out. General Electric, SNC-LAVALIN POLSKA and PKN ORLEN have appointed teams for identifying causes of unplanned unit's shutdown and preparing a schedule of works necessary for the unit to become fully operational again. PKN ORLEN expects that the repair works on the CCGT unit will be carried out under the contractual warranty. Accordingly, their cost will not have to be covered by PKN ORLEN. At the same time, the lost benefits resulting from the block's standstill will be estimated. It is expected that the power plant will be launched till the end of 1st quarter 2019.
QUARTER 4	
PKN Orlen has become the owner of 100% shares in Unipetrol, a.s.	PKN ORLEN informed that in the course of the executed squeeze out of shares of Unipetrol a.s. owned by the minority shareholders of Unipetrol representing app. 5.97% of Unipetrol share capital, on 1 October 2018, has acquired all shares which were subject to Squeeze out. As a result, PKN ORLEN has become the sole shareholder of Unipetrol, controlling 100% of shares representing 100% of votes at the General Meeting of Shareholders of Unipetrol. As of 26 September 2018, the shares of Unipetrol - by virtue of law - have been withdrawn from trading at the Prague Stock Exchange. Regulatory announcement no. 99/2018.
Costs summary of programme of public bonds issue dedicated to individual investors	PKN ORLEN informed about the costs of the programme of public bonds issue dedicated to individual investors. The total costs of the Programme amounted to ca. PLN 5.5 million. Under the Programme five issues including 2 000 000 of Series A bonds, 2 000 000 of Series B bonds, 2 000 000 of Series C bonds, 2 000 000 of Series D bonds, and 2 000 000 of Series E bonds were conducted. The above mentioned amount includes the following: - costs of preparing and conducting of the bonds offers – ca. PLN 3.1 million, - costs of preparing of the prospectus including consulting costs – ca. PLN 1.3 million

	- costs of promoting of the bonds offers –ca. PLN 1.1 million. The average cost of the offers per bond of the nominal value of PLN 100 amounted to PLN 0.13 p.a. The Company did not incurred the costs of underwriters fees, due to the fact that no underwriting agreement was signed by PKN ORLEN in connection with the offers of the bonds. The costs of the Programme (excluding costs of promoting of the bonds offers) were included as prepayments and systematically charges the financial result from the day of Series A bonds issue (6 October 2017) to the day of Series E bonds maturity day (13 July 2022). The costs of promoting of the bonds offers were included in the financial result when they were incurred. As far as taxes are concerned the transaction costs constitute tax deductible costs and are charged as of the dates of their enter into books. Regulatory announcement no. 100/2018.
The consent to change the bond issue programme agreement from 2006 and commencement of works on issue of new series of bonds	PKN ORLEN informed that the Supervisory Board of PKN ORLEN, following its meeting on 24 October 2018 gave consent to change the Agreement for a Bond Issue Programme, signed on 27 November 2006 (with subsequent annexes) by the Company as the issuer and the consortium of banks ("Programme Agreement"), including increase of the programme limit to PLN 4 bn and to incur, by the Company, liabilities resulting from the changed Programme Agreement. The Company plans to start works on conducting the issue of unsecured, bearer bonds, which will be proposed to buy in the manner specified in Art. 33 point 2 of the Law on Bonds dated 15 January 2015 (Journal of Laws, 2018 point 483 with subsequent changes) under the bonds issue programme based on the Programme Agreement.Regulatory announcement no. 103/2018.
PKN ORLEN have become an Official Partner of the Formula 1 Team – Williams Martini Racing. The ORLEN logo will be found on the cars and overalls of competitors appearing in the most prestigious and most popular races around the world	On 21 November 2018 PKN ORLEN informed that have become an Official Partner of the Formula 1 Team – William Martini Racing. Daniel Obajtek, CEO and President of the Management Board of PKN ORLEN said, "Cooperation between PKN ORLEN and Williams Martini Racing starts a new era for motorsports in Poland, as well as building the global reach of our brand. It is worth remembering that ORLEN Group has assets in five countries in Europe and North America today. Our products are available in over 90 countries around the world. This means that we are looking for global communication channels to establish an international position. Involvement in Formula One racing is one of the most effective ways to promote our brand through sports sponsorship, and we are delighted to be entering the sport with Williams. With the team having just announced Robert Kubica as a race driver for 2019, the only Pole to have participated in Formula One, we want to accompany him on his journey back to the top." As part of the sponsor package, the PKN ORLEN logo will appear on the cars, including the rear spoiler, nose, intake system and each of side mirrors. In addition, the company's logo will be seen on the chin portion of the drivers helmet, the drivers and mechanics suits and the staff's clothing. Claire Williams, Deputy Team Principal, commented, "We are pleased to announce that PKN ORLEN will partner Williams Martini Racing for the 2019 season. Williams stands for technology, innovation and top-class engineering, and these synergies with PKN ORLEN will help drive our partnership forward." Robert Kubica added: "It is great news to hear about the partnership between PKN ORLEN and Williams Martini Racing for 2019. I am looking forward to being back in the F1 grid next season and to be sharing the experience with PKN ORLEN, and all the fans back both in Poland and around the world." Detailed information are included on PKN's ORLEN web site in press release: https://www.orlen.pl/EN/PressOffice/Pages/ORLEN-debuts-in-F1.aspx.
Submittion to the European Commission a draft notification for concentration regarding the planned taking capital control over Grupa Lotos S.A. by PKN ORLEN S.A.	On 30 November 2018 PKN ORLEN submitted to the European Commission a draft notification for concentration ("Notification"), together with the draft outline of remedies areas, regarding the planned taking capital control over Grupa Lotos S.A. headquartered in Gdansk by PKN ORLEN ("Transaction"). Notification, submitted by the Company, initiates the process of the arrangement of its final version with the European Commission. After submitting the final notification by the Company, the European Commission will formally start the concentration investigation. Notification includes, apart from the description of the parties and Transaction assumptions, description of parties activity on the certain markets and presents preliminary arguments on the influence of the Transaction on the competitiveness on that markets. There has been enclosed a set of internal documents of both companies, that should allow the European Commission to verify the accuracy of the attached arguments. Regulatory announcement no. 106/2018.
Anwil General Meeting consent to extend fertilizers production capacities	On 14 December 2018 the General Meeting of Anwil S.A. gave consent to investment task regarding extension of fertilizers production capacities in Anwil S.A. The project assumes increase of fertilizers production capacities by 495 thousand tonnes yearly, i.e. to the level of 1 461 thousand tonnes yearly. Estimated total cost of the investment amounts to ca. PLN 1.3 billion. The finalization of the investment is planned for the end of 2021. After realization of the programme, i.e. from the beginning of 2022, it is estimated that the operating profit EBITDA of Anwil S.A. may increase by ca. EUR 57 million yearly (i.e. approximately PLN 245 million translated using the exchange rate as at 31 December 2018). Regulatory announcement no. 107/2018.
The ORLEN Group strategy update for 2019-2022	On 20 December 2018 the Management and the Supervisory Board of PKN ORLEN approved the ORLEN Group strategy update for 2019-2022. The approved document updates "PKN ORLEN growth strategy" dated 15 December 2016 in respect of PKN ORLEN directions of development, refers to the level of realization of targets determined for 2017-2018 and sets the Company's financial and operating targets for the next two years, i.e. 2019-2020. The need for the update arose due to high volatility of macroeconomic factors and the need to present the targets for the next two-year period. The presented material takes no account of the Grupa Lotos S.A. acquisition and integration process. Once the European Commission clearance is secured and a controlling interest in Grupa Lotos S.A. is acquired, a new strategy for the ORLEN Group will be unveiled. Detailed information about the Strategy is available on PKN ORLEN website: https://www.orlen.pl/EN/InvestorRelations/Presentations/Pages/default.aspx

2019 year until publication of the Management Board Report.

QUARTER 1

Information regarding investment of building Metathesis Unit	On 20 February 2019 PKN ORLEN informed that that it was informed by Elektrobudowa S.A., contractor in the project of building the Metathesis Unit in Production Plant in Płock, that the completion of the investment process, i.e. conduction of guarantee measurements and signing of documents, is planned for the middle of April 2019. Currently the unit is in the final stage of commissioning phase. After executing of all steps within the commissioning, loading up of the unit and stabilization of the process parameters, process adjustment and guarantee measurements will be conducted and the investment process will be completed.

Information on significant agreements are described in **section 3.4.**

The most important awards and honours

QUARTER 1

Top Employer Polska	PKN ORLEN for the seventh time in a raw was honoured with the „Top Employer Polska" title, confirming its status as the leading employer in Poland.
The World's Most Ethical Company	PKN ORLEN for the fifth time was distinguished with a 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.
Service Station of 2018	MOP ORLEN Wiśniowa Góra Zachód, was awarded as Service Station of 2018 in competition organised by BROG B2B, editor of monthly magazine Stacja Benzynowa and portal Petrolnet.pl. Service stations of the Concern were awarded also for the best gastronomic offer, convenience shop, motorway service areas, premium object and new object.

QUARTER 2

Green Frog Award (GFA)	Integrated Report of the Group for 2016 was chosen as the best in Deloitte Central Europe survey and honoured with Green Frog Award (GFA) 2018 by international expert team.
Techno Business	EMS (Energy Management System) and APC (Advanced Process Control) was awarded in category: Industry 4.0 in this year's "**Techno Business**" competition organized by "Gazeta Bankowa".
Investment of the Century	ORLEN Lietuva received an award in category **„Investment of the Century"** during Polish-Lithuanian Economic Forum, organized under the auspices of RP Prime Minister and LT Prime Minister
Hermes statue	Modern concept Stop Cafe, constituting a visit card of ORLEN service stations, was honoured with Hermes Statue, granted by all-Poland monthly magazine "Poradnik Restauratora" for innovative approach to retail trade.
Store of the Year	Modern format of convenience store O!Shop and gastronomical concept Stop Cafe on ORLEN service stations the best in "Store of the Year" plebiscite. In the jury opinion both concepts complement each other, creating an unique project of service station of the future.
Teraz Polska	Gastronomical offer Stop Cafe and format of convenience store O!Shop received prestigious emblem „Teraz Polska" in category "The Best Products and Services". The competition's organisers distinguished quality, technological and utility values of PKN ORLEN concepts compared to other participants of convenience market.
Rzeczpospolita 500 List Budget Pillars	PKN ORLEN became a leader of Rzeczpospolita list of 500 largest Polish companies. At the same time the Concern became a leader of „Budget Pillars" plebiscite.

QUARTER 4

The Best Annual Report	In the thirteenth edition of "The Best Annual Report" competition organized by Institute of Accountancy and Taxes, PKN ORLEN, once again, received the title of "The Best of the Best" for financial reporting, awarded to companies which managed to obtain the highest distinction in the above competition at least three times. PKN ORLEN received also special awards for the best Online Report and Integrated Report as well as distinction for the high quality of financial reporting.
Global Finance Magazine	PKN ORLEN was, for the next time, distinguished as the best company in the area of currency risk management in Central and Eastern Europe in the prestigious ranking of the Global Finance magazine.
The most active Social Labour Inspector	Department Social Labour Inspector in ANWIL S.A. took the second place in the competition organized by The National Labour Inspectorate "The most active Social Labour Inspector" in Kujawsko-Pomorskie Voivodship.
RESPECT Index	PKN ORLEN for the eleventh time was qualified to the prestigious RESPECT Index, stock exchange index comprising companies socially responsible.
„Electro mobility Leader 2018"	PKN ORLEN was distinguished in the ranking organized by Polish Association of Alternative Fuels (PSPA) and consulting firm PwC. The prize was awarded during climate summit COP24 in Katowice.
All-Poland Competition of Improving Working Conditions	PKN ORLEN S.A. took the first place in the 46th edition of All-Poland Competition of Improving Working Conditions for document Employees Support Scheme – Behavioural programme.

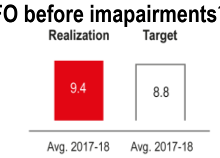
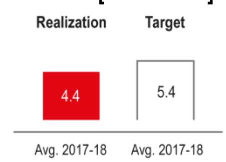
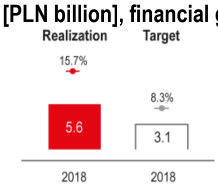
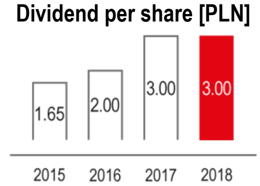
2. STRATEGY

Daniel Obajtek, CEO and President of the PKN ORLEN Management Board:

The overriding growth objectives for PKN ORLEN in 2019–2022 are to increase and enhance its petrochemical production capacity, further the integration of its refinery assets, maintain commitment to low emission energy, drive retail sales growth, promote sustainable development in upstream, and focus on strengthening the R&D base and implementing innovations to support all business lines, while maintaining solid financial foundations.

2.1. SUMARY OF STRATEGIC MEASURES PROGRESS IN 2017-2018

In the last two years PKN ORLEN continued to pursue its strategic objectives. Actual average full-year EBITDA LIFO for 2017-2018 came in at PLN 9.4 billion, PLN 0.6 billion above the strategic target. A stable financial situation allowed to implement development investments with consistently increasing dividend which in 2017 amounted to PLN 1.3 billion. At the same time safe financial indicators were kept. PKN ORLEN's standing is very good and enable further development. The Group has modern, fully integrated assets with production capacity exceeds 30 million tonnes of different types of crude oil processing annually as well as its own base of resources of crude oil and gas (2P), estimated at over 200 million boe at the end of 2018.

PILLARS	OBJECTIVES	ACTUAL
Value creation	Higher generated profit	**EBITDA LIFO before imapairments[1] [PLN billion]** 
	Implemented development program	**CAPEX [PLN billion]** 
Financial strength	Further strengthening of financial fundamentals	**Net debt [PLN billion], financial gearing [%]** 
	Dividend payment increase	**Dividend per share [PLN]** 
People	Modern management culture	

1) Before impairment on property, plant and equipment of (0.2) PLN billion in 2017 and 0.7 PLN billion in 2018

2.2. STARTEGIC ASSUMPTIONS FOR YEARS 2019-2022

Pillars and update of PKN ORLEN's startegy for 2019-2022

Value creation	**Downstream**: scaling up petrochemical production, further integration of refinery assets and expanding low – emission energy generation	• Feedstock security • Strengthening market position • Operational excellence
	Retail: expanding the retail network and strengthening customer relations	• Modern service stations network • Unique customer experience • Operational excellence
	Upstream: cautious continuation	• Further production increase in Poland and Canada • Cautious continuation • Operational excellence and financial strength
Financial strength	**Solid fundamentals**	• Investment grade rating • Financial gearing below 30% by 2022 • Net debt/ EBITDA covenant below 1.5 by 2022
	Secured financing	• Diversified financing • The possibility of inorganic development
	Dividend payments	• Regular dividend payments reflecting current financial situation
People	**Safety:** commitment to the highest standards	• Zero tolerance policy towards accident hazards • No accidents at work • Further improvement of process safety
	Responsibility: caring for employees, external stakeholders and the environment	• Caring for local communities • Support for local producers and business partners • Aligning with new environmental requirements • Reducing environmental impacts • Stepping up environmental protection efforts

The vision for PKN ORLEN's growth set out in the new strategy fits well with global trends in the use of primary energy sources, technological progress and social processes, which are bound to create new consumer behaviours and expectations. 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 cautious continuation in the Upstream segment.

An important element of the strategy is focus on value-added innovations by:

– development of internal and external innovation in the organisation,
– making optimal conditions for creating innovations in ORLEN Group,
– creating PKN ORLEN's Strategic Researching Agenda,
– establishing tools for gaining innovations: accelerator and CVC found,
– development of cooperation with start-ups,
– building Research and Development Centre as a platform for cooperation between PKN and scientific world and business,
– own research work and tests which make processes more efficient, improve products and optimise feedstock,
– efforts put in its own technologies.

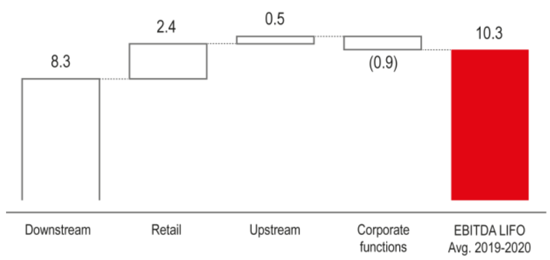
2.3. KEY FINANCIAL AND OPERATIONAL OBJECTIVES FOR YEARS 2019-2020

The dynamics of the market environment forces the Group to adjust its planning perspective. Therefore the new strategy features goals and aspirations in the way presented previously. Strategic directions were set for the next four years while specific financial and operational targets were presented for 2019-2020 only, due to volatility of the macroeconomic parameters.

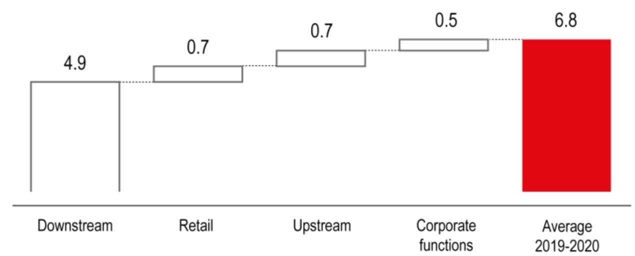
Key PKN ORLEN's strategic objectives for years 2019-2020:

- annual average EBITDA LIFO of PLN 10.3 billion,
- realisation of annual average CAPEX of PLN 6.8 billion,
- financial gearing below 30%,
- regular dividend payments reflecting current financial situation.

EBITDA LIFO before impairment [PLN billion]



CAPEX [PLN billion]



2.4. STRATEGIC ASSUMPTIONS BY OPERATING SEGMENTS

DOWNSTREAM

Value levers

Feedstock security

- Further diversification of crude supplies
- Securing natural gas supplies
- Building a competitive advantage based on low-carbon energy generation

Operational excellence

- Further improvements in efficiency of refinery assets
- Leveraging synergies offered by integrated production assets
- Readiness for market and regulatory challenges

Strengthening market position

- Investments in extending the petrochemical value chain
- Implementation of operational programme for biofuels: construction of production facilities, operational adjustments and R&D works
- Maintaining leading position in home markets through expansion of product offering

Targets

Sales and Logistics[1]

- Wholesale of fuels (diesel, gasoline, jet) increase by 2.1 million tonnes
- Petrochemical sales: increase by over 1.1 million tonnes
- Security of transmission and handling capacities

Production[1]

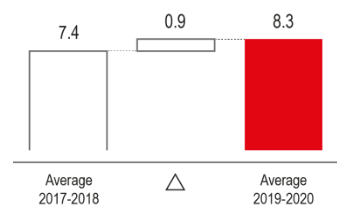
Project pipeline:

- **Petrochemicals:** construction of the aromatic derivatives complex, extension of phenol production capacity, extension of the R&D base, extension of Anwil's fertilizers complex
- **Refining:** expansion of the biofuel production plant, including standalone HVO unit, visbreaking, hydrocracking of vacuum residue in Lithuania (feasibility study based on purchased base design and licence)
- **Power generation:** preparation of the offshore wind energy project

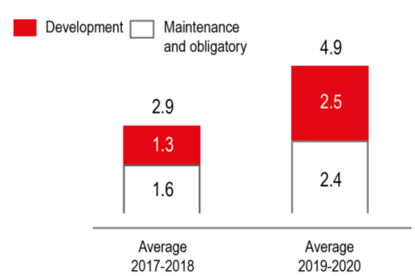
Change of key indicators:

- Further throughput maximisation: increase by over 0.3 million tonnes
- White product yield: 1.8 pp increase
- Refinery's Energy intensity: 0.5 pp increase
- Electricity generation: increase by 1.2 TWh

Increase of EBITDA LIFO [PLN billion] [2]



CAPEX [PLN billion] [2]



1) Quantitative indicators for the ORLEN Group pertain to the 2022 target relative to 2018 Forecast based on Q1-Q3 actuals and Q4 forecast.
2) Averages 2017-2018 includes actual data for year 2017 and forecast for year 2018 based on Q1-Q3 actuals and Q4 forecast accordingly to the ORLEN Group Strategy presented on 20 December 2018.

RETAIL

Value levers

Modern network of service stations
- Developing in-store and food sales
- Continued efforts to enhance technical quality of the stations
- Adapting service stations to sell alternative fuels
- Organic growth of the retail chain

Unique customer experience
- Launch of new services and customer service channels
- Flexible and personalised offering based on big data analytics
- Improving customer satisfaction and expanding the customer loyalty programme towards e-commerce

Operational excellence
- Maintaining market leadership in home markets
- Optimal product, food range and service management
- Cost efficiency improvement
- Refining customer service and service station management processes

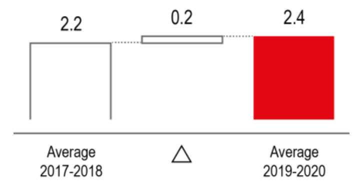
Targets 2019-2022

Modern service station network[1]
- Increasing non-fuel margins by over 30%
- Organic growth of the service station network: addition of ~ 150 new stations by 2022
- Share of the fuel market: increase by over 2.4 pp

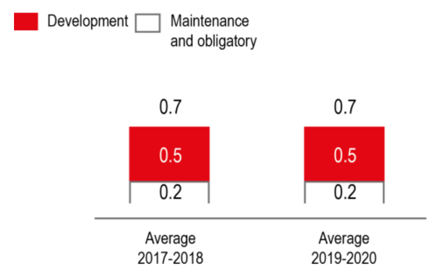
Unique customer experience
- Improvement and development of store and Stop Cafe formats
- Launch of new product and services:
  - development of food and service offering
  - flexible product range based on big data
  - development of new customer communication channels
  - improving service quality

Operational excellence[1]
- 3% increase in unit fuel margin
- Improved cost efficiency of service stations
- Distribution system optimisation

Increase of EBITDA LIFO [PLN billion] [2]



CAPEX [PLN billion] [2]



UPSTREAM

Value levers

Further production increase
- Focus on quality assets and most profitable and prospective projects in Poland and Canada

Cautious continuation
- Flexible response to changes in crude oil and gas market
- Capital expenditure adjusted to macro environment
- Generating positive cash flows

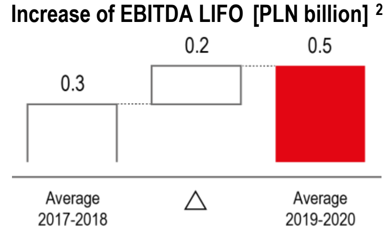
Operational excellence
- Continuous improvement of key operational indicators
- Leveraging segment synergies in Poland and Canada

Targets 2019-2022

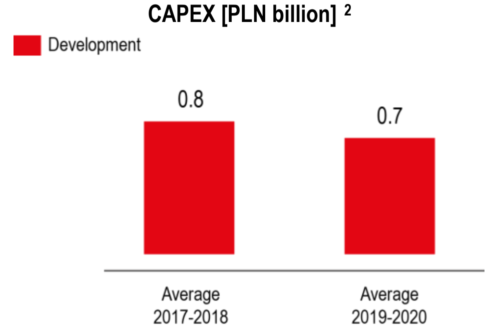
Production in Poland and Canada[1]
- Production increase to ca. 25,000 boe/d (i.e. by ca. 7.000 boe/d) at the Group level
- Share of liquid hydrocarbons (%)[3]
  - Poland: 6%
  - Canada: 49%
- Wells (net) optimised to 13.8:
  - Poland: 2.5 wells
  - Canada: 11.3 wells

Operational excellence[1]
- Achieving operating netback in excess of PLN 75/boe
- CAPEX rationalisation and reaching positive cash flows and CAPEX self – financing in the shortest possible time

Increase of EBITDA LIFO [PLN billion] [2]



CAPEX [PLN billion] [2]



1) Quantitative indicators for the ORLEN Group pertain to the 2022 target relative to 2018 Forecast based on Q1-Q3 actuals and Q4 forecast.
2) Averages 2017-2018 includes actual data for year 2017 and forecast for year 2018 based on Q1-Q3 actuals and Q4 forecast accordingly to the ORLEN Group Strategy presented on 20 December 2018.

3. OPERATIONS

3.1. RESEARCH AND TECHNOLOGICAL DEVELOPMENT

Zbigniew Leszczyński, Member of the PKN ORLEN Management Board, Development:

"In pursuit of its R&D strategy, PKN ORLEN is expanding its research infrastructure by building the Research and Development Centre in Płock. The R&D Centre will provide the facilities to intensify research and development efforts and will create the potential space for developing a portfolio of R&D projects and innovative technological solutions. By creating our own, robust R&D facilities we provide safety for the knowledge, know-how and intellectual property generated within the ORLEN Group. The facilities support long-term value generation correlated with the ability to carry on effective production and product development, and the ability to better adapt our business model to the changing market environment.

PKN ORLEN monitors and responds to the global megatrends. Chemicals are an essential component in most industries, including those directly affected by revolution 4.0.

PKN ORLEN is set to remain the chemical industry leader in its region and has an increasingly important role in Europe and globally. By taking advantage of its solid position and maintaining its competitive edge, PKN ORLEN also intends to extend product chains and generate even higher margins – these are the goals of the Petrochemicals Development Programme."

Extending the petrochemical value chain and enhancing the refinery's competitive position are the key elements of the ORLEN Group's Strategy for the coming years. In 2018, significant efforts were put into the preparation of the Strategic Plan for Development and New Technologies (SPRINT) for PKN ORLEN and the ORLEN Group. The aim is to develop a long-term vision (until 2032 and beyond) for expanding ORLEN Group's production and logistics assets.

PKN ORLEN has approved the Petrochemicals Development Programme (PDP), which seeks to significantly expand the Company's petrochemical production capacity, enhance its competitive position and consolidate its leadership in the petrochemical market in the region. The PDP offers potential for long-term generation of added petrochemical margins as well as flexibility in responding to changes in the macroeconomic conditions that have impact on the Company's refining and petrochemical businesses. The PDP will comprise three projects: extension of the olefins complex, expansion of the phenol production capacity, and construction of an Aromatic Derivatives Complex and a Research and Development Centre.
Following the completion of conceptual and detailed design work on the project to construct a Research and Development Centre, a concept design was developed, environmental permits were secured and construction plans and specifications were prepared. Also, the site preparation process and the procedure to obtain a building permit commenced, and the procurement procedure to select the EPC contractor for the project was opened.
In 2018, PKN ORLEN maintained and strengthened its collaborative partnerships with universities and research institutions. During the year, PKN ORLEN had contractual relationships with 17 research institutions based in Poland and abroad. The Company also collaborates with other institutions in implementing promising ideas and research projects. More than 30 research and development projects were in the pre-implementation or implementation phase in 2018, of which five were co-financed from national public funds (INNOCHEM sectoral programme) and EU programmes (Horizon 2020 Programme).
A full-scale test of co-hydrogenation of petroleum and vegetable oils was one of the successful innovation projects that received funds under the INNOCHEM programme. The demonstration test of the new technology was preceded by a multi-stage laboratory and pilot testing process carried out by the Industrial Chemistry Research Institute. The test results confirmed that rapeseed oil can be co-hydrogenated with crude oil fractions in specified proportions. The experience with HON I paves the way for trials on other HON units and incorporating co-hydrogenation into the continuous production process as an element of the strategy to meet the NIT.
In 2018, working with Gdańsk University of Technology, PKN ORLEN completed the key research phases of another co-funded project that consists of building and implementing a world-class innovative dual sensor system forming part of a larger integrated real-time (online) corrosion monitoring system. The system simultaneously assesses the rate of uniform (general) corrosion and susceptibility to corrosion cracking and hydrogen embrittlement (hydrogen corrosion).
Progress was also made under the international BioRECO2VER project, which explores the possibility of transforming carbon dioxide by microorganisms into compounds used for the production of valuable chemical products, including bioplastics. The project received funding under the Horizon 2020 Programme, EU's largest ever project to finance research and innovation.

The **Unipetrol Group** carries out its research and development projects through Unipetrol Research and Education Centre and Polymer Institute Brno. The projects focus on biofuels and alternative fuels as well as raw materials used for their production. Furthermore, the company implements projects designed to reduce greenhouse gas emissions and improve energy efficiency, use waste heat, optimise technology and upgrade energy generation sources. The projects in the area of refining focused on efficient and environmentally-friendly production of motor fuels, including biofuels. Other research focused on the application of used cooking oils as a feedstock for biofuel production, optimisation of the pyrolysis process, and use of renewable materials and advanced inorganic materials. In the area of petrochemicals, the portfolio of polypropylene and polyethylene products was expanded to improve product basket quality and production efficiency. The research centre staff provide extensive research support, constantly monitoring monomer and polymer quality, obtaining all required certificates, and developing and testing catalysts that meet the requirements imposed under the REACH Regulation. Unipetrol closely collaborates with universities in Prague, Brno and Liberec and has engaged university students in a number of its R&D projects.

The **ORLEN Lietuva Group** purchased the basic design and licence for a hydrocracking unit. The technology was purchased to help reduce the production of heavy oil fractions in an effort to comply with more stringent bunker fuel quality regulations issued by the International Maritime Organization (IMO), which come into force at the beginning of 2020. After a series of efficiency and operational analyses have been performed, a decision will be made whether to proceed with the project. 2018 saw continued implementation of projects designed to improve the efficiency of production processes, including by upgrading the crude distillation unit (CDU) to reduce variable costs and improve product quality. Also, the company completed projects to reduce sulphur compound (SO2) and nitrogen compound (NOX) emissions from the on-site CHP plant and systems for continuous monitoring of emissions from the FCC, sulphur recovery and hydrogen production units.

ANWIL established a partnership with the Institute of Soil Science and Plant Cultivation, which investigates the effects of various fertiliser additives on fertiliser effectiveness. The company also continued to work with the New Chemical Syntheses Institute on the possible use of FGD gypsum for the production of nitrogen fertilisers, and forged a partnership with Polymer Institute Brno to test the quality of PVC and fertilisers and to research plastic colorants. The company continued an R&D project co-financed under the INNOCHEM sectoral programme to develop an innovative production technology for PVC-based ceramic nano-composites for the construction industry, which may improve fire resistance of cable and wire sheaths.

The **ORLEN Południe Group** continued with a growth project entitled ‘Glycerine conversion to 1,2-propylene glycol’. Within the area of advanced biofuels, a procurement procedure was launched for the purchase of a basic design and licence for the production of bioethanol from straw. Work involving market research on methanol and available production technology commenced under the project ‘Analysis of the methanol production potential of ORLEN Południe S.A.’. Work continued under the projects ‘Biodegradable anti-caking agents for the fertiliser industry’ and ‘Development of biotechnology-based conversion of organic raw materials into lactic acid using microorganisms’, which received funding under the INNOCHEM Programme. Efforts were also undertaken with a view to purchasing the basic design and licence for the production of lactic acid from biomass.

ORLEN OIL conducted research work to implement new and modify existing products and to define new directions for the development of lubricant technologies. The projects in the field of motor oils helped to create a product range that meets the new ACEA 2016 quality standards. Technology for 55 new products was developed and implemented in 2018. Modifications were made to 36 products. Seventy-two approvals for 27 products were obtained. Also, collaborative partnerships were maintained with research and scientific institutions, as well as Polish and international standardisation, certification and opinion-making institutions that influence the development directions for lubricants. Basic work to incorporate graphene into heat treatment oils was completed. As a next step, a decision will be made whether the project can be continued with external financial support.

ORLEN Asfalt and other industry players prepared a research report for the General Directorate for National Roads and Motorways (GDDKiA) on the practical application of the ORBITON HiMA polymer-modified bitumens in road construction.

3.2. OPERATING SEGMENTS

3.2.1 Downstream

2018

PRODUCTION

	units	ORLEN Group	Poland	Czech Republic	Lithuania
Maximum processing capacity	**million t**	**35.2**	**16.3**	**8.7**	**10,2**
Utilization of processing capacity	%	95	97	87	95
White product yields	**%**	**78**	**80**	**80**	**74**
Utilization of Olefin installation capacity	%	74	72	77	-
Utilization of PTA installation capacity	%	70	70	-	-

SALES

	units	ORLEN Group	Poland	Czech Republic	Lithuania
TOTAL	**thousand t**	**32 716**	**17 777**	**6 498**	**8 441**
Refinery, including:	**thousand t**	**27 733**	**14 692**	**4 600**	**8 441**
fuels	thousand t	19 103	9 001	3 788	6 314
heavy fractions	thousand t	5 032	2 503	641	1 888
other refinery products	thousand t	3 598	3 188	171	239
Petrochemicals, including:	**thousand t**	**4 983**	**3 085**	**1 898**	**-**
olefins	thousand t	849	693	156	-
polyolefins	thousand t	540	0	540	-
benzene	thousand t	367	164	203	-
plastics	thousand t	371	276	95	-
fertilizers	thousand t	1 067	881	186	-
PTA	thousand t	508	508	-	-
other petrochemical products	thousand t	1 281	563	718	-

LOGISTICS

	units	ORLEN Group	Poland	Czech Republic	Lithuania
Total length of used pipelines	**km**	**3 720**	**1 888**	**1 741**	**91**
length of used raw materials pipelines	km	1 662	930	641	91
length of used product pipelines	km	2 058	958	1 100	-

POWER INDUSTRY

	units	Poland[1]	Czech Republic[2]	Lithuania
Electric power installed	MWe	1 599	112	160
Heating power installed	MWt	3 658	766	1 040
Boiler's efficiency	%	93.0	89.3	81.9
Boiler's availability	%	88.6	71.1	93.3

1) Installed thermal and electrical capacity refers to the CHP plant in Płock and the CCGT plant in Włocławek. Availability and efficiency of boilers at the CHP plant in Płock.
2) Installed thermal and electrical capacity as well as availability and efficiency of boilers at the Litvinov Power Plant.

3.2.1.1. Market trends

Adam Czyżewski, Chief Economist:
"Limittation of the cap on sulfur content in bunker fuel from 3.5% to 0.5% for non-SECA areas from early 2020 will trigger at least three margin-related issues: a wider price spread between high-sulfur and low-sulfur crudes, an increase in margins on middle distillates as a result of a surge in demand for diesel oil for bunkering, and erosion of margins for heavy fuel oil as a result of plummeting demand for heavy fuel oil for bunker fuel blending".

CRUDE OIL PRICE

In 2018, the average price of Brent Crude was USD 71/bbl, an increase of 32% year on year. A barrel of oil traded at almost USD 67 at the opening session of 2018 and the price continued on an upward trend until the end of September 2018, reaching USD 84/bbl. In the last quarter of 2018, the upward trend reversed, bringing the price down to nearly USD 50/bbl, and at the year's closing session a barrel of oil traded at more than USD 53.

DIAGRAM 1. Changes in crude oil prices [USD/bbl].

Source: Own preparation based on Bloomberg

Oil prices are driven both by fundamentals, such as shifts in demand, production and stocks of crude oil and fuels, as well as by expectations concerning changes in those fundamentals. In this context, the main drivers of oil prices in 2018 included:

- High supply of oil on the market – historically high production volumes in the US, and record production volumes in the third quarter in Russia and Saudi Arabia. These countries are the principal players who want to directly control the price of oil: the United States – as the world's largest oil consumer, Saudi Arabia – as the largest oil producer, and Russia, whose economy is highly dependent on profits from oil production and sale.
- OPEC's and Russia's intervention
- Expected and actual decline in China's and other emerging markets' economic growth.
- Lowering of oil supply security buffers, including reduction of oil inventories in OECD countries to the five-year average, and the low level of oil reserves readily available for extraction.
- Negative economic sentiment between the US and China, giving rise to more concerns about economic growth and having a potentially adverse effect on expected demand for oil.
- Growing political instability and risks in oil-exporting countries, especially the re-imposition of sanctions on Iran by the United States, the political and economic crisis in Venezuela, and relatively unstable relations with Saudi Arabia.
- Regulations introduced by a number of countries to reduce CO_2 emissions from exhaust gases, which in turn has an impact on long-term prospects for oil demand and upstream projects.
- Higher global demand for diesel oil at the end of 2018, driven by the need to adapt the oil sector to the IMO regulations and boosting the demand for crude oil.

Possible directions of oil price changes

Based on industry analysts PKN ORLEN expect in Q1 2019 the price of Brent crude above USD 60/bbl. The price of Brent crude is expected to continue trending upwards in the coming quarters, to approximately USD 70/bbl, and to stay at this level until the end of the year. According to forecasts by J.P. Morgan and Goldman Sachs, the average price of Brent crude in 2019 is expected to fluctuate between USD 62/bbl (Goldman Sachs) and USD 70/bbl (JP Morgan). The main drivers of crude prices in 2019 include primarily:

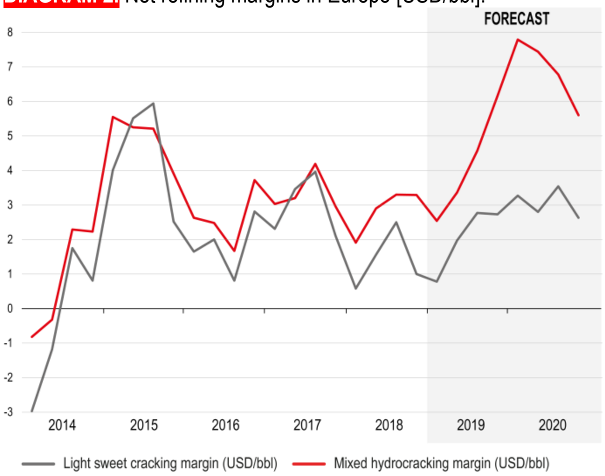
- Steady growth of oil production in the United States. The average monthly growth rate, however impressive, is slightly lower than a year before. Production growth rate in the US is expected to outpace the global growth rate.
- Further production cuts in Iran due to sanctions – IHS Markit analysts expect the Iranian crude output to be reduced by 400,000 bbl/d by mid-2019.
- Expected production cuts in Saudi Arabia and Russia. In late 2018, Saudi Arabia's output fell from 7.9 million bbl/d to around 7.1 million bbl/d – according to IHS Markit analyses, production volumes in both countries may drop by as much as 1.1 million bbl/d.
- Deceleration of global economic growth – the global GDP growth rate is expected to slow down to 3.0% in 2019, from 3.2% in 2018. For this reason, IHS Markit analysts predict that the global demand for oil will grow by 1.4 million bbl/d, compared with 1.5 million bbl/d in 2018.
- Stronger demand for crude oil due to IMO regulations.

Considering the above factors, the PKN ORLEN Strategy until 2022 envisages an increase in global demand for crude oil (mainly from developing countries). Concurrently, oil supply will suffer due to falling production by OPEC countries (including Iran) and Russia. Higher production in the US will be insufficient to fully satisfy growing demand for oil. The resulting supply gap will be the main reason behind rising oil prices over the long term.

DOWNSTREAM – PRODUCTION AND SALES

2018 was a period of rapid changes for the global refining industry. The refining margin in Europe shrank significantly in Q1 2018, to rebound later on and ultimately return to the levels seen at the beginning of the year. This was chiefly attributable to crude oil prices and the low level of water in the Rhine in Germany affecting margins in Western Europe.

DIAGRAM 2. Net refining margins in Europe [USD/bbl].



Source: IHS Markit.

In the short- and medium-term perspective, downstream margins in Europe will be driven mainly by movements in oil prices, regulatory factors and competitive pressures.

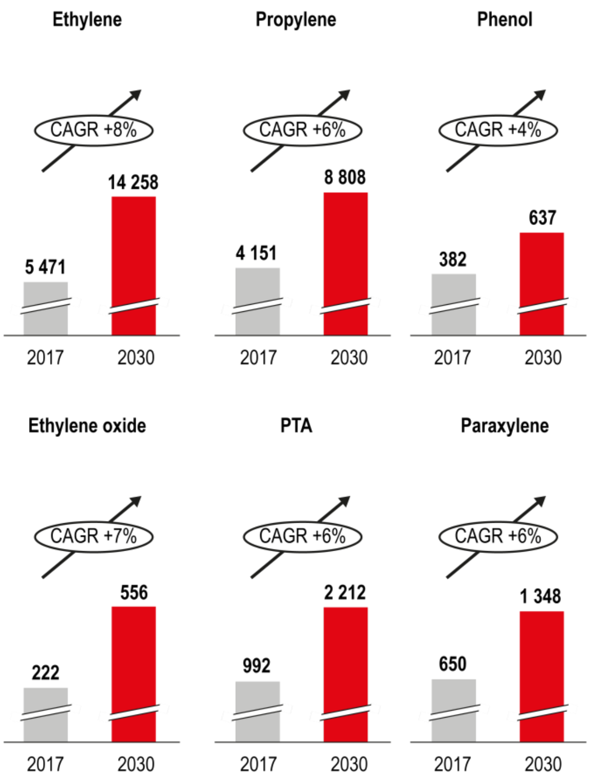
- The expected increase in **refining margins** globally (especially in the case of deep- conversion refineries) in 2020 is attributable to the lowering (from 3.5% to 0.5%) of the cap on sulfur content in bunker fuel by the International Maritime Organization (IMO) for non-SECA areas, leading to the 'IMO effect': higher demand for middle distillates and, consequenlty, higher margins, accompanied by a decline in demand for and margins on heavy fuel oils. The market is expected to adapt in the coming years and margins should return to historical levels.
- **Potential decline in fuel supply from Russia by 2020**, caused by the IMO regulations, should further push up refining margins. As more stringent bunker fuel standards come into force, prices of high-sulfur fuel oil (HSFO) will fall sharply. This will have a particularly detrimental effect on Russian refineries, as heavy fractions make up a significant part of their output. Major refinery upgrade projects aimed at reducing sulfur content and increasing volumes of gasoline production are delayed and probably will not be completed before January 2020. In order to reduce sulfur content (and HSFO volumes), Russian refineries may have to cut down crude throughput, which may result in lower gasoline volumes being sold on the Russian market and exported.
- **Petrochemical margins** are expected to return by 2022 to the level seen in the period before the oil price decline which occurred in the second half of 2014, as a result of price pressures on feedstocks driven by the anticipated rise in oil prices. The expected margin levels are promising, enabling full utilisation of production assets and creating favourable macroeconomic conditions for investment. The new petrochemical units coming on stream, especially those using a less expansive feedstock (ethane), will be putting price pressure on European petrochemical manufacturers.

Over a longer period, structural challenges and competition will compel European refineries to further optimise their capacity utilisation after 2022. Although no European refineries were closed down in 2017−2018, they have no choice but to optimise their capacity utilisation, and the optimisation process will have to accelerate after 2021. This is chiefly attributable to the following factors:

- Structural weakness of European refineries caused by higher costs of labour, energy and crude oil.
- Growing environmental pressure and higher regulatory costs. According to IHS Markit's base scenario, the energy sector's emissions will continue to rise, at nearly 1% on average per annum. The sharp increase in the prices of emission allowances in 2018 was mainly a response to the steps taken by the regulator (the European Commission) to keep the prices at levels which would encourage businesses to reduce emissions by investing in environmental projects. Therefore, the prices of CO_2 emission allowances in Europe are expected to increase by as much as ten times in 2018−2040.
- Growing impact of electric cars and broadly defined electromobility on demand expectations and investment in future production. Electric vehicles have been gaining traction for years, but it is now that we may be seeing a breakthrough for the industry. Launch of the next generation electric cars, largest car makers' plans to significantly increase electric car production, and the proposed ban on sales of internal combustion engines in the coming decades, as announced by the governments of China, India, France and the United Kingdom, to name just a few, can have a significant impact on the development of the refining industry and its margins.
- Continued pressure experienced by European refineries from competitors in Russia, the Middle East and the United States.

In a longer term, the **petrochemical industry** may support demand for crude refining products, thus building refining margins given the growing application of modern plastics in the global economy. Central and Eastern Europe is among the fastest-growing markets in terms of demand for petrochemical products of the kind produced by the ORLEN Group.
Such products, particularly speciality products tailored to the needs of particular customers, offer a high growth rate. The role of plastics in production processes is expected to grow considering their new applications in advanced insulation systems, automotive industry or 3D printers, to name a few. Manufacturers are able to compete with each other based on the technologies they use, specialist units they operate or speciality products they sell rather than by offering the lowest price for their products.

DIAGRAM 3. Forecast growing demand on petrochemical products in Central and Eastern Europe 2017-2030, thousand tonnes %CAGR.



DOWNSTREAM – POWER GENERATION

According to the New Policy Scenario contained in the International Energy Agency's (IEA) World Energy Outlook 2018, electricity demand grows at the rate of 2.1% annually. Developing nations represent almost 90% of the increase in electricity demand, with a moderate growth in developed countries, driven primarily by electrification of transport. In this scenario, which describes the target energy system taking into account the existing regulations and announced changes, demand for electricity is forecast to increase from the current 22 209 TWh to 35 526 TWh in 2040.

TABLE 2. Sources of global electric energy production [TWh].

Source	2000	2017	New Policies 2025	New Policies 2040
Coal	6 001	9 858	9 896	10 335
Oil	1 212	940	763	527
Gas	2 747	5 855	6 829	9 071
Nuclear	2 591	2 637	3 089	3 726
Renewables	2 867	6 350	9 644	16 752
Total	**15 418**	**25 640**	**30 221**	**40 411**

Source: International Energy Agency.

According to the IEA, the way that the world meets its growing energy needs will change dramatically. Global electricity output is expected to grow by almost 60% (15 000 TWh) from 2017 to 2040. Fossil fuels are bound to remain the major source of energy, but their share will dwindle from 65% today to below 50% in 2040. The change will be driven primarily by the need to decarbonise industry and cut emissions from the power sector. Renewables will rise most rapidly, with concurrent improvements in energy efficiency. These improvements will play a huge role in taking the strain off the supply side: without them, the projected rise in final energy use would more than double. Renewable sources of energy will meet 40% of the increase in primary demand and their explosive growth in the power sector will mark the end of the boom years for coal. Coal-fired power generation capacity grew significantly between 2000 and 2017, but the growth will slow markedly by 2040. The share of coal as a fuel for power generation is expected to decline from approximately 40% today to just over 25% in 2040. Renewables will capture two-thirds of global investment in power plants in the future as they become, for many countries, the least-cost source of new generation. Rapid deployment of solar photovoltaics, led by China and India, will help solar become the largest source of low-carbon capacity by 2040.

In the European Union, renewables will account for 80% of new capacity and wind power will become the leading source of electricity soon after 2030, due to strong growth both onshore and offshore. China will continue to lead a gradual rise in nuclear power output, overtaking the United States by 2030. According to the IEA forecasts, the share of nuclear energy in the energy mix will slightly increase by 2040.

Poland, where in 2010−2017 the demand for energy grew at the CAGR of 1.8%, is the key market for the power generation business of the ORLEN Group's Downstream segment. Until 2025, the CAGR is expected at around 1.3% (according to IHS Markit), and the growth will be chiefly led by the country's economic development.

The key trends that present challenges and opportunities for the energy sector include decarbonisation, decentralisation and digitalisation:

Decarbonisation

- Falling share of fossil fuels, chiefly coal, in EU energy consumption
- EU energy policy seeks to curb carbon air emissions using mechanisms that raise the price of emission allowances
- Rapid growth in renewable energy output

Decentralisation

- Large commercial power plants squeezed out by smaller energy sources, mainly renewables
- Growing popularity of energy produced for own needs (prosumers) and energy clusters and cooperatives that locally balance electricity consumption and output
- Weaker position of energy majors, losing the market to new players

Digitalisation

- Use of big data and cloud technology to increase the capacity to analyse data relating to, among other things, energy markets or system operation
- Lower costs of repairs and increased equipment availability supported by predictive diagnostics
- Advances in the Virtual Power Plant (VPP) technology, increasing the flexibility of generating assets with integrated management of diverse energy sources and energy uptake.

TABLE 3. Overview of key trends in Downstream.

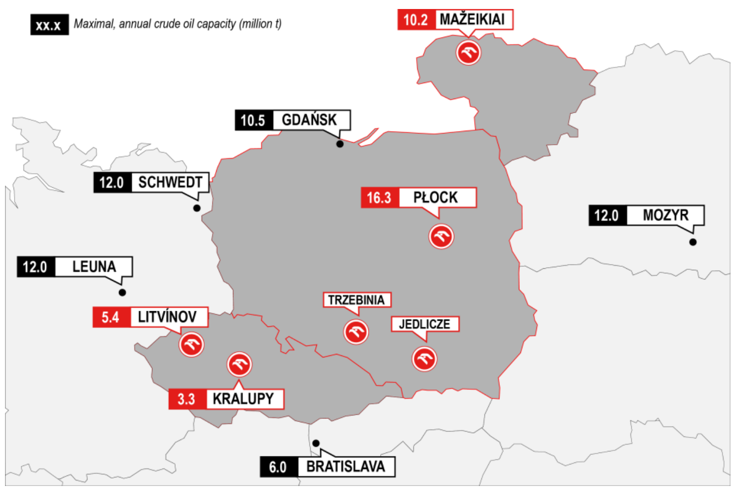
Long-term trends in economic growth and energy markets		Trend 2019-2022
Economic growth	• Global economy is predicted to grow at a rate of between 3.1% and 3.2% in 2019–2020, driven mainly by emerging markets (with an around 3.2% growth predicted for 2021–2022). Optimistic GDP forecasts for PKN ORLEN's markets: 3.5% for Poland, 3.0% for Lithuania, 2.7% for the Czech Republic, and 1.6% for Germany. In the period covered by the 2019−2022 strategy, growth in Europe will be around 1.9%, • with long-term forecasts predicting a gradual slowdown in GDP (to an average of 2.7% in 2023–2040)	↗
Demand for oil, gas and petroleum refining products	• Slight decrease (increase in nominal terms) in the share of crude oil and natural gas in the global energy mix, with a modest increase in the share of gas in Europe. Higher share of renewable energy sources seen in Europe and globally • Strongest growth in fuel and gas demand seen in developing countries (Africa, Asia ex OECD, Latin America). Crude oil demand down in Western Europe but up in Central and Eastern Europe. • Gasoline and diesel oil remain the key fuels in transport • Expected increase in petrochemical consumption	↗
Oil and gas supply	• Crude oil supply from non-OECD countries is on the rise, chiefly from the US, due to the large scale of unconventional oil production • New discoveries needed to keep global oil output stable • Long-term oversupply of natural gas is expected globally due to increased capacity of LNG terminals	↗
Oil and gas prices	• An upward trend in crude oil prices driven by IMO regulations, reimposition of sanctions on Iran, global growth and permanent coordination of oil production between OPEC and non-OPEC countries • Gas prices expected to drop in 2019 and 2020 (LNG oversupply, LNG prices, falling production from Europe's largest field Groeningen in the Netherlands due to seismic activity), with an uptrend predicted to persist in the long term • In Poland, gas prices will rise following the introduction of the emergency stocks requirement as of 2018 (the Mandatory Stocks Act)	↗
Refining margins	• IMO regulations expected to improve margins in the short term (2020) • In the long term (beyond 2020) the refining margins of European refiners will return to the 2019 level under pressure from Russian, US and Middle East supplies	↗
Regulations	• Efforts to reduce emissions (including CO2, SOx, NOx) generate additional costs to oil and energy companies across Europe • Rising cost of CO2 emission allowances inflate electricity prices • Regulatory regime drives improved engine efficiency (the key contributor to reduced fuel consumption)	↘
Megatrends	• In response to megatrends, energy companies make inroads into new growth markets: new mobility (alternative fuels infrastructure), new business models (full mobility, advancement of renewable energy sources)	↘

3.2.1.2. ORLEN Group's market position and competitive environment

Józef Węgrecki – Member of the PKN ORLEN Management Board, Operations:
"In 2018, the ORLEN Group once again reported record levels of crude oil throughput and capacity utilisation. It should be noted that our refineries processed 33.4 million tonnes of crudes and operated at 95% of their maximum capacity despite lower availability of production units due to both scheduled and unscheduled shutdowns. Last year, we strove to fully integrate and utilise our production assets across the ORLEN Group and to improve yields on high-margin products. We also put in operation another CCGT unit in Płock and completed the construction of the Metathesis Unit at PKN ORLEN and the Propylene Splitter in Lithuania. We are moving ahead with the Unipetrol Group's key project to construct the Polyethylene 3 Unit."

MAIN PRODUCTION ASSETS OF THE ORLEN GROUP

SCHEME 3. Production assets of the ORLEN Group and main competitors in the Central and Easter Europe / production capacity [million t].



Source: Own preparation.

ORLEN GROUP

- The total production capacities of the **ORLEN Group** refineries are 35.2 million tonnes.
- **The refinery in Płock** is one of the most advanced integrated production facilities in Central and Eastern Europe, with a production capacity of 16.3 million tonnes/year. In petrochemicals, the key unit (Olefins) has a maximum production capacity of about 700 thousand tonnes of ethylene and about 380 thousand tonnes of propylene. Monomers manufactured at PKN ORLEN are used as feedstock for the polymer units at Basell Orlen Polyolefins and the PVC unit at ANWIL. PKN ORLEN also operates a modern PX/PTA complex with an annual capacity of around 690 thousand tonnes of terephthalic acid.
- The other Polish refineries, operating as the **ORLEN Południe group in Trzebinia and Jedlicze**, manufacture bio-components, base oils and heating oils, and regenerate spent oils.
- The **ORLEN Lietuva refinery in Mazeikai** has a production capacity of 10.2 million tonnes/year and is the only such facility in the Baltic States (Lithuania, Latvia and Estonia).
- The **Unipetrol Group operates refineries in Kralupy and Litvinov,** with a combined production capacity of 8.7 million tonnes/year. The Unipetrol Group also owns gas petrochemical assets with combined production capacities of approximately 600 thousand tonnes/year, including 320 thousand tonnes of polyethylene and approximately 280 thousand tonnes of polypropylene. Construction of a new Polyethylene III unit, with a capacity of approximately 270 thousand tonnes/year, is under way. Once completed, the unit will allow Unipetrol to increase the use of the Olefins installation and further integrate the petrochemical and refining operations.
- The Włocławek-based **Anwil** is the only manufacturer of polyvinyl chloride (PVC) in Poland and one of the major manufacturers of fertilizers and sodium hydroxide in the country. The annual production capacities are around 1.0 million tonnes/year of nitrogen fertilizers, approximately 0.4 million tonnes/year of PVC and granulates, and approximately 0.2 million tonnes/year of sodium hydroxide. Thanks to the planned construction of the third production installation of nitrogen fertilizers the production capacity of Anwil after 2021 will increase to approximately 1.5 million tonnes/year.
- **Basell ORLEN Polyolefins in Płock** operates facilities with a total production capacity of 900 thousand tonnes (420 thousand tonnes of polyethylene and 480 thousand tonnes of polypropylene). Products are marketed both in Poland and in foreign markets.

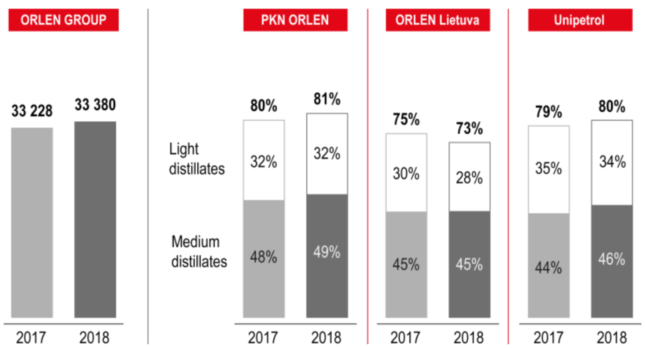
COMPETITION IN CENTRAL AND EASTERN EUROPE

The largest **competitors of the ORLEN Group** are:

- LOTOS Group of Gdańsk – Poland's second largest refinery
- Mitteldeutschland Refinery in Leuna/Spergau, located in south-eastern Germany, about 150 km from the Polish-German border, the country's most advanced refinery
- PCK Refinery in Schwedt, located north-east of Berlin, about 20 km from the Polish-German border
- Slovnaft refinery, an integrated refining and petrochemical group, with a leading position in the Slovak Republic, located near Bratislava
- Mozyr refinery, a leading refinery in Belarus, located close to the Ukrainian border.

KEY OPERATIONAL DATA

DIAGRAM 4. Crude oil throughput and fuel yields.



Source: Own preparation.

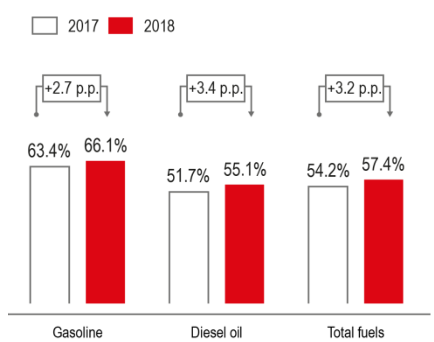
- **Volume of crude processed by** the ORLEN Group in 2018: **33.4 million tonnes, an increase of 0.5% year on year**, including:
  - **Poland, a year-on-year increase of 4.2%** as, unlike in 2017, there were no maintenance shutdowns of the DRW III unit and the Hydrogen Plant, and the downtime at Hydrocracking, Reforming and PX/PTA units was shorter (year on year).
  - **the Czech Republic, a year-on-year decrease of (4.3)%** due to scheduled maintenance shutdowns at the Kralupy refinery and the steam cracker in Litvínov, as well as the unscheduled maintenance shutdown of the POX and DRW units in Litvínov.
  - **Lithuania, a year-on-year decrease of 1.3%**, mainly due to a larger amount of work performed as part of the scheduled maintenance shutdown of the refinery.

ORLEN GROUP'S MARKET SHARES IN THE DOWNSTREAM SEGMENT

Wholesale of refining products

In 2018, the ORLEN Group was involved in wholesale distribution of refining products in Poland, the Czech Republic, Germany, Slovakia, Hungary, Austria, Lithuania, Latvia, Estonia and Ukraine, and in Western Europe, where products were delivered to transhipment terminals by sea. The ORLEN Group's home markets are Poland, Lithuania and the Czech Republic. The Group has an extensive portfolio of refining products, including gasoline, diesel oil, A-1 jet fuel, light and heavy heating oil, bitumen, engine oils and a wide range of non-fuel products and semiproducts.

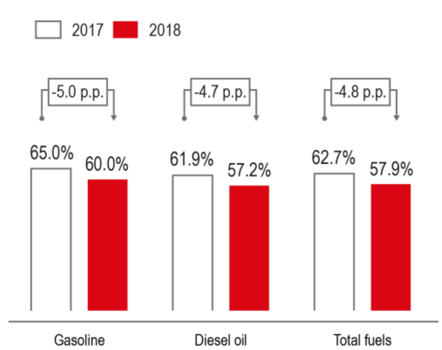
DIAGRAM 5. Market share in Poland.



Source: Own preparation.

- Strong sales allowed the ORLEN Group to maintain the leading position in the Polish fuel sales market.
- The ORLEN Group increased its sales of diesel oil and gasoline on the Polish market by, respectively, 3.4pp and 2.7pp year on year, driven by sustained favourable market conditions, including the effects of enactment, as of August 2016, of the legislative solutions designed to curb the grey fuel market in Poland.

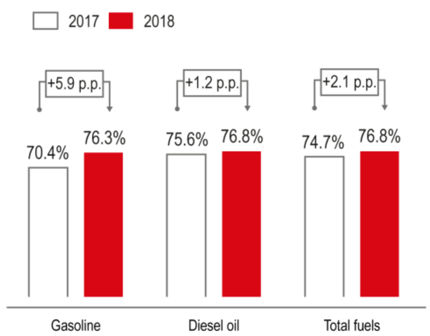
DIAGRAM 6. Market share in the Czech Republic.



Source: Own preparation.

- The ORLEN Group is the leader in fuel sales in the Czech Republic.
- A (4.8)pp decrease in the aggregate market share due to supply problems resulting from the scheduled maintenance shutdown at the Kralupy refinery and failures of the key refining units (steam cracker, POX, and hydrodesulfurisation unit) during the year.

DIAGRAM 7. Market share in the Baltic states.



Source: Own preparation.

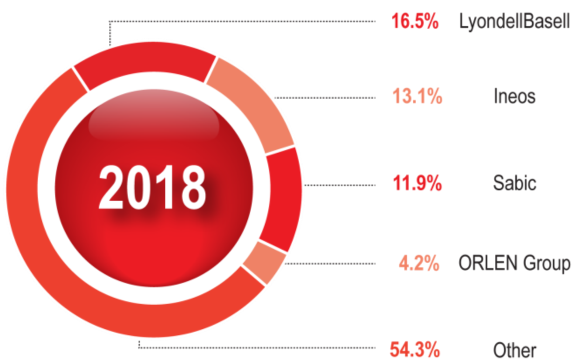
- Consolidation of the Group's position as the market leader in the Baltic States despite strong price pressures from Finnish, Belarusian and Russian suppliers.
- Increase in the shares of total gasoline sales on the markets of 5.9pp and diesel oil markets of 1.2pp attributable to strong sales from the marine terminal in Klaipėda.

For description of the ORLEN Group's sales by product groups, see section 3.2.1.3.

Wholesale of petrochemical products

The ORLEN Group is the largest petrochemical company in Central and Eastern Europe, the only manufacturer of monomers and polymers on the Polish market, and the manufacturer of most of the petrochemical products available on the Czech market.

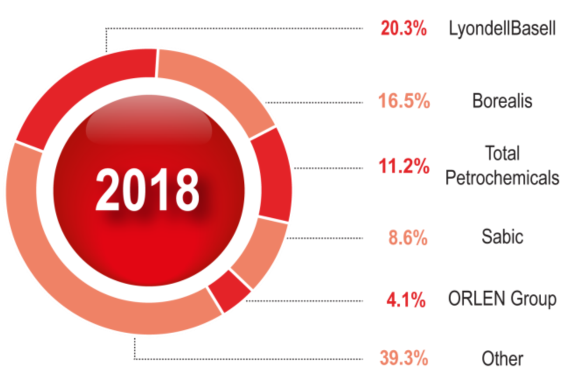
DIAGRAM 8. Polyethylene producers in Europe.



Source: Own preparation based on POLYGLOBE.

- Europe's production capacities for high-density (HDPE) and low-density (LDPE) polyethylene are currently at around 13 337 thousand tonnes per year.
- Lyondell Basell Industries − the largest polyethylene manufacturer, with an annual production capacity of approximately 2 195 thousand tonnes (including its 50% share in Basell ORLEN Polyolefins Sp. z o.o. (BOP) and production assets in Germany, France and Poland.
- Ineos Olefins & Polymers Europe, with an annual production capacity of approximately 1 745 thousand tonnes and assets in Belgium, France, Germany, Italy and Norway; and Sabic – production capacity of around 1 590 thousand tonnes per year and assets in Germany, the Netherlands and the UK.
- The total production capacity of the ORLEN Group, with production sites in Poland and the Czech Republic (including its 50% share in BOP), is approximately 555 thousand tonnes per year.
- The ORLEN Group is building a new Polyethylene 3 unit in the Czech Republic with an annual production capacity of approximately 270 thousand tonnes.

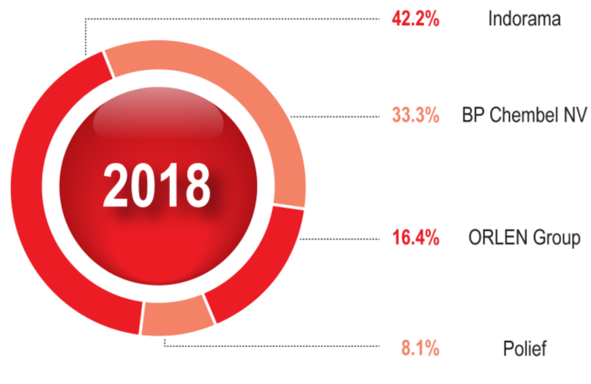
DIAGRAM 9. Polypropylene producers in Europe.



Source: Own preparation based on POLYGLOBE.

- Europe's annual production capacities for polypropylene are at around 11 669 thousand tonnes.
- Lyondell Basell Industries has an annual production capacity of around 2 369 thousand tonnes (including its 50% share in BOP) and assets in Germany, France, Italy, Spain, UK and Poland.
- Borealis, with an annual production capacity of approximately 1 920 thousand tonnes and assets in Belgium, Germany, Austria and Finland.
- Total Petrochemicals, with a production capacity of around 1 310 thousand tonnes per year and assets located in Belgium and France.
- The total production capacity of the ORLEN Group, with production sites in Poland and the Czech Republic (including its 50% share in BOP), is approximately 480 thousand tonnes per year.

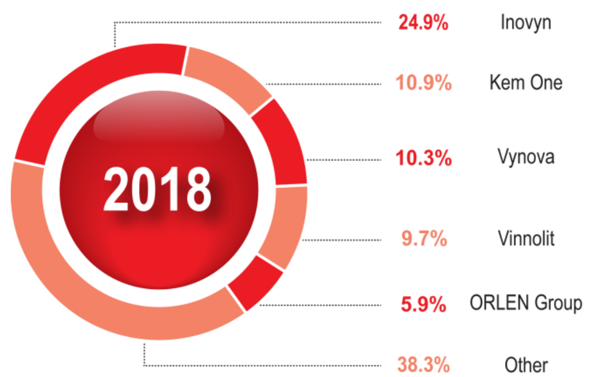
DIAGRAM 10. PTA producers in Europe.



Source: Own preparation based on PCI.

- The European nominal PTA production capacities total 4 205 thousand tonnes per year.
- Indorama – Europe's largest PTA manufacturer (following the acquisition of Artlant), with a nominal production capacity of 1 775 thousand tonnes per year and assets located in Portugal, Spain and the Netherlands.
- BP Chembel NV – Europe's second largest PTA manufacturer, with an annual production capacity of 1 400 thousand tonnes, located in Belgium.
- PKN ORLEN is the only manufacturer in Europe to have production units fully integrated with paraxylene production, and its production capacity totals 690 thousand tonnes per year.

DIAGRAM 11. PVC producers in Europe.



Source: Own preparation based on Petrochemical Market Dynamics, Vinyl – 2017 Report from October 2017 (Nexant)

- The European nominal PVC production capacities total 8 060 thousand tonnes per year.
- Europe's leading PVC manufacturer – Inovyn, was formed following the combination of Ineos Chlor and Solvay; its annual production capacity is 2 005 thousand tonnes.
- Other manufacturers, such as Kem One, Vynova, and Vinnolit, have annual PVC production capacities estimated at 882 thousand, 830 thousand and 780 thousand tonnes, respectively.
- The Karpatneftekhim plant, with nominal production capacities of ca. 300 thousand tonnes annually, resumed operations in 2017 after a five -year shutdown.
- The ORLEN Group, with the annual production capacity of its Anwil and Spolana units at 475 thousand tonnes, ranks fifth on the European plastics market.
- Anwil's principal competitors are Inovyn and Vynowa in Europe and BorsodChem in Poland.

For description of the ORLEN Group's sales by product groups, see section 3.2.1.3.

ORLEN GROUP'S LOGISTICS ASSETS

The logistics infrastructure is one of the key elements of the ORLEN Group's competitive advantage.

The Group operates a network of complementary infrastructure assets: fuel terminals, onshore and offshore handling depots, transmission pipelines, rail transport, and transport by road tankers.

In 2018, pipelines were the primary mode of transport of feedstock and products used by the Group. The total length of product and feedstock pipeline networks, both Group- and third party-owned, used by the ORLEN Group in Poland, the Czech Republic and Lithuania was nearly 3.7 thousand km (including 2.1 thousand km of product pipelines, and 1.6 thousand km of feedstock pipelines).

In **Poland**, PKN ORLEN uses 958 km of pipelines for fuel product transport: 620 km of pipelines owned by Przedsiębiorstwo Eksploatacji Rurociągów Naftowych S.A., as well as its own transport infrastructure with a total length of 338 km, comprising two sections: Płock – Ostrów Wielkopolski – Wrocław (319 km) and Wielowieś – Góra (19 km). Crude oil is transported mainly via the network of pipelines owned by Przedsiębiorstwo Eksploatacji Rurociągów Naftowych S.A. (total lengths of 887 km), and via the Group's own pipeline (43 km), connecting Góra and Żółwiniec (link to the PERN pipeline).

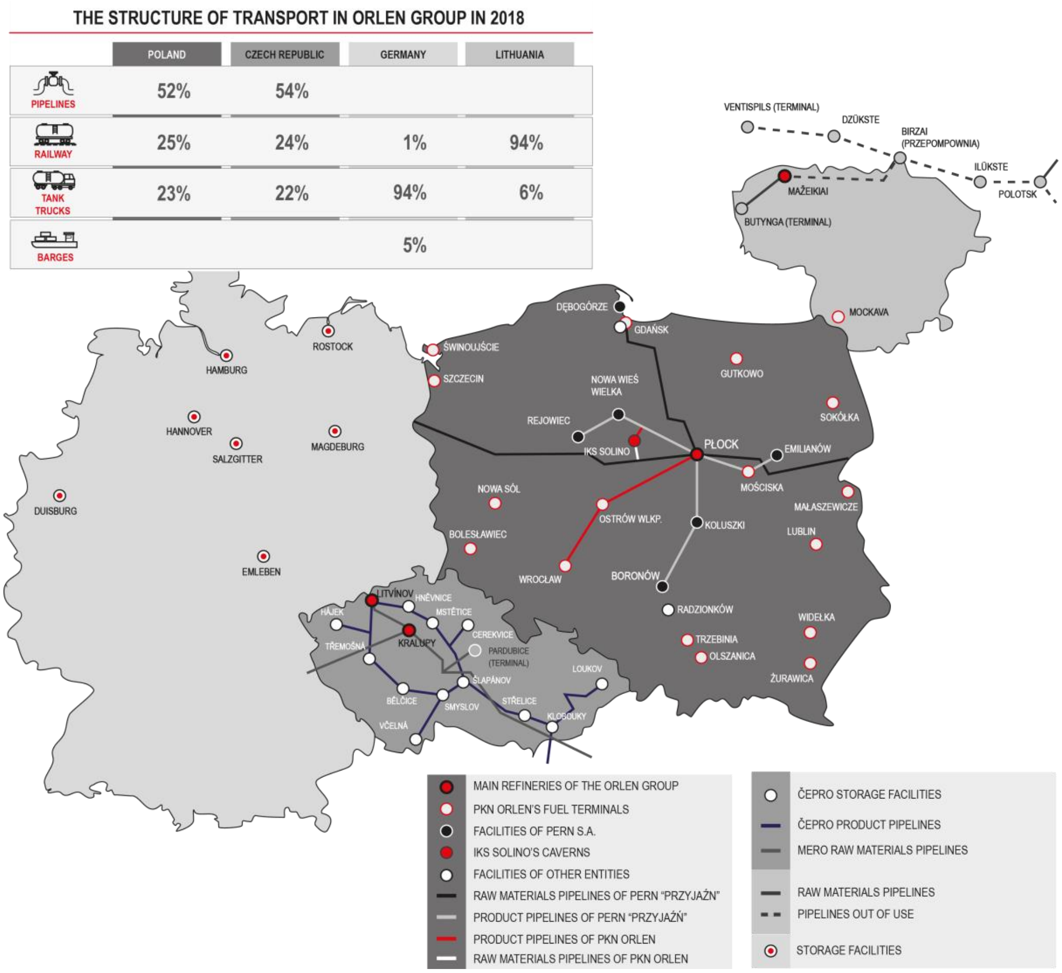
In 2018, the ORLEN Group used a total of 25 facilities to receive, store, dispatch and handle fuels (Group- and third party-owned fuel terminals). As at the end of 2018, the total storage capacity available to the Group within its own infrastructure and contracted from third parties was over 2.7 million m^3.

In 2018, the ORLEN Group used 1 741 km of pipelines in **the Czech Republic** (1 100 km of product pipelines operated by ČEPRO, and 641 km of feedstock pipelines operated by MERO), 12 storage and distribution depots owned by state-owned operator ČEPRO, 3 terminals owned by the Group and 2 external terminals not belonging to CEPRO.

The main component of the logistics infrastructure currently used on the **Lithuanian market** is a 91-km feedstock pipeline 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 uses the storage and distribution capacities of seven third party-owned depots. Products are delivered by tank trucks, railway and barges.

SCHEME 4. Transport structure and logistic infrastructure used by the ORLEN Group in Europe.



THE STRUCTURE OF TRANSPORT IN ORLEN GROUP IN 2018

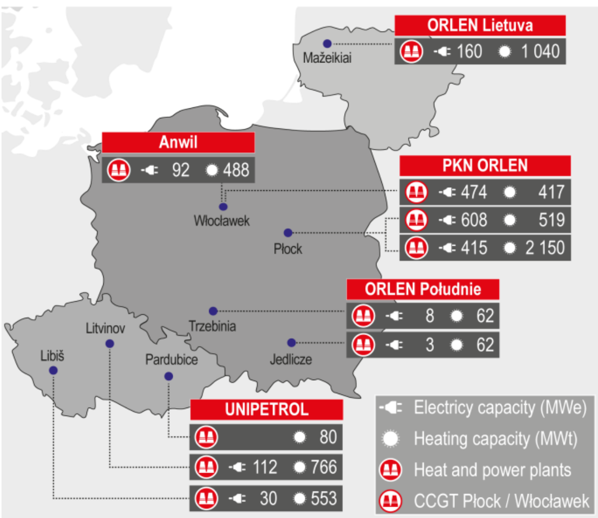
	POLAND	CZECH REPUBLIC	GERMANY	LITHUANIA
PIPELINES	52%	54%		
RAILWAY	25%	24%	1%	94%
TANK TRUCKS	23%	22%	94%	6%
BARGES			5%	

Source: Own preparation

POWER GENERATION

The ORLEN Group is a significant producer of electricity and heat, used in large part to satisfy the Group's own production needs. It is also one of the largest consumers of gas in Poland and an active participant in the process of gas market liberalisation.
The ORLEN Group currently owns power generation assets in three countries. In Poland, they are located in Płock, 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.



Source: Own preparation.

CHP Plants

- In terms of installed capacity, **PKN ORLEN's high-efficiency combined heat and power plant in Płock** is the largest industrial power plant in Poland and one of the largest in Europe. The CHP plant is the main supplier of steam heat, heating water and electricity to production units and to external customers. The total installed capacity is 415 MW, after including the new turbogenerator TG7. Boilers of the CHP plant are fired with heavy fuel oil, derived from crude oil distillation, and with natural gas.
- **The ORLEN Południe Group's CHP plant in Trzebinia** fully satisifies the Trzebinia Plant's demand for steam heat and heating water, and partly the demand for electricity. Fine coal is the primary fuel used by the CHP plant. The new source of heat was placed into service in December 2018, i.e. complies with environmental standards and received all required administrative decisions. Currently, the last assembly works concerning part of low and medium-pressure reduction stations are carried out. The test run (720 h), proceeding commissioning i.e. PAC, has been planned.
- The ORLEN Południe Group's **CHP plant in Jedlicze**, fired mainly with fine coal, is the main supplier of process steam to the Jedlicze Plant.
- At present, the **Anwil CHP plant** operates due to the failure of CCGT in Włocławek. Till September 2018 it was treated as an auxiliary source of heat. For technological purpose, Anwil uses mostly process steam from the Włocławek gas-fired CCGT unit (commissioned in mid-2017) owned by PKN ORLEN.
- The Unipetrol Group's **CHP Plant in Litvínov** uses lignite as the primary fuel, till 2026 a new technology based on gas will be introduced.
- **The CHP Plant in Spolana** is fuelled mainly with lignite. Works aiming replacing it by gas boilers are carried out.
- **The Paramo CHP Plant** comprises two production plants, in Kolin and in Pardubice, both fuelled with natural gas.
- **ORLEN Lietuva's CHP plant** is a source of process steam and is fired mainly with heavy fuel oil and refinery gases.

CCGT Plants

- **Włocławek CCGT Plant**, 474 MWe. In 2018, the CCGT plant produced over 2.04 TWh of electricity and supplied almost 1 205 542 GJ of heat to Anwil in the form of process steam. Starting from 8 September, the CCGT Plant is under repair, General Electrics repairs the turbine under the guarantee.

  During the three first quarters, the unit, which cogenerates electricity and heat, was an active market participant closely cooperating with PSE, the national power grid. The relatively high installed capacity and high flexibility enable the unit to also provide system services to PSE, thus contributing to the grid's stability.
- **Płock CCGT Plant**, 608 MWe, an electrical efficiencies gross over 61%. On 29 June 2018 PAC has been assigned. The CCGT as combined heat and power plant not only satisfies the ORLEN Group's internal demand but also is an active market participant closely cooperating with PSE. In 2018, the unit produced 2.932 TWh of electricity and 1 378.4 TJ of steam directed to production plant network, consuming for that purpose main internal process utility: 5.9 TWh of natural gas and 1.2 million tonnes of water from Vistula ricer.

Surplus electricity from the new CCGT assets is sold both on the wholesale energy market and to end customers.

Capacity market

2018 saw the first capacity market auctions for 2021–2023. PKN ORLEN designated two capacity providers: the CCGT unit in Płock (389 MW) and the CCGT unit in Włocławek (351 MW). The CCGT unit in Płock, as a new unit, was awarded a five-year capacity agreement (for 2021–2025), and the CCGT unit in Włocławek, as an existing unit, was awarded three one-year capacity agreements for 2021–2023.

Offshore

With regard to low-emission energy generation, the ORLEN Group strategy provides for the development and construction of offshore wind farms. The Offshore Wind Farm Programme (the MEW Programme) comprises two projects: The MEW project and the project designed to attract a trade investor for the MEW Programme.

Baltic Power (an SPV) is implementing the MEW project and PKN ORLEN is working on finding a trade investor. To facilitate the ventures, a cooperation agreement was signed in 2018 between Baltic Power and PKN ORLEN. The PKN ORLEN Supervisory Board gave its consent for an equity increase at Baltic Power in order to carry on with the timely delivery of the MEW project.

In 2018, multichannel seismic surveys were carried out and a plan of geological operations was developed as part of the MEW project in the area covered by a permit to construct and use artificial islands, structures and facilities in Polish marine areas (the PSZW permit). Last year, work started on a preliminary technical concept and consultancy for the Offshore Wind Farms. In 2018, the monitoring of marine birds and their local migrations was reviewed.
An agreement was signed with a technical adviser required for signing contracts for and conducting environmental and wind surveys.
In December 2018, a contract was signed to conduct environmental and wind surveys on the Baltic Power Offshore Wind Farm area, and an application for defining the conditions for grid connection was filed with PSE.
In 2019, in accordance with the contract, environmental and wind surveys will start and work on the technical concept will continue. In addition, the key tasks are planned to be executed, including the performance of preliminary geotechnical tests in the Baltic Power licence area, preparation of the building design for MEW and execution of geotechnical tests, and commencement of environmental surveys to connect MEW to the National Power System.
The project schedule also provides for signing a contract with an advisor to obtain a permit to lay submarine cables as well as advisory services with respect to the grid connection agreement with PSE.
An RFP has been released to select a transaction and legal adviser as part of the project to find a trade investor for the MEW Programme.

3.2.1.3. Downstream segment sales volumes

Michał Róg, Member of the PKN ORLEN Management Board for Wholesale and International Trade:

Permanent eradication of grey market activity coupled with considerable improvement of economic conditions have allowed us to achieve record sales for another consecutive year. Despite the significant impact of maintenance shutdowns, the ORLEN Group's Downstream segment sold over 32.7 million tonnes of refining and petrochemical products.

The excellent cooperation along the entire supply chain, from the Sales Division through the Logistics Department to the International Trade Office, made it possible for the Group to satisfy the unprecedented growth in demand on the Polish market.

The ORLEN Group's refining assets in Poland, the Czech Republic, and Lithuania as well as its well-developed logistics infrastructure allow it to respond in many ways to the changing market environment. The Group's own production capacities are supplemented with consistently enhanced trading capabilities. As an active player on international markets, the Group is able to flexibly supplement temporary shortages with imports from both onshore and offshore sources. The ORLEN Group's potential has allowed us to face new market challenges and increase control of fuel imports and balancing in Poland, which will translate into a steady increase in market share in the near future.

2018 was a period of hard work on updating the Strategy for 2019−2022, adjusted to the changing market environment and new challenges. The main objective behind the strategy pursued by the Wholesale segment is to maintain the leading position on the home markets, increase presence on associate markets, and maximise margins earned by the ORLEN Group through the optimum use of its own production and logistics assets as well as active trading.

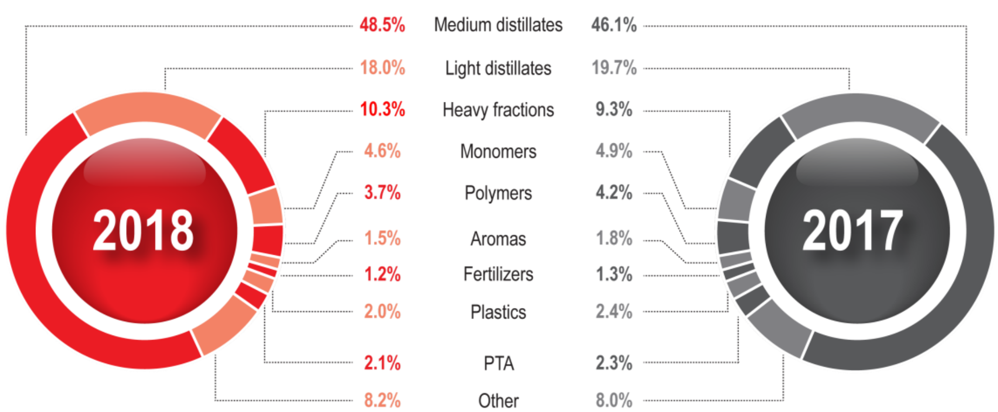
In 2018, total sales of the ORLEN Group's Downstream segment fell by 0.6% year on year, to 32 716 thousand tonnes. The slight year-on-year decline in sales volumes relative to the record levels reported in 2017 was attributable to the negative impact of scheduled maintenance shutdowns at the petrochemical section of the ORLEN Group. Sales of refining products remained relatively stable year on year, as the volume of sales on the Polish market rose significantly – by 3.6% year on year, driven mainly by record sales of middle distillates on the Polish market, which posted record performance for another consecutive year.
In the Czech Republic and the Baltic States sales declined year on year by 8.6% and 2.5%, respectively, mainly as a result of the abovementioned scheduled maintenance shutdowns at the Kralupy and Mažeikiai refineries and at the petrochemical business of PKN ORLEN and Unipetrol.

TABLE 4. The ORLEN Group sales in the Downstream segment [PLN million/thousand tonnes].

Sales	2018		2017		2016		change %	
	Value	Volume	Value	Volume	Value	Volume		
1	2	3	4	5	6	7	8=(2-4)/4	9=(3-5)/5
Light distillates1)	12 925	5 450	12 071	5 818	10 513	5 766	7.1%	(6.3%)
Medium distillates2)	34 787	13 653	28 325	13 343	22 714	12 459	22.8%	2.3%
Heavy fractions3)	7 339	5 032	5 691	4 879	3 786	4 334	29.0%	3.1%
Monomers4)	3 260	849	2 994	868	2 025	681	8.9%	(2.2%)
Polymers5)	2 643	540	2 557	550	1 135	245	3.4%	(1.8%)
Aromas6)	1 096	367	1 100	360	625	248	(0.4%)	1.9%
Fertilizers7)	825	1 067	805	1 081	821	1 089	2.5%	(1.3%)
Plastics8)	1 409	371	1 466	391	1 218	351	(3.9%)	(5.1%)
PTA	1 528	508	1 399	523	1 571	605	9.2%	(2.9%)
Other9)	5 851	4 879	5 017	5 112	4 794	4 930	16.6%	(4.6%)
Total	**71 663**	**32 716**	**61 425**	**32 925**	**49 202**	**30 708**	**16.7%**	**(0.6%)**

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 contains mainly: brine, salt base, vacuum distillates, acetone, ammonia, butadiene, phenol, technical gases, glycols, caprolactam, caustic soda and sulphur. Additionally, in value terms revenues from sale of services of the segment and materials.

DIAGRAM 12. Sales revenue structure of the ORLEN Group Downstream segment.



In 2018, 2017 and 2016 none of the ORLEN Group's leading customers accounted for 10% or more of the Group's total revenue.

3.2.1.4. Sales markets and market shares

TABLE 5. Sales volume of the ORLEN Group in the Downstream segment on domestic markets1) (in thousands of tonnes).

Sales	2018	2017	2016	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Poland	17 777	17 159	15 173	618	3.6%
Baltics states	8 441	8 654	9 114	(213)	(2.5%)
Czech Republic	6 498	7 112	6 421	(614)	(8.6%)
Total	**32 716**	**32 925**	**30 708**	**(209)**	**(0.6%)**

1) by country of headquarter of company carrying out the sales.

Polish market

2018 was one of the best years for the Polish economy in recent history. FTSE Russell classified Poland as one of the 25 most advanced global economies. According to the Central Statistics Office, the unemployment rate in Poland fell to 5.8%, which is the lowest figure in over 20 past years. According to preliminary data, GDP grew by 5.1% year on year in 2018, up by 0.3pp on 2017. Favourable market conditions drove up diesel oil and gasoline consumption by 5.2% and 4.0%, respectively. For more information on the macroeconomic environment, see Section 4.1.

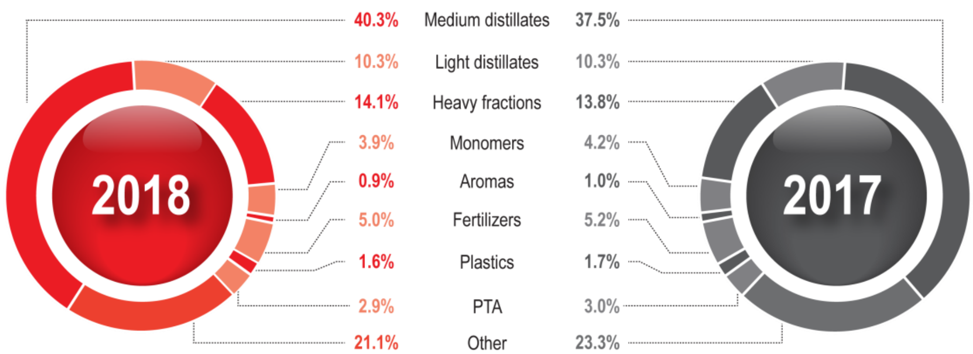
In 2018, the Downstream segment's sales increased by 3.6%, to a record high of 17 777 thousand tonnes. The solid results, corresponding to the market consensus range, were achieved amid macroeconomic challenges, with an average annual increase in crude oil and natural gas prices by 32% and 29%, respectively.

The ORLEN Group remained the main supplier of major foreign fuel companies operating in Poland (BP, Shell, Amic), while expanding its activity on the market of end customers, supplying fuel to a growing number of SMEs through ORLEN Paliwa.

TABLE 6. Sales volume of the ORLEN Group in the Downstream segment on the Polish market [in thousands of tonnes].

Sales	2018	2017	2016	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Light distillates	1 837	1 773	1 704	64	3.6%
Medium distillates	7 164	6 434	5 104	730	11.3%
Heavy fractions	2 503	2 369	1 961	134	5.7%
Monomers	693	716	661	(23)	(3.2%)
Aromas	164	178	212	(14)	(7.9%)
Fertilizers	881	897	914	(16)	(1.8%)
Plastics	276	300	284	(24)	(8.0%)
PTA	508	523	605	(15)	(2.9%)
Other	3 751	3 969	3 728	(218)	(5.5%)
Total	**17 777**	**17 159**	**15 173**	**618**	**3.6%**

DIAGRAM 13. Structure of sales volume of the ORLEN Group in the Downstream segment on the Polish market.



Sales of the ORLEN Group's refining products grew by 5.3% year on year. The most significant increase was seen in the case of middle distillates (up 11.3% year on year), driven by strong growth in sales of diesel oil and aviation fuels. The continuing favourable market conditions drove up sales of diesel oil and the market shares. The aviation fuel market in Poland grew for another consecutive year in 2018 (up by approximately 18%), while the ORLEN Group's share in domestic aviation fuel sales rose by 2.4pp, to 82.7%, mainly on the back of higher sales of aviation fuels in the into-plane segment and higher supplies to strategic customers, including to the Polish Army. At the beginning of 2018, PKN ORLEN joined the group of IATA Strategic Partners, thus gaining access to a new platform for communication with leading players of the global aviation industry.

Sales of light distillates rose by 3.6% year on year, driven by higher sales of gasoline which balanced lower LPG sales volumes. Like in the case of diesel oil, the ORLEN Group's share in the gasoline market grew by 2.6pp in 2018. Such strong sales performance in Poland was achieved thanks to maintaining a strong position on the import market, among other factors. Currently, the ORLEN Group is one of the largest importers of diesel oil in the region, and imports of gasoline and diesel oil in 2018 reached a record high of 2.3m

tonnes, which represents approximately 45% of the total imports of those products to Poland.
Sales of heavy fractions grew by 5.7% year on year (mainly heavy fuel oil and oils), mainly on account of worse product structure due to refinery downtimes.

In the petrochemical segment, the ORLEN Group's sales fell by 3.7% year on year, chiefly due to lower sales of monomers, aromatics and PTA (respectively down by 3.2%, 7.9% and 2.9% year on year) as a result of the scheduled maintenance shutdown of the olefins unit. The decline in PVC sales was an effect of the shutdown of the production units at Anwil, correlated with the shutdown of the olefins unit at PKN ORLEN S.A.

The decline in fertilizer sales followed from limited demand from retail customers due to weather conditions, and from unscheduled downtimes at Anwil.

ORLEN Lietuva's markets

Despite poorer GDP growth, the Baltic States' economies continued to grow at a fast pace. According to EUROSTAT estimates Lithuania's GDP went down (0.7)pp year on year, to 3.4% and Estonia slowed by (1.0)pp year on year, to 3.9%.In tern, the economy of Latvia increased by 0.2pp, to 4.8% year on year.

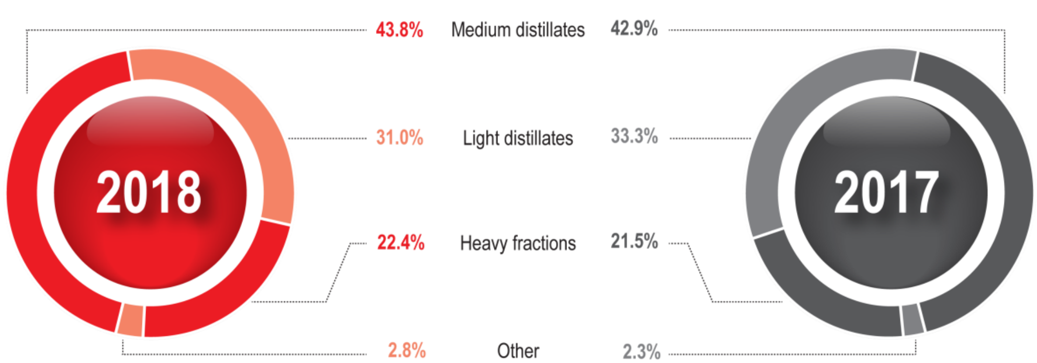
The favourable economic conditions translated into stronger demand for diesel oil in each of the markets. In Lithuania consumption of diesel oil rose by 2.1%, in Latvia by 3.2% and in Estonia by 9.0% year on year. In line with the long-term trend, demand for gasoline shrank by (4.0)% in Latvia and by (35.1)% in Estonia year on year. The severe decline in Estonia was additionally driven by a 10% increase in excise duty on gasolines in 2018. Favourable trends in gasoline consumption were observed in Lithuania, where the consumption rose by 9.9% year on year.

The Baltic States are attractive markets for Scandinavian and Belarusian fuels producers. The Scandinavian countries and Belarus have large surpluses of diesel oil and gasolines, and are constantly looking for opportunities to place the fuels abroad. In 2018, ORLEN Lietuva faced aggressive competition, particularly from importers from Finland and Belarus.

TABLE 7. Sales volume of the ORLEN Group in the Downstream segment on the markets serviced by the ORLEN Lietuva Group [thousand tonnes].

Sales	2018	2017	2016	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Light distillates	2 614	2 880	2 753	(266)	(9.2%)
Medium distillates	3 700	3 715	4 213	(15)	(0.4%)
Heavy fractions	1 888	1 859	1 920	29	1.6%
Other	239	200	228	39	19.5%
Total	**8 441**	**8 654**	**9 114**	**(213)**	**(2.5%)**

DIAGRAM 14. Structure of sales volume of the ORLEN Group in the Downstream segment on the markets serviced by the ORLEN Lietuva Group.



The ORLEN Lietuva Group's sales volume fell by 2.5% year on year, to 8 441 thousand tonnes, chiefly on the back of lower sales of light distillates (down 9.2% year on year). Sales of middle distillate decreased slightly (by 0.4%), while sales of Jet A-1 aviation fuel surged by as much as 32.6% year on year.

The drop in product sales was an outcome of lower fuel yields resulting from a wider (year on year) scope of maintenance shutdowns and a lower share of sweet crudes in the crude slate. In view of these factors, less profitable sales by sea were reduced, while inland sales increased by approximately 6% year on year.

In 2018, ORLEN Lietuva actively participated in balancing the ORLEN Group's deficits on the Polish market. Considering the high fuel consumption on the Polish market and as part of the efforts to optimise product flows across the ORLEN Group, almost 896 000 tonnes of products (mainly fuels) were taken from the ORLEN Lietuva Group and placed on the Polish market. In 2017, the volume was 1 043 thousand tonnes.

The ORLEN Group also sells fuels on the Ukrainian market. Despite improvements in its macroeconomic environment, Ukraine continues to be perceived as an unstable and high-risk market, which does not encourage new investment or growth in transport services. As in previous years, the Ukrainian fuel market faced strong pressures from Russian and Belarusian exporters offering competitively-priced products. The ORLEN Group has been building its position as a stable and reliable partner for years. Ukrainian customers receive timely supplies of high quality products. The ORLEN Group represents the only Western oil company operating in Ukraine. In 2018, on the back of strong sales ORLEN Group was able to increase to 8% its total share in the Ukrainian market of fuels (including gasolines, diesel oil, jet fuel and LPG).

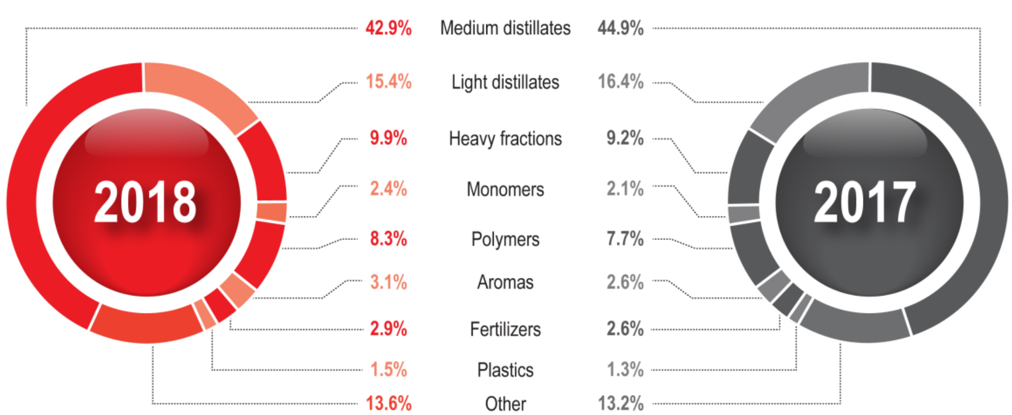
Czech market

The Czech economy slowed down in 2018. According to the EUROSTAT estimates, the GDP growth rate fell to 3.0%, from 4.4% in 2017. Favourable macroeconomic environment translated into a year-on-year increase in gasoline consumption which, according to preliminary data, rose by 0.2% year on year, while demand for diesel oil grew by 1.1% year on year.
Following the full buyback of the shares from Unipetrol shareholders in 2018, PKN ORLEN became the sole owner of Unipetrol and the only fuel producer in the Czech Republic.

TABLE 8. Sales volume of the ORLEN Group in the Downstream segment on the Czech market [in thousands of tonnes].

Sales	2018	2017	2016	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Light distillates	999	1 165	1 309	(166)	(14.2%)
Medium distillates	2 789	3 194	3 142	(405)	(12.7%)
Heavy fractions	641	651	453	(10)	(1.5%)
Monomers	156	152	20	4	2.6%
Polymers	540	550	245	(10)	(1.8%)
Aromas	203	182	36	21	11.5%
Fertilizers	186	184	175	2	1.1%
Plastics	95	91	67	4	4.4%
Other	889	943	974	(54)	(5.7%)
Total	**6 498**	**7 112**	**6 421**	**(614)**	**(8.6%)**

DIAGRAM 15. Structure of sales volume of the ORLEN Group in the Downstream segment on the Czech market.



Unipetrol faced product shortages for the better part of 2018, mainly because production units were shutdown for maintenance. The scheduled maintenance shutdown at the Kralupy refinery as well as other unscheduled downtimes caused significant fuel shortages and

Unipetrol had to purchase fuels from importers and domestic suppliers.
In addition, the more demanding conditions of contract execution in 2018, related to the introduction of the UIC index, were the main reason behind the decrease in the sales volumes on the Czech market to 6 498 thousand tonnes (down by 8.6% year on year), including light and middle distillates down by 14.2% and 12.7%, respectively, year on year.
A slight decline in total sales of monomers and polymers was attributable to the scheduled maintenance shutdown of the steam cracker in September 2018.
Despite the challenging operating conditions, in 2018 the Unipetrol Group continued selling its products to a broad customer base, including large fuel companies and hypermarket chains. Unipetrol also exported its products to Slovakia, Hungary, Germany and Austria. The German market played an important role here as in 2018 it suffered serious logistics problems caused by major difficulties in barge traffic on main water routes, as well as supply shortages due to maintenance shutdowns at many refineries and the closing down of the Bayernoil refinery following a fire. Fuel supplies to ORLEN Deutschland helped secure sales at PKN ORLEN's service stations operating under the Star brand and ensured uninterrupted wholesale of fuels. Unipetrol also supplied gasoline and diesel oil to Poland as part of the strategy to optimise product stream flows within the ORLEN Group.

3.2.1.5 Sources of supply

Crude oil

Crude oil is supplied to PKN ORLEN via the Druzhba pipeline and, where the feedstock is imported by sea, via the Gdańsk-Płock pipeline.
Crude supplies to the ORLEN Lietuva refinery are handled by the Būtingė terminal.
The Unipetrol Group receives the feedstock chiefly through the southern section of the Druzhba pipeline (Litvinov) and via the TAL and IKL pipelines (Kralupy).

In 2018, two long-term contracts for oil supply via pipeline to the Płock refinery (with Rosnieft Oil Company and Tatneft Europe AG) and one long-term contract for oil supply by sea (with Saudi Arabian Oil Company) were in force. These contracts covered almost 78% of crude oil supplies to PKN ORLEN.
Under separate contracts, PKN ORLEN supplies crude oil to three ORLEN Group refineries, in Litvinov and Kralupy in the Czech Republic, and in Mazeikiai in Lithuania.
In 2018, crude oil supplies from all sources were made as planned.

PKN ORLEN is consistently expanding its supplier base and the crude slate processed by the Group. In 2018, the first cargo (approximately 130 000 tonnes) of crude oil was delivered to PKN ORLEN from Nigeria. The Nigerian Bonny Light oil supplemented PKN ORLEN's purchases made on the spot market. Decisions on supplies are always weighed against economic considerations to combine secure deliveries with commercial viability. The diversification of oil supplies is also PKN ORLEN's response to rising demand for fuels, especially diesel oil, currently seen in Poland in the wake of regulatory measures to curb the grey market.
A shift in the crude slate towards oil types with properties other than those of REBCO will increase the yield of middle distillates, especially diesel oil. As a result of its diversification efforts, approximately 30% of all crude oil processed at the ORLEN Group is now sourced from alternative directions.
In 2018, the feedstock for all refineries of the ORLEN Group was procured from oil producers and other companies operating on the international oil market. In addition to Nigeria, the feedstock supplied to Płock came primarily from Russia and Saudi Arabia, and was also imported from Kazakhstan, Iran, Norway, and the United Arab Emirates.

The refineries in the Czech Republic received feedstock from Russia, Algeria, Saudi Arabia, Azerbaijan, Libya and Kazakhstan. The Mažeikiai refinery was primarily supplied with Russian oil, with additional deliveries from Saudi Arabia, Norway and Kazakhstan.

In 2018, the share of Rosneft Oil Company in the crude supplies exceeded 10% of the ORLEN Group's total revenue.

Natural gas

Most deliveries of natural gas to the ORLEN Group companies in Poland are made under a five-year contract signed in 2016 by PKN ORLEN and PGNiG, and under additional contracts with major European gas suppliers. Gas is also purchased on the Polish Power Exchange. The ORLEN Group takes steps to ensure stability of supplies and to lower gas procurement costs through such measures as diversification of supply sources, centralisation of gas trading functions and further development of the trading expertise. The current portfolio of gas contracts allows the Group to optimise gas procurement costs by selecting the underlying gas indices and delivery points.

PKN ORLEN has gas transmission contracts with both domestic and foreign operators, ensuring full support in natural gas logistics for the Production Plant in Płock, CCGT Włocławek, and CCGT Płock.
The ORLEN Group is active on the gas trading market in Poland, thus participating in the development and liberalisation of the Polish gas market.
PKN ORLEN has also been developing natural gas sales on both retail and wholesale markets. The gas offering is tailored to customer needs, and reflects gas consumption profiles as well as delivery points. PKN ORLEN also offers gas portfolio management advisory services and dispatching services, while the ORLEN Group is engaged in a number of exploration and production projects to secure its own sources of natural gas.

In 2018, the value of deliveries by none of the suppliers of natural gas to the ORLEN Group accounted for 10% or more of the ORLEN Group's total revenue.

3.2.2. RETAIL

Patrycja Klarecka, Member of the Management Board, Retail Sales:
What sets us apart from the competition is the premium quality of our products and services. To meet customer expectations, the ORLEN Group consistently launches new services and products, both in its fuel and non-fuel offering, and improves service quality. We are constantly working on innovative solutions to further boost the quality of service at our stations. The year-on-year increase in sales volumes confirms the success of our strategy.

2018

RETAIL STATIONS

	units	ORLEN Group	Poland	Germany	Czech Republic	Lithuania
Total sales	thousand t	9 448	5 696	2 838	838	76
Market share	%	16.1	34.0	6.4	23.2	4.7
Number of stations, including:	**number**	2 803	1 787	582	409	25
Premium	number	1 919	1 704	-	192	23
Economical	number	818	54	564	200	-
Other	number	66	29	18	17	2
CODO/COCO[1]	number	2 255	1 342	492	396	25
DOFO/DODO[1]	number	548	445	90	13	-

CATERING OUTLETS

	units	ORLEN Group	Poland	Germany	Czech Republic	Lithuania
Total, including:	**number**	**2 327[2]**	**1 667**	**367[2]**	**270**	**23**
Stop Cafe	number	1 089	923	-	143	23
Stop Cafe Bistro	number	399	372	-	27	-
Stop Cafe 2.0	number	472	372	-	100	-
Star Connect	number	72	-	72	-	-
Star Cafe	number	295[2]	-	295[2]		

1) Abbreviations used for types of fuel stations are described in „Glossary of selected financial and industry concepts”.
2) Number of Star (Germany) fuel stations including those with previous Star Cafe gastronomic format (data not reported in previous years).

3.2.2.1. Market trends

In 2018, the Retail segment reported higher year-on-year unit margins on fuels and higher fuel consumption across all ORLEN Group's markets except Germany, where fuel consumption declined on the back of, among others, logistics problems.
Operating expenses went up in each of the markets, driven largely by rising labour costs. Although salaries and wages offered to service station staff were higher compared with previous years, it was difficult to find new employees. Higher costs of employment and the low jobless rate led to an increase in other operating expenses, such as costs of logistics, repairs and services.

In 2018, most retail chains upgraded their facilities and expanded their food and beverage offering. As all leading chains are modernising their service stations, the premium and economy segments are slowly converging. The only factors that set one segment apart from the other is the price, availability of premium fuels, and loyalty schemes for customers.
As there were no acquisitions or ownership changes involving the main players on the retail fuel market, the leading chains in the PKN ORLEN Group's operating markets maintained their respective market shares.

Retail chains operated by Polish and foreign fuel companies (PKN ORLEN, LOTOS, BP, Shell) did not undergo any major changes. In 2018, the Canadian company Alimentation Couche-Tard completed the rebranding of the Statoil service station chain and now all the stations now operate under the Circle-K brand. In late 2018, Amic Energy Management began to rebrand the Lukoil chain. The launch of the new brand, Amic, should be completed in the first half of 2019.

On the **Czech market**, the number of fuel stations remained stable in 2018. The structure of the market evolved, however, as some smaller non-public stations (e.g. serving a single company only) became generally accessible. After the Unipetrol Group's Benzina chain completed the integration of OMV service stations and incorporated more stations in 2018 into its chain, it consolidated its leading position on the Czech fuel market in terms of both the number of service stations (an increase of 8 stations year on year) and the volume of fuel sales (up by 12% year on year).

There were no major structural changes on the **German market**. Aral and Shell, the market leaders, maintained their leadership. In 2018, the number of service stations within the individual chains changed slightly year on year, but stayed close to 14 500 the figure reported for the last few years.
In the second half of 2018, the German market experienced significant fuel availability constraints, which had a substantial impact on retail prices and unit margins on fuels. Due to supply shortages, some service stations had to temporarily suspend fuel sales.

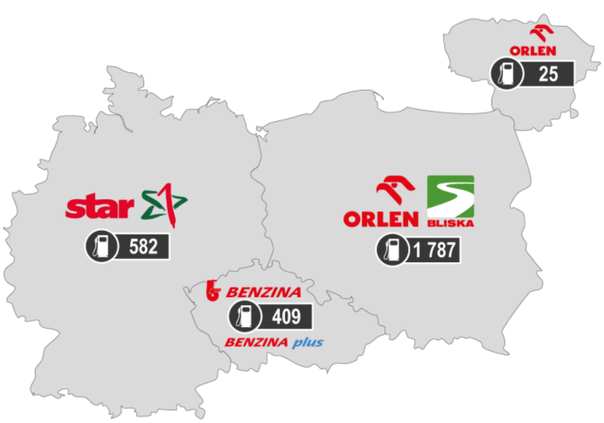
Fuel companies and customers adapted to the retail price monitoring system introduced several years ago, which completely transformed each chain's retail price management system.

The Lithuanian market saw the continuation of the process to rebrand Lukoil service stations to Viada. The rebranding of Statoil to Circle-K (the third largest chain in terms of the number of stations and leader in terms of the average fuel flow per station) was completed. The process also involved thorough upgrades of the key locations to expand and modernise their retail stores and food services. The increase in fuel consumption was mainly attributable to a lower excise duty in Lithuania relative to the other Baltic States.

3.2.2.2. Market position and environment

The ORLEN Group is the undisputed leader in retail fuel sales in Central Europe. 2018 was the first year in which the total number of service stations operated by the Group exceeded 2 800.

SCHEME 6. The number of the ORLEN Group stations on the markets the Group operates on at the end of 2018.

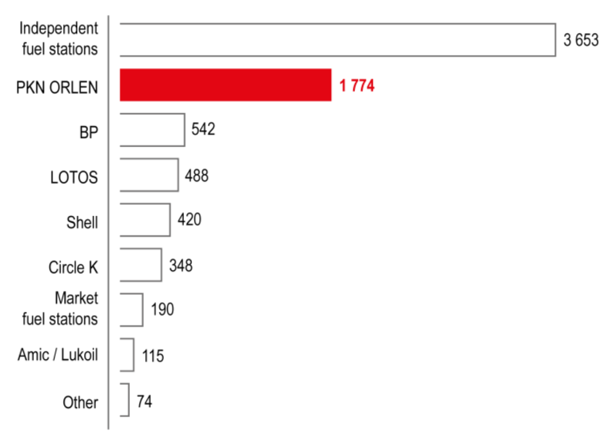


Source: Own preparation.

In Poland, our service stations operate under the ORLEN brand in the premium segment and under the Bliska brand in the economy segment (representing only 3% of the total number of stations included in the chain). In the Czech Republic, the brands are Benzina and Benzina Plus (mainly the premium segment), and in Lithuania − ORLEN (premium segment). On the German market, ORLEN Deutschland operates economy stations under the STAR brand and the network is complemented by more than a dozen of Famila supermarket stations.

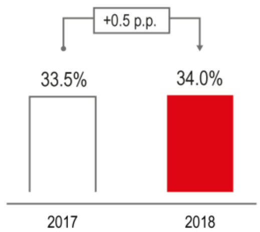
Polish market
According to the Polish Organisation of Oil Industry and Trade (POPiHN), there were more than 7 600 service stations in Poland at the end of 2018, nearly 1 000 stations more than at the end of 2017. However, the difference follows from a change of methodology: in 2018, service stations operated by independent operators and entered in the ERO register were for the first time included in the calculation. The number of POPIHN members rose by 2%, or approximately 70 service stations, including Total and Avia (more than 30 stations).
As at the end of 2018, the ORLEN Group had a network of 1 787 service stations on the Polish market (approximately 24% of all stations in the country), while the stations operated by international chains (BP, Shell, Circle-K, Lukoil, Total) represent 20% of the total. Independent operator stations (including smaller chains operating under a single brand) accounted for nearly 50% of all service stations in Poland. Moya, Huzar, and Avia are among those chains of independently-operated stations that continue to grow dynamically. The number of supermarket service stations remained unchanged (190 stations, representing around 2.5% of all service stations in Poland). The number of AS 24 and IDS self-service stations, also managed by foreign operators, was 40 and remained virtually the same as in previous years.

DIAGRAM 16. Fuel station network in Poland.



Source: Own preparation on the basis of POPiHN data as at 30 September 2018 (since 2018 fuel stations from registred by URE and identified by POPiHN)

DIAGRAM 17. Share of the ORLEN Group in the retail fuel market in Poland.



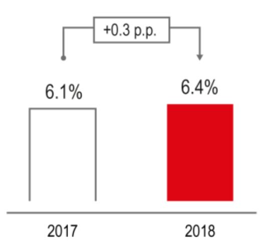
With completion of certain growth projects and successful adaptation of its operations to the changing competitive landscape in Poland, PKN ORLEN was able to increase its share in the Polish market to 34%.

2018 saw continuation of the road network development programme in Poland, which, as in previous years, also had an impact on the operation of the retail fuel market. Following the opening of new expressway and motorway sections, tenders for lease of **Motorway Service Areas (MSA)** were called and new large service stations were opened at these locations. As at the end of 2018, there were 82 MSA service stations at Polish expressways and motorways, including 32 operated by PKN ORLEN. PKN ORLEN is also currently setting up a further eight such facilities.

German market

Since 2003, the ORLEN Group has been present on the German market, which is the largest fuel consumer in Europe. As at the end of 2018, the Star retail chain operated by ORLEN Deutschland GmbH comprised 582 service stations. In 2018, despite a decline of 2.3 pp in the German fuel consumption, strong competitive pressures, and certain macroeconomic headwinds, Star increased its market share to 6.4%.

DIAGRAM 18. Share of the ORLEN Group in the retail fuel market in Germany.

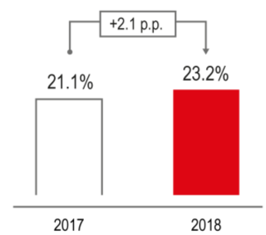


ORLEN Deutschland's main competitors include international networks Aral, Shell, Esso, Total (accounting for a nearly 60% share in the market and 44% of all stations) and economy chains JET and HEM (almost 9% of all stations). In terms of the number of service stations, Star is the eighth largest fuel retailer in Germany (and second to Jet in the economy segment).

Czech market

The ORLEN Group maintained its leading position on the Czech market, both in terms of the volume of sales and the size of the service station chain. In 2018, the Benzina chain comprised 409 stations. The successful incorporation of the acquired OMV stations as well as ongoing investment projects and operating efforts contributed to a continued growth in the market share, which reached 23.2%. Over the last ten years, Benzina's market share has gone up by 10 pp.
In late 2018, PKN ORLEN acquired the rights to the Benzina brand in Slovakia to position itself well for expansion into a new home market in 2019.

DIAGRAM 19. Share of the ORLEN Group in the retail fuel market in Czech Republic.

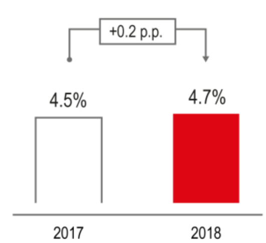


In terms of the number of service stations, Hungary's MOL remained the second largest chain in the Czech Republic (306 stations), with a market share 50% smaller than that claimed by Benzina. In terms of the market share, Tank Ono, a privately-owned discount chain, continued to hold the second place, with 41 service stations and an approximately 16.5% share in the market. Among the leading competitors of the service stations run by Unipetrol are the premium stations of the two multinationals Shell and OMV, with a combined market share of close to 23%. In 2018, EuroOil, the third largest chain in the Czech Republic in terms of the number of retail assets (200 stations), reported a market share of less than 6%, largely due to low average annual flow. The retailer is owned by Cepro, a state-owned operator which, apart from fuel sales, provides fuel transport and storage services, operating a 1 100km long pipeline network and 17 fuel terminals.

Lithuanian market

As at the end of 2018, the ORLEN Group in Lithuania owned 25 fuel stations, managed by AB Ventus-Nafta, a subsidiary. The ORLEN chain increased its market share slightly, to 4.7% and is the 7th largest chain in Lithuania.

DIAGRAM 20. Share of the ORLEN Group in the retail fuel market in Lithuania[1)].



1) In 2017, AB Ventus-Nafta changed the methodology of market shares calculation to unify the method of reporting data from other retail networks. The sales of agrodiesel (which is still sold on the part of fuel stations) was incorporated to the total volume.

In 2018, as in the previous year, Viada continued to lead the Lithuanian retail fuel sales market, with a chain of 124 services stations and a 22% share in the market. Together with associated, the third largest network in Lithuania (Baltic Petroleum), has under its control almost 200 service stations and a 33% share in the market. The another competitor of the ORLEN Group is Circkle-K with 87 stationsand a 19% share in the market. Lithuania is the only market where automatic stations play a important role (73 stations operated by Neste and 12 stations operated under the 1-2-3 brand, part of the Circle-K chain).

3.2.2.3. Sales volume of the retail segment

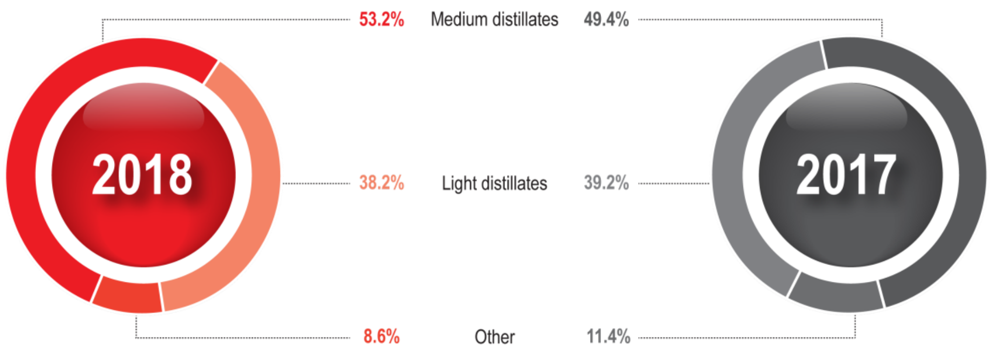
In 2018, the volume of sales in the ORLEN Group's Retail segment increased by 7.1% y/y, to 9 447 thousand tonnes, as a result of improved fuel sales across all markets.

TABLE 9. The ORLEN Group sales in the retail segment [PLN million/thousand tonnes].

Sales	2018		2017		2016		change %	
	Value	Volume	Value	Volume	Value	Volume		
1	2	3	4	5	6	7	8=(2-4)/4	9=(3-5)/5
Light distillates[1)]	14 266.0	3 546.3	13 086.0	3 339.0	11 838.0	3 136.1	9.0%	6.2%
Medium distillates[)]	19 879.0	5 900.2	16 471.0	5 480.0	14 305.0	5 050.5	20.7%	7.7%
Other[3)]	3 194.0	0.0	3 793.0	0.0	3 698.0	0.0	(15.8%)	-
Total	**37 339.0**	**9 446.5**	**33 350.0**	**8 819.0**	**29 841.0**	**8 186.6**	**12.0%**	**7.1%**

1) Gasoline, LPG.
2) Diesel oil; light heating oil sold by ORLEN Deutschland.
3) Other value – includes revenues from sale of non-fuel goods and services.

DIAGRAM 21. Structure of sales revenue of the ORLEN Group in the retail segment.



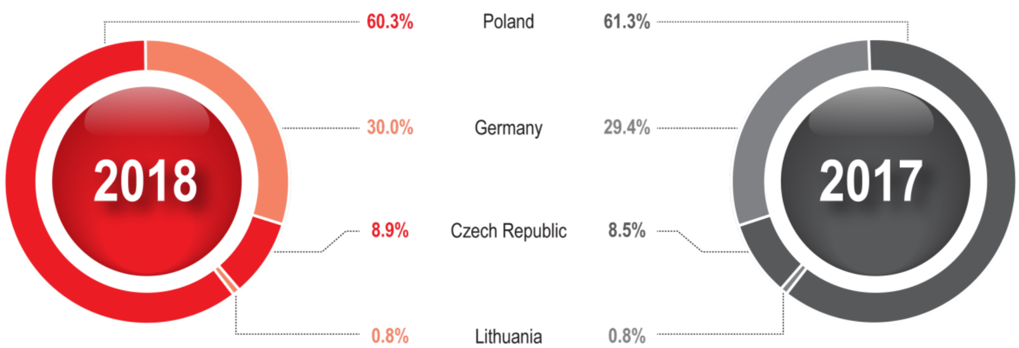
3.2.2.4. Markets

The ORLEN Group's home retail markets include Poland (retail business managed by PKN ORLEN), Germany (retail chain operated by ORLEN Deutschland), the Czech Republic (service stations run by Benzina brand, a member of the Unipetrol Group – a subsidiary of the ORLEN Group), and Lithuania (AB Ventus Nafta, a subsidiary).

TABLE 10. Sales volume of the ORLEN Group in the retail segment on domestic markets [thousands of tonnes].

Sales	2018	2017	2016	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Poland	5 695.7	5 407.1	5 052.4	288.6	5.3%
Germany	2 837.5	2 593.6	2 453.6	243.9	9.4%
Czech Republic	837.4	749.3	617.4	88.1	11.8%
Lithuania	75.9	69.4	63.2	6.5	9.3%
Total	**9 446.5**	**8 819.5**	**8 186.6**	**627.0**	**7.1%**

DIAGRAM 22. Structure of sales volume of the ORLEN Group in the retail segment on domestic markets.



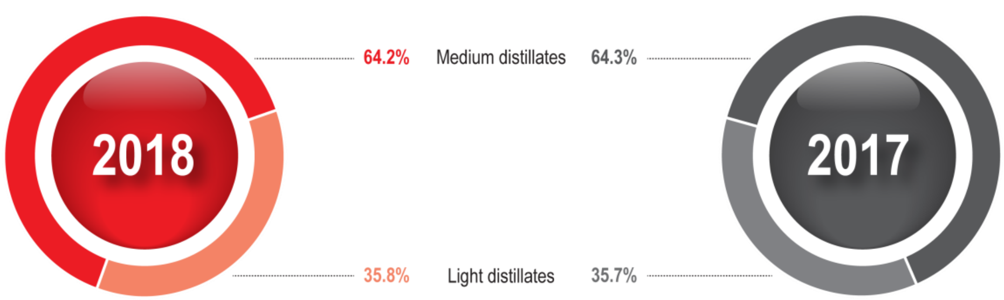
Polish market

In 2018, the volume of retail fuel sales grew by 5.3% year on year, to 5 695.7 thousand tonnes (for the first time on record, ORLEN sold more than 11 billion litres of fuels). A technical upgrade of our stations, expansion of the retail chain to include new outlets with a high potential for sales volume growth, launch of new standard fuels (Efecta Diesel and Efecta 95), and a higher number of service stations with the new store and food format translated into an improved average annual flow per station. The increase reported by CODO stations was 4.9% year on year (4.7 million litres).

TABLE 11. Sales volume of the ORLEN Group in the retail segment on the Polish market [thousands of tonnes].

Sales	2018	2017	2016	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Light distillates	2 038.6	1 931.1	1 809.3	107.5	5.6%
Medium distillates	3 657.1	3 476.0	3 243.1	181.0	5.2%
Total	**5 695.7**	**5 407.1**	**5 052.4**	**288.6**	**5.3%**

DIAGRAM 23. Structure of sales volume of the ORLEN Group in the retail segment on the Polish market.



In 2018, the total number of PKN ORLEN stations increased by 11 locations, to 1 787 at year end,
including 1 342 CODO stations, an increase of 14 locations year on year. As a result of an investment programme, 20 new CODO service stations were added into our retail chain (including two stations in motorway service areas: one on the A4 motorway and one on the S8 expressway). In 2018, six stations were closed down.
As part of our efforts to expand the ORLEN retail chain in Poland, a number of sites were secured for the construction of new service stations in the coming years.
In 2018, more than 70 stations underwent major technical upgrades. The rebranding of the Bliska chain to ORLEN is being finalised. In 2018, the number of both CODO and DOFO Bliska stations was reduced from 76 to 52. In late 2018, certain upgraded service stations were re-opened in Warsaw and Bodzanów under the CPN and Petrochemia brands, respectively.
As at the end of 2018, PKN ORLEN had 445 DOFO stations, a decrease by 3 locations year on year. In 2018, 24 new sites were added to PKN ORLEN's DOFO chain. Franchise agreements were renewed with for more than 200 service stations. The number of the ORLEN Group's DOFO service stations has remained largely flat over the last few years, with their performance steadily improving. In 2018, the DOFO segment's average annual sales were 5.7% higher than a year before.
As part of its work on new retail formats, PKN ORLEN launched the first ORLEN Drive service station at the Michałowice motorway service area (S8 freeway) and the first Stand Alone restaurant format at the Osiecza motorway service area (A2 motorway)
In 2018, PKN ORLEN's fleet sales volumes rose almost 2% year on year, reaching the highest figure on record (more than 2.3bn litres). Sales to microenterprises continued to grow at a fast rate, i.e. by more than 24% year on year.
2018 also saw strong non-fuel sales, with combined store and food sales going up by 13.1% year on year. The project to develop proprietary 'O!' brand products was continued, and the brand was awarded the 'Teraz Polska' badge of quality. In line with our programme to support Polish suppliers and producers, the share of made-in-Poland merchandise in the ORLEN retail offering exceeded 60%, with more than 300 new products added to our portfolio. A campaign to promote Polish and regional products was run across the ORLEN chain. Stop Cafe 2.0, the new food service concept, was rolled out at a further 179 locations, and at the end of 2018 the number of ORLEN stations featuring the new format exceeded 370 (including 18 DOFO stations). In total, PKN ORLEN had 1,667 stations offering food services across all formats (Stop Cafe, Stop Cafe Bistro and Stop Cafe 2.0).
A major portion of non-fuel sales is attributable to car wash services. In 2018, their sales went up by 12.5% year on year. The ORLEN chain recorded a monthly average of close to 900 car wash cycles per service station, a figure higher than the average calculated by POPiHN. In 2018, our service station upgrade programme included the launch of new car washes at 12 locations.
In 2018, several key projects were carried out to optimise and improve the performance of the non-fuel retail business. A system for developing store plans and planograms for individual non-fuel categories was successfully implemented. PKN ORLEN also took a range of measures to improve its customer service. ORLEN Mobile, an application dedicated to mobile payments, was launched to enable customers to pay at the pump. Selected locations began to offer the Mobile Cashier service, where customers can make payments to customer service assistants available at the pumps without having to check out at the station buuilding. The first pilot self-service kiosks were launched, offering customers self-checkout for fuel as well as selected store items and foods. LCDs were deployed in the sales and checkout areas of certain service stations to communicate the non-fuel offering to customers.
In previous years, PKN ORLEN made a decision to launch an emobility project**.** The Company plans to make fast progress in this area. Ultimately, 150 charging stations in urban areas and on main transit routes will be deployed. The first charging points were installed at PKN ORLEN service stations in Płock and Siewierz (on the Katowice-Warsaw route), with a further 50 to be made available by the end of 2019, including at least 20 in the first quarter.
In 2018, ORLEN entered into a partnership with Nextbike Polska, whereby 35 PKN ORLEN service stations launched a bike rental service, with a total of 350 bicycles available.

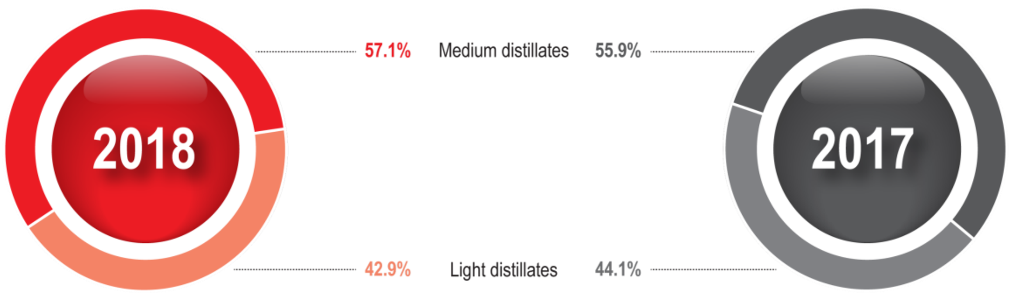
German market

In 2018, the ORLEN Group recorded a 9.4% year-on-year increase in total fuel sales on the German market. This includes both retail sales at services stations and wholesale of refined petroleum products to third parties. The Star retail chain reported a 2.3% growth in sales year on year despite declining fuel consumption in Germany. The average annual flow per station rose by 2.2%, to 4.7 million litres. ORLEN Deutschland benefited from the fuel supply constraints observed in the second half of 2018, delivering record wholesale performance.

TABLE 12. Sales volume of the ORLEN Group in the retail segment on the German market [thousands of tonnes].

Sales	2018	2017	2016	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Light distillates	1 216.2	1 143.1	1 106.3	73.1	6.4%
Medium distillates	1 621.3	1 450.5	1 347.3	170.8	11.8%
Total	**2 837.5**	**2 593.6**	**2 453.6**	**243.9**	**9.4%**

DIAGRAM 24. Structure of sales volume of the ORLEN Group in the retail segment on the German market.



Year on year, the number of service stations managed by the company rose to 582, with one location added to the network (comprising 564 STAR stations operating in the economy segment, one ORLEN station in Hamburg, and 17 Famila supermarket stations). Almost 85% are CODO stations, with the remaining outlets owned by private individuals (DODO). In 2018, ORLEN Deutschland added four CODO stations to its retail network and acquired five DODO stations. Three service stations were removed from the Star chain following contract expiry. The STAR network operates the largest number of stations offering the automatic car wash service of any retail chain managed by the ORLEN Group (409). Approximately 10% of the equipment is replaced every year. In 2018, automatic car washes were modernised at 41 service stations. In 2017, the company decided to change its store format across the chain. The rollout process was spread over a few years due to the size of the network and the scope of work. In 2018, 56 upgrades were carried out under the StarConnect project. The number of the new format stations in operation as at the end of 2018 was 72, and 295 stations operated in the old Star Cafe format.

The StarConnect investment programme and the launch of further non-fuel products under the STAR proprietary brand translated into a 4.8% year-on-year increase in store revenue. ORLEN Deutschland terminated an over a decade-long partnership with its supplier of non-fuel products. New contracts and new business relationships will enable the company to further improve the performance of its non-fuel business.

An important factor driving sales in 2018 and the following years is the new partnership with one of Europe's largest automotive clubs ADAC, bringing together more than a dozen million members in Germany. STAR is one of the three service station chains in Germany (and the first in the economy segment) working with ADAC. This collaboration has resulted in additional volumes and higher revenue from non-fuel sales generated by new customers (ADAC members).

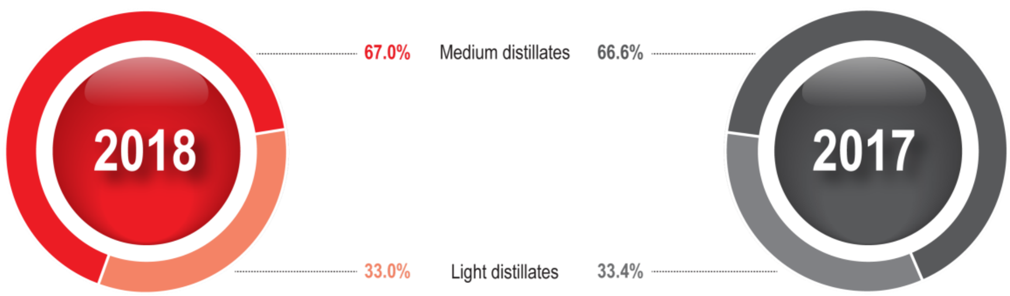
Czech market

2018 was an exceptional year for the ORLEN Group's Czech Benzina network. The ORLEN Group again increased its fuel sales, by 11.9% year on year, having exceeded the one billion mark for the first time in history. In 2018, the volume of fuel sales reported by the Benzina chain increased by 11.8% year on year. Average annual sales per station rose 9% year on year, to over 2.5 million litres.

TABLE 13. Sales volume of the ORLEN Group in the retail segment on the Czech market [thousands of tonnes].

Sales	2018	2017	2016	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Light distillates	276.4	250.2	205.0	26.1	10.4%
Medium distillates	561.0	499.0	412.4	62.0	12.4%
Total	**837.4**	**749.3**	**617.4**	**88.1**	**11.8%**

DIAGRAM 25. Structure of sales volume of the ORLEN Group in the retail segment on the Czech market.



As at December 31st 2018, the ORLEN Group managed a chain of 409 service stations in the Czech Republic (including 396 CODO stations and 13 DOFO stations). The retail stations in the Czech Republic operated under the Benzina brand (191 stations under the new revamped brand, 205 stations under the old and simplified brand, 5 self-service Benzina Expres stations, and one in the old Benzina Plus premium format). There is also one ORLEN service station operating on the Czech market, complementing the network of six non-public stations located at business premises and manufacturing plants. During the year, 8 new service stations were added to the chain and 4 stations (including two DOFOs) were removed.
As part of the Benzina brand revamping programme, the rebranding of 90 Benzina Plus service stations was completed. Price pylons were replaced with new ones across the entire chain – the new pylons are equipped with digital systems able to display various marketing and information messages. As part of the upgrade work, 25 service stations had automatic car washes replaced.

2018 was a successful year for the Benzina fleet business as well. Fleet volumes surged 34% year on year, driven by the steadily growing number of stations, new programmes and business arrangements with fleet customers, and the rollout of the prepaid fleet card programme for retail customers. Fleet sales accounted for over 25% of total volumes sold at Benzina stations.
The Czech subsidiary continued to roll out the new bistro format Stop Cafe 2.0, with 71 new outlets of this type opened in the Czech Republic in 2018 (a total of 100 stations as at December 31st 2018). Besides Stop Cafe 2.0, 143 Stop Cafe and 27 Stop Cafe Bistro outlets operated at Benzina stations. Out of the 409 stations, more than half had one of these formats.
A major development on the retail fuel market in the Czech Republic was the launch of mobile payments at Benzina stations that followed the successful completion of development work on a proprietary app. The app will ultimately be rolled out for use by fleet customers to enable participation in a new loyalty scheme that is being prepared for launch.
Thanks to an extensive investment programme and a host of replacement projects, the Benzina chain delivered improved non-fuel performance, with store sales up 19% year on year.

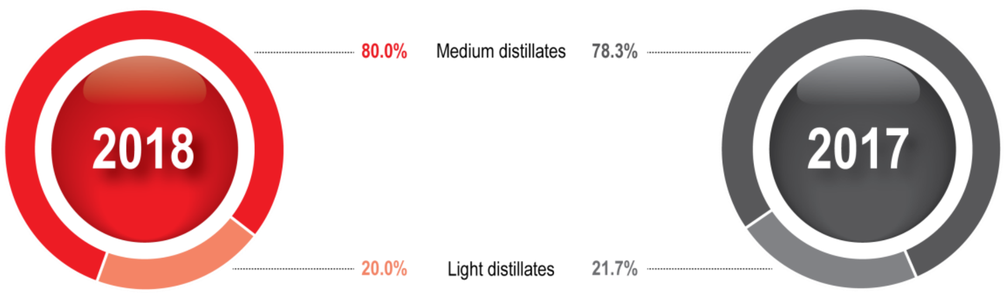
Lithuanian market

AB Ventus Nafta, a member of the ORLEN Group, posted a 9.3% year-on-year growth in fuel sales in Lithuania in 2018. Sales of light distillates remained broadly flat on 2017, with a strong 10.7% year-on-year increase in diesel oil sales. This increase was largely attributable to stronger demand from transport companies (including those from other Baltic States where fuels are much more expensive due to higher tax rates) and ongoing marketing efforts targeted at retail customers.
As a result, the average annual flow per station rose 9% year on year, to 3.8 million litres. Significantly higher consumption of diesel oil in Lithuania translated into a 17% year-on-year increase in fleet sales volumes, which accounted for as much as 46% of total sales.

TABLE 14. Sales volume of the ORLEN Group in the retail segment on the Lithuanian market [thousands of tonnes].

Sales	2018	2017	2016	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Light distillates	15.2	15.1	15.5	0.1	0.4%
Medium distillates	60.8	54.4	47.7	6.4	11.8%
Total	**75.9**	**69.4**	**63.2**	**6.5**	**9.3%**

DIAGRAM 26. Structure of sales volume of the ORLEN Group in the retail segment on the Lithuanian market.



The number of stations remained unchanged year on year. As at the end of 2018, the chain comprised 25 COCO premium service stations operating under the ORLEN brand (approximately 4% of all service stations in Lithuania). 2018 saw the end of preparatory work for an ambitious programme to upgrade the ORLEN service station chain in Lithuania. The programme is planned to be launched in 2019.

In 2018, in an effort to further expand its fleet business, Ventus signed a cooperation agreement with one of the leading Latvian chains (Virsi-A) under which Latvian transport companies will be able to use products and services offered by PKN ORLEN in Lithuania.
Increased volumes at the Lithuanian chain managed by the ORLEN Group also translated into a 14% year-on-year increase in revenue from non-fuel sales.

3.2.2.5. Supply sources

Refinery assets sold by the ORLEN Group's were in 2018 the main source of fuel supply on the Polish, Czech and Lithuanian markets. The ORLEN Group has no refining assets on German market. Unlike other maternity markets, ORLEN Deutchland subsidiary is forced to cooperate with entities operating on the German wholesale market, among others with Deutsche BP AG, Shell Deutschland Oil GmbH, Total Deutschland GmbH, Esso Deutschland GmbH. A significant part of fuels sold by ORLEN Deutschland comes from Litvinov Refinery (Unipetrol RPA s.r.o.), which is a part of ORLEN Group. Deliveries from the Czech Republic in 2018 increased by 10 pp year on year and met 20% of fuel demand in ORLEN Deutschland.

3.2.3. Upstream segment

Daniel Obajtek, President of the Management Board, Chief Executive Officer:
"Our updated Upstream strategy is based around a prudent continuation scenario with a focus placed on quality assets and the most profitable/promising projects in Poland and Canada. We will respond flexibly to any new developments taking place in the oil and gas market and adjust the segment's capital expenditure to the prevailing macro factors. We expect to achieve positive cash flows starting from 2021."

2018

OUTPUT AND PRODUCTION

	units	Canada	Poland
Oil and natural gas reserves (2P)	million boe	197.6	13.0
Output	million boe/year	6.2	0.4
Average production	thousand boe/day	17.0	1.0
Output structure (liquid/gas)	%	47/53	-/100
Drillings (net)[1]	number	16.4	3.0
Licences	number	-	22

1) the number corrected with the share of other partners.

3.2.3.1. Market trends

In the New Policies Scenario (baseline scenario) presented in the International Energy Agency's World Energy Outlook 2018, until 2040 the global primary energy demand will grow for all main fuels: crude oil, coal, gas, nuclear energy, and renewables. In line with the baseline scenario, renewable energy sources and gas will account for the major part of the growth in primary energy demand. All renewable energy sources and gas will cover 43% and 35%, respectively, of the increase in primary demand until 2040.

The primary energy demand will grow by more than a quarter, driven by higher incomes and the expected 1.7bn increase in the global population, which will occur mainly in urban areas of developing countries. Until 2000, Europe and North America accounted for more than 40% of global demand for primary energy, while developing Asian countries represented merely 20% of the total. This situation will have reversed by 2040.

Asia is set to deliver over 80% of the growth in global oil consumption until 2040, half of the global gas consumption increase, 60% of the increase in wind and solar energy consumption, and more than 100% of the increase in coal and and nuclear energy consumption (taking into account declines in other countries).

By 2025, the US will account for over 50% of the increase in global oil and gas production (close to 75% in the case of oil and 40% in the case of gas), which means that every fifth barrel of oil and every fourth cubic metre of natural gas available on the global market will be produced in the US.

TABLE 15. Global demand for primary energy by fuel type [million toe[1]].

Source	2000	2017	New Policies 2025	New Policies 2040
Coal	2 308	3 750	3 768	3 809
Oil	3 665	4 435	4 754	4 894
Gas	2 071	3 107	3 539	4 436
Nuclear	675	688	805	971
Hydro	225	353	415	531
Bioenergy	377	727	924	1 260
Other renewables	60	254	517	1 223
Solid biomass	646	658	666	591
Total	**10 027**	**13 972**	**15 388**	**17 715**

1) toe – ton of oil equivalent
Source: IEA.

Crude oil, despite a lower share in the energy mix (down from 32% in 2017 to 28% in 2040) will play a key role in the energy sector. Consumption of oil used to power vehicles will peak during the mid-2020s. However, demand for oil from the petrochemical sector, trucks, airplanes and ships will continue on an upward trend. Petrochemical products will be the main driver of growth in crude oil consumption. The overall increase in demand for crude oil, to 106 million bbl/d under the New Policies Scenario will only be delivered by developing economies.

In 2030, **natural gas** will replace coal as the second largest component of the global energy mix (with a 25% share in 2040). The industry will be the largest contributor to a 45% increase in the global gas consumption by 2040. LNG trading will more than double in response to growing demand from developing countries, primarily China. Russia will remain the world's largest natural gas exporter as new routes to Asian markets become available.The increasingly integrated European energy market will offer more gas supply options for buyers.

In 2018, the global activity of oil and gas producers measured as the number of operating wells increased by 9% year on year, most notably in the United States. The number of drilling operations decreased in Europe and Canada, where producers were struggling with the relatively low prices of liquid hydrocarbons and a large differential relative to prices on the US market. However, the programme implemented by the government of Alberta, designed to reduce crude oil production in that province, boosted prices on the internal market and offset the unfavourable differential relative to the US crude benchmarks.

The U.S. Energy Information Administration anticipates that the US will become a net exporter of oil in 2020. US net gas exports continue growing as LNG consolidates its position in international trade.

3.2.3.2. Position and competitive environment

In line with the Strategy, the ORLEN Group intends to continue its exploration and production efforts to increase output and secure a wider access to own resources of crude oil and natural gas.

Competence building in the E&P segment required efforts to assemble an international team of experts, capable of building and managing a diversified asset portfolio, and using state-of-the-technology exploration and production methods.

In Poland, the ORLEN Group works independently or with a partner (PGNiG S.A.) in 22 exploration and appraisal licence areas, covering more than 14 000 km^2 and spread over six provinces, with 2P reserves of 13.0 mboe. The ORLEN Group holds 100% interests in 10 licences and 49% interests in other 10 licences. In addition, in partnership with PGNiG S.A., the Group carries out operations under an exploration and production project in two licence areas located in the Polish Lowlands.

In Alberta, Canada, the ORLEN Group is a recognised operator and holds exploration and production assets covering a total area of 312.6 thousand acres (1 300 km2), with total 2P reserves of 197.6 mboe.

3.2.3.3. Operations in Poland

The operations mainly comprised hydrocarbon exploration and production. Currently, in Poland gas is produced in cooperation with PGNiG S.A. The share of production attributable to the ORLEN Group reached the annual average level of 1.0 thousand boe/d. Basic exploration work in Poland was conducted in four oil provinces.

In the **Kraków Oil Province**, work was performed under three Projects. Under the **Karpaty Project**, drilling of an exploration well commenced in the previous year was completed; the well was abandoned as it failed to yield a commercial flow of hydrocarbons. Aquisition of new 3D seismic data were executied. The processing of the data obtained, integration with the archive data and interpretation of the results will be continued next year. Results of the well data and seismic surveys performed in the previous years were analysed.

As part of the **Miocen Project**, the Bystrowice-OU1 exploration well was drilled leading to the discovery of a multi-horizontal gas field. Conceptual and administrative work is under way on further drilling and development of the field. Next year, new wells will be drilled and field development will be continued. Acquisition of new seismic data to map other field welles in this area is planned.

Under the **Bieszczady Project**, carried out with associate (PGNiG S.A.) drilling of a well has been started and 2D field seismic surveys were performed; their results will be analysed in 2019. In addition, analysis of seismic data collected from two 3D seismic surveys performed last year was completed.

In the **Poznań Oil Province** work was performed on two Projects implemented under a Joint Operating Agreement with PGNiG. As part of the **Sieraków Project**, documentation and preparatory work was continued to enable development of the discovered crude oil field, preparatory work was in progress for drilling an appraisal well, and an unpromising well was abandoned.

Under the **Płotki Project**, the drilling of four wells, one of which began in 2017, was completed. The drilling of the Chwalęcin-1K well proved an exploration success, gas fieled was discovered. The well yielded strong gas flows and work commenced to prepare a detailed concept for the well's development; the other wells were abandoned. In 2018, seismic data collected from four 3D seismic surveys performed in 2017 were interpreted, and prospects where wells could be drilled were selected. Analysis of archive data and acquired 2D/3D seismic data also continued as did work to develop the fields.

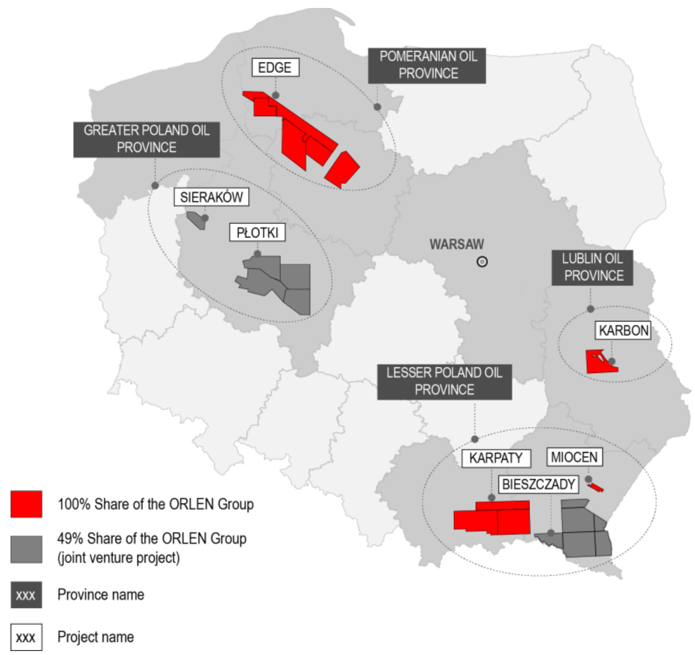
In the **Gdańsk Oil Province**, work was carried out in five licence areas under the **Edge Project**. In 2018, drilling of an exploration well was completed. The well was abandoned as it failed to yield a commercial flow of hydrocarbons. In addition, production tests were carried out on a well drilled last year and the well yielded strong gas flows.Conceptual work on developing the area was underway. A 3D field seismic survey was run for one task and the obtained data will be processed and interpreted next year. In addition, geological data was analysed in 2018 to select new areas where further seismic surveys could be carried out.

As part of the activities performed under the **Karbon Project** in the **Lublin Oil Province**, the prospectivity assessment was performed, following which a decision was made to relinquish three licences.

With regard to the fourth licence area, results of the well data surveys and seismic data is being analysed in order to decide on further steps.

As regards the **Lublin Shale Project**, work was in progress on well decommissioning and land restoration, and the Project is considered completed.

SCHEME 7. Exploration and production projects of the ORLEN Group in Poland.



Source: Own preparation.

3.2.3.4. Operations in Canada

The ORLEN Group, via its subsidiary ORLEN Upstream Canada, conducts production operations in Canada. In 2018, the capital expenditure programme focused on the Ferrier and Kakwa areas in the province of Alberta.

In the **Ferrier** area, drilling of 12 (8.1 net) wells commenced, 12 wells (8.5 net) were fractured, and 14 wells (9.7 net) were brought on stream.

In the **Kakwa** area, drilling of 7 wells (6.3 net) commenced, 6 wells (5.0 net) were fractured, and 8 wells (6.8 net) were brought on stream. Another stage of work was also completed in Kakwa to expand the gas pre-treatment facilities to increase their capacity in keeping with growing production figures. Also, in order to optimise production from gas deposits, ORLEN continued the project to install gas lifts.

In the **Lochend** area, the drilling of two wells (one net) was commenced, fracturing was performed in one well (0.5 net) and one well was brought on stream (0.5 net).

One exploration well (1.0 net) was also drilled in the Blackstone area. Data acquired from the well is currently being analysed to evaluate the prospectivity of the projects in that area.

In 2018, the average output was 17.0 thousand boe/d, of which 47% were liquid hydrocarbons (crude oil and condensate).

Good deposit parameters of the assets and their location in a well-surveyed area minimise the project's operational risks. The Canadian market also offers good access to drilling and well services. Equally important are the stable tax regime and business-friendly regulatory environment.
Seeking to achieve operational synergies and focus on the most profitable areas, ORLEN Upstream Canada is keeping a watchful eye on the local market. In 2018, new sections with hydrocarbons exploration and production rights were acquired and interests held in several attractive locations were consolidated through asset exchange. In addition, an agreement to sell Pouce Coupe assets

was signed to divest areas with a lower business potential. The transaction was closed at the beginning of January 2019.

ORLEN Upstream Canada also holds exploration and production assets in New Brunswick, and a 4.94% interest in an integrated company developing an LNG export terminal in Nova Scotia. To date, the process of securing administrative and legal approvals for the construction project has been completed. A preliminary investment decision for the project is planned for the first half of 2019, after which the process of identifying business partners and project financing sources will be started.

SCHEME 8. Assets in Canada.

Source: Own preparation.

3.2.3.5. Sales volume of the Upstream segment

TABLE 16. The ORLEN Group sales volume in the Upstream segment [thousand tonnes].

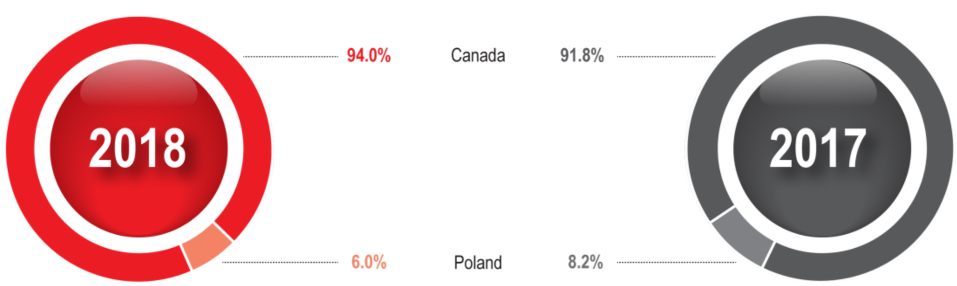
Sales	2018		2017		2016		change %	
	Value	Volume	Value	Volume	Wartość	Value	Volume	
1	2	3	4	5	1	2	3	4
Crude oil	95	77	62	52	84	76	53%	48%
Natural gas	168	456	196	439	172	359	(14%)	4%
Other[1]	342	195	257	147	186	123	33%	33%
Total	**605**	**728**	**515**	**638**	**442**	**558**	**17%**	**14%**

1) Other: in volume terms consists mainly of NGL (Natural Gas Liquids), in value terms includes sale of NGL (Natural Gas Liquids) and revenues from sales of services of the segment.

Production and sale of hydrocarbons in Canada were conducted through ORLEN Upstream Canada Ltd., and in Poland – through FX Energy Poland, a subsidiary.

In 2018, the combined volume of sales on the two markets was 728 thousand tonnes and rose by 14% year on year, mainly on the back of higher hydrocarbon production in Canada.

DIAGRAM 27. Sales volume structure in the Upstream segment of the ORLEN Group.



3.3. RISK MANAGEMENT

3.3.1. Enterprise Risk Management System

In 2018, the organisation and underlying principles of the Enterprise Risk Management System did not change relative to the previous year. Based on its **Enterprise Risk Management Policy and Procedure**, the ORLEN Group monitors and assesses its risk exposures on an ongoing basis and takes steps to minimise their impact.

As required by these regulations, the Financial Control, Risk Management and Compliance Office was established at PKN ORLEN to coordinate the enterprise risk management (ERM) processes across all levels of the organisation. Management boards at each ORLEN Group company are responsible for risk management at individuals companies.

The **Enterprise Risk Management System** is a tool used to support effective delivery of the ORLEN Group's strategic and operational objectives. It ensures identification and assessment of strategic risks and control mechanisms for those risks.

SCHEME 9. Key roles in the Corporate Risk Management System

Management Board PKN ORLEN

- ✓ Monitoring of the Corporate Risk Management System
- ✓ Risk assessment acceptance for the Company / the ORLEN Group

Supervisory Board PKN ORLEN

- ✓ Monitoring of the Corporate Risk Management System

Financial Controlling, Risk Management and Compliance Office

- ✓ Coordination of the process of corporate risk management as well as provision of tools and methodological support for the process participants.

Processes owners

- ✓ Risk assessment on the process level.
- ✓ Coordination of the process of control mechanisms self-assessment.

Risk owners

- ✓ Main risk elements management.

Control owners

- ✓ Supervision over realization of control activities in processes in which they take part.
- ✓ Running self-assessment of control mechanisms.

The ORLEN Group Employees

- ✓ Risk identification.
- ✓ Conveying information about potential risk to the Financial Controlling, Risk Management and Compliance Office.

Risk assessment by business areas at PKN ORLEN S.A. and the ORLEN Group companies is carried out annually as part of a self-assessment process and is meant to ensure that risk valuations are up to date. The assessment falls within the remit of process and risk owners.

Risk valuation involves a **gross risk** assessment, i.e. determination of the value of risk in the absence of any control mechanisms; **net risk** assessment, i.e. value of risk taking into account the effectiveness of the control mechanisms in place; as well as **target risk** assessment (the level of risk acceptable for the respective business area). Risk valuation is based on the verification of effectiveness of control mechanisms. After completion of the risk assessment process and tests of control mechanisms, the Company's Management Board and Supervisory Board receives a report specifying key risks and planned mitigation measures.

Risks at PKN ORLEN S.A. and other ORLEN Group companies are defined based on a common model and are tied to business processes and strategic objectives.

In 2018, as part of an annual risk self-assessment process and risk controls tests at PKN ORLEN, **530** risks were assessed based on tests of **1 039** control mechanisms in **111** business processes. The ORLEN Group companies evaluated **599** risks and **1 882** control mechanisms in **190** processes.

In 2018, the ERM system covered the following entities: PKN ORLEN, Anwil, ORLEN Lietuva Group, Unipetrol Group, ORLEN Deutschland, ORLEN Paliwa, and ORLEN Centrum Usług Korporacyjnych.

Additionally, with a view to reducing potential operational risks and ensuring high safety standards and environmental neutrality of its operations, the ORLEN Group maintains and develops the Integrated Management System ("IMS"), which comprises:
- Quality Management System based on the PN-EN ISO 9001 and AQAP 2110 standards,
- Environmental Management System based on the PN-EN ISO 14001 standard,
- Occupational Health and Safety Management System based on the PN-N-18001 standard,
- Information Security Management System based on the PN-ISO/IEC 27001 standard,
- International Sustainability & Carbon Certification System (ISCC EU), and
- Factory Production Control System (ZKP).

In addition, all PKN ORLEN S.A. CODO service stations apply the HACCP System compliant with Codex Alimentarius standards. All the organisational units which conduct research or tests using methods that require approval by the Office of Technical Inspection (UDT) apply the Quality Management System based on the PN EN ISO/IEC 17025 standard. An Energy Management System based on the requirements of the ISO 50001 standard is being implemented.
The scope and rules governing the operation of the IMS are defined in the Policies and Management Systems Books issued by the Company, defining and describing the individual system processes.
The Group applies a process approach, which consists in identification and mapping of processes taking into account the context in which the entire organisation operates. The process sequence and the relationships between the processess, constituting a multi-layered mechanism that facilitates recognising and meeting customer expectations, have been defined. Individual processes are monitored and the achievement of the processes' objectives is evaluated by checking process metrics and comparing them against adopted benchmarks. This approach allows us to manage and improve processes relying on real, measurable data. In line with a risk-based approach, process owners are responsible for identifying threats (risks) and opportunities that can potentially affect process operation and efficiency. There is in place a process-based system of internal audits, which operates in accordance with a dedicated procedure and checks compliance of operation of individual areas with the adopted standards. The improvement measures we take concern internal and external conditions and identify opportunities available to PKN ORLEN.

The precautionary principle, environmental damage prevention and effective workplace safety and information security management are ensured through standardisation and implementation of systemic mechanisms, which also include preventive measures. The precautionary principle is supported by systemic mechanisms that pre-emptively address potential irregularities and are based on process analysis and elements of risk and opportunity assessment. In accordance with the precautionary principle, business activity involves taking preventive measures, including measures to prevent environmental degradation.
Proper maintenance of the Integrated Management System is verified by external auditors.
In 2018, PKN ORLEN's IMS system was verified by means of:
- IMS recertification audit carried out by Bureau Veritas Polska. The audit confirmed the correctness of system operation and recommendation was given to issue new certificates of compliance of the Integrated Management System with the requirements of the PN-EN ISO 9001:2015, PN-EN ISO 14001:2015, PN-N-18001:2004 and PN-EN ISO/IEC 27001:2014 standards. The audit did not reveal any instances of non-compliance.
- ISCC recertification audit performed by Bureau Veritas Polska. The audit did not reveal any non-compliance and a new certificate of compliance with the Renewable Energy Directive / ISCC EU Certification System was obtained.
- AQAP 2110 recertification audit certified by the Centre for Quality Certification of the Military University of Technology. The audit did not reveal any non-compliance and new certificates of compliance of the Quality Management System with the AQAP 2110 and ISO 9001:2015 standards were obtained.
- Factory Production Control System audit carried out by the Polish Centre for Testing and Certification. The audit did not reveal any non-compliance and validity of certification was maintained.

The external audits revealed no instances of non-compliance, confirmed the correctness of the existing system operation and recommended new certifications.

In 2018, work also continued on harmonising the Management Systems across the ORLEN Group with a view to adjusting the management model to PKN ORLEN's development strategy. All steps taken at the Group with respect to the IMS complied with the concept to optimise the functioning of this area, based on the Management System Guidelines for the ORLEN Group Companies, and with the Management System certification timetable for individual Group companies. IMS integration activities covered the following key members of the ORLEN Group: ORLEN Lietuva Group, UNIPETROL Group, Anwil, Basell ORLEN Polyolefins, ORLEN Laboratorium, ORLEN EKO, ORLEN Asfalt, ORLEN Serwis, ORLEN Upstream, IKS Solino, ORLEN KolTrans, ORLEN Oil, ORLEN Administracja, ORLEN Paliwa, ORLEN Południe, ORLEN Centrum Serwisowe, ORLEN Aviation, ORLEN Centrum Usług Korporacyjnych, and ORLEN Ochrona, and will be continued in the coming years.

In the **Enterprise Risk Model** adopted by the ORLEN Group, all identified risks are classified into the following categories:

I. **STRATEGIC RISKS** – directly related to strategic objectives, specific actions and performance indicators.

II. **PROJECT RISKS** − events or circumstances which, if they materialise, may have an adverse effect on one or more project objectives. These risks are subject to ongoing assessment during project implementation.

III. **PROCESS / OPERATIONAL RISKS** – identified in the ordinary course of business; their identification facilitates effective process management. These risks are assessed by business owners annually in a self-assessment process.

TABLE 17. Risks and processes classification along with control mechanisms within the ERM functioning.

Risks / processes	Risk description	Risk mitigation method
STRATEGIC		
Assumptions	• inconsistent and unrealistic strategic goals and assumptions • change of strategic goals/assumptions during the process	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	• inappropriate division of competences between the organisational units • no decision-making centre	High degree of employee specialization, appropriate assignment of duties and responsibilities by developing precise scopes of tasks.
New regulations	• entry into force of unfavourable legal regulations • no effective action of the public administration in relation to enforcement of the law	Participation in public consultations for legislative drafts reducing the risk of unfavourable regulations.
Accidents at work and other threats	• insufficient knowledge about work safety among contractors • threats to work safety and fire safety related to the presence of third-party employees on the ORLEN Group's premises	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 and potential delays in project realization.
Schedule overrun	• inappropriate assumptions concerning the project completion time	Constant supervision over the performance of the work in progress, systematic evaluation of the progress of implementation of successive stages of the project and enforcement of performance of the work.
Project scope modification	• incomplete performance of the project • exceeding the project framework/scope	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 • no decision-making centre	Preparation and implementation of methodology concerning competency division of project team members in order to 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.
PROCESS / OPERATIONAL		
Procurement		
	• supplying crude oil (by land and by sea) in a quantity and of a quality not corresponding to the requirements • planning supplies of crude oil in such a way as to meet the quality requirements	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		
	• inappropriate planning and management of repairs in the production area	Functional IT system supporting the repair planning process and maintenance at the production plant.
	• Ineffective production balancing	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		
	• environmental pollution as a result of the distribution processes carried out	Periodic checking of levels of fuel products contamination in Oil Terminals.
	• failure to comply with the requirements to physically maintain an appropriate level of mandatory stocks	Systematic monitoring of stock levels.
	• failure of the logistics infrastructure affecting supply of products continuity or risk of their loss	Periodic inspections of the condition of the logistic infrastructure.
Retail		
	• inefficient process of contract conclusion and price negotiations	Pricing policy setting forth the rules of collaboration with contracting parties and implemented systemic mechanisms to prevent irregularities. Checking the correctness of parameters of the contracts with fleet clients before entering them into the system and verifying customers' purchasing potential.
	• failure to apply ethical standards and unfair conduct on the part of employees, fraud on company property and other violations	Checking compliance with the ethical standards in place, as well as observance of the Ethical Code of Conduct; checking for any signs pointing to violations of ethical standards or fraud.
	• failure of the pricing policy to maximize benefits and to develop market potential	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		
	• readiness to react quickly with regard to adjustment of sales plans in the case of changes in the value and production chains	Systematic checking of sales and production plan implementation with the participation of the wholesale area and of the supply chain management office.
	• inefficient process of negotiating terms and of concluding commercial contracts	Negotiation of trading conditions and signing agreements in accordance with the scope of authority granted. Formal process in place for the conclusion of contracts and for the issuing of opinions about them.
	• failure of the pricing policy to maximize benefits and to develop market potential	Price formulas approved by the area responsible for pricing policy development. Additional review by the units responsible for product sale.
Finance [1]		
	• commodity risk – related to changes in margins generated from the sales of products, to the Brent/Ural differential, to prices of crude oil and products as well as of CO_2 emission allowances, and to the risk related to prices of commodities in cash-and-carry arbitrage transactions	Market risk management policy and hedging strategies defining the rules for measuring individual exposure, parameters and time horizon for the hedging against the specific risk, as well as the use of hedging instruments.
	• exchange rate risk – related to the currency exposure of cash inflows and outflows, investments as well as assets and liabilities denominated in foreign currencies	
	• interest rate risk – related to assets and liabilities held, for which the interest revenue and costs depend on variable interest rates	
	• liquidity risk – related to an unexpected shortage of cash or lack of cash or access to sources of financing.	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.
	• 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.	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.
	• credit risk – related to the contracting parties' failure to pay trade receivables	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 [2]		
	• amendments to existing legislation or new regulations significantly influencing the ORLEN Group as well as its financial position and business results.	Monitoring changes in legislation in countries, where the ORLEN Group operates as well as active participation in legislative processes.

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, restricted access to the OS layer and databases as well as to the system hardware, and complex level of password security.
	• inappropriately configured operational planning and supply chain optimization model favouring non-optimal business decisions	Periodic analysis and update of models used for operational planning and daily monitoring of operating plan implementation. Standardization of data layout for corporate planning purposes and precise work scheduling.

1) For detailed description of the financial risks as well as the methods applied to measure, manage and hedge the risks, see section 10.3 of the Consolidated Financial Statements for 2018.
2) The principal legislative acts regulating the oil sector include:

- ***Biofuels*** *– in Poland, delivery of the National Indicative Target is governed by the Act Amending the Act on Biocomponents and Liquid Biofuels and Certain Other Acts of November 24th 2017, which entered into force on January 1st 2018 – the purpose of the amendment is to facilitate the implementation of the National Indicative Target (NIT) by fuel companies and change the structure of its implementation.The regulations essentially remove the quantitative limit on the amount of biocomponents (liquid bio-hydrocarbons, HVO) added to diesel oil, introduce quarterly measurement of the fulfilment of the compulsory blending targets; introduce a mechanism of double counting of 'advanced biocomponents' (mainly derived from waste) in NIT; introduce the possibility of 15% derogation from the NIT in exchange for an emission charge; and lower penalties for failure to meet the NIT. In 2019, NIT was delivered at 5.57% (in terms of the energy value, taking into account the reduction ratio and emission charge of 15%), and will be increased to 8.5% as of 2020. The National Reduction Target (NRT) was also introduced − an obligation to reduce GHG emissions relative to 2010 by 6% by the end of 2020.*
  Delivery of the National Indicative Target in other markets:
  - *The Czech Republic: NIT is achieved by blending biocomponents into gasolines (blending level of 4.1%) and diesel oil (blending level of 6%). Mandatory blending will be accounted for quarterly, and GHG emissions are to be driven down by (–) 6% by the end of 2020.*
  - *Lithuania: mandatory blending of biocomponents into the ES95 gasoline (blending level of 5%) and diesel oil, with the exception of Arctic (blending level of 7%). Consultations are currently under way regarding the probable introduction of mandatory sales of E10 and blending of biocomponents into diesel oil in the winter period starting from 2019, as well as a change in the biofuels obligation (a shift from mandatory addition of biocomponents to each litre of a given type towards a general annual target). Therefore, the final wording and effective dates of those regulations may still change.*
- ***Emergency stocks*** *– producers and traders must pay a substitute fee for gradual reduction in the amount of physical stocks they are required to maintain. Poland: fulfilment of the physical stocks target – from December 31st 2017: 53 days, the substitute fee maintained at its current level (PLN 43/t of oil equivalent and PLN 99/t of LPG). Czech Republic: emergency stocks are maintained by a state agency for 90 days of net imports of crude oil and are financed from the state budget. Lithuania: maintaining stocks equivalent to the higher of 90 days of average daily net imports or 61 days of average daily domestic consumption. The amount equal to at least 30 days of average daily domestic consumption is collected and maintained by the state agency as earmarked stocks, with the balance maintained by businesses.*
- ***Incentives in electricity costs*** *– a notification procedure is under way relating to capacity charge reduction for energy-intensive industrial customers (capacity charge incentive). If approved by the European Commission, this solution will make it possible to allocate the capacity charge to various end user groups, thus reducing capacity market costs at the ORLEN Group. A draft act on promoting electricity generated by high-efficiency co-generation plants provides for incentives in relation to co-generation charges for energy-intensive industrial customers; requires a dedicated notification procedure. A co-generation charge incentive will apply to energy-intensive industrial customers for whom the electricity consumption intensity ratio (GVA) is calculated based on the quantity of electricity taken off the grid and used by them in a given settlement period. Introduction of a quality charge incentive for energy-intensive industrial customers is also planned, taking into account in-house electricity cogeneration. The quality charge is the tariff rate of the Transmission System Operator (TSO), which is passed on to end users through the distribution tariff. Ensuring continued application of incentives with respect to the RES charge and excise duty for energy-intensive industrial customers.*
- ***Power generation support systems.***
  - *Capacity market - securing the interests of industrial energy players in the capacity market.*
  - *The draft act on promoting electricity generated by high-efficiency co-generation plants envisages solutions which significantly limit the application of the support system by industrial co-generation units. They include the requirement to introduce to the grid and sell electricity, as well as the requirement to introduce at least 70% of generated heat to the public heating network. A new solution provides for the introduction of a unit CO2 emissions ratio of less or equal 450 kg/MWh of electricity output, which will exclude from the support system all generation units other than gas-fired ones. The certificate-based support system is to be replaced by a system involving guaranteed bonuses for existing generation units and an auction system for new electricity generators.*
  - *Offshore Wind Power Generation - the new National Energy Policy is to provide for the possible construction of an 8 GW Offshore Wind Farm by 2035. Offshore activities of the transmission system operator and construction of an offshore power grid are being considered. In this scenario, the cost of service lines will be covered by the power system operator. It is assumed that the Offshore Wind Farm would be supported through a dedicated legal act governing the entire investment process from the pre-investment phase until decommissioning, as well as a support system guaranteeing the project's economic viability throughout its life. A scheme regulating the share of local materials and services in the investment process would be an important part of that dedicated legal act. The existing RES support system is based on auctions, with investors placing their bids to sell electricity. Each RES technology has a specific reference price, which is the maximum price for which the bidder may sell electricity generated by a given unit. In 2018, the reference price of electricity generated by offshore wind farms was PLN 450/MWh.*
- ***CO_2 emission allowance system*** *– in April 2018, Directive (EU) 2018/410 of the European Parliament and of the Council, introducing changes to the CO_2 emission allowance trading system (EU ETS 2021-2030), came into effect. The purpose of the amended ETS Directive is to reduce greenhouse gas emissions by at least 40% by 2030 compared to 1990 levels and to meet the obligations under the Paris Agreement. Key assumptions of the new Directive:*
  - *The total emission limit will be reduced by 2.2% annually (Linear Reduction Factor, LRF).*
  - *57% of emission allowances will be sold on auctions, and the remaining 43% will be distributed free of charge. It will be possible to conditionally reduce the auction pool of allowances by 3% (with a corresponding increase in the percentage of free allowances) if the application of a Cross Sectoral Correction Factor (CSFC) is required.*
  - *As of December 31st 2023, a temporary enhancement of the Market Stability Reserve (MSR) is planned by doubling the number of emission allowances to be deducted from the auction pool and transferred to the MSR (24% instead of 12% of unallocated emission allowances in the market). Starting from 2023, any emission allowances in the MSR in excess of the number of allowances auctioned in the previous year are to be cancelled.*
  - *Benchmarks for 2021-2025 will be set by comparing actual data for 2016-2017 with current-period indicators (taking into account their adjustments within the range from 0.2% to 1.6%). In 2026-2030, indicators will be calculated using the same formula on the basis of data from 2021-2022.*
  - *Sectors exposed to the risk of carbon leakage will receive full allocation of emission allowances (100%). For the remaining sectors, the share of free emission allowances will be 30%. As of 2026, the number of emission allowances will be reduced on a straight-line basis to zero by the end of the period unless other decisions are taken and other principles are introduced following a review performed in accordance with, inter alia, the provisions of the Paris Agreement. The only exception is district heating, which is entitled to a 30% free allocation in the entire settlement period.*
  - *Emission allowances issued from January 1st 2013 are valid for an indefinite term. Emission allowances issued from January 1st 2021 will include information specifying their ten-year validity period falling after January 1st 2021, and will be valid as of the first year of the period.*

  Compensation scheme – in mid-2017, the prices of annual futures for 2019 did not exceed EUR 5 per carbon emission allowance. Following the completion of work on the EU ETS reform, the price of emission allowances went up sharply, exceeding EUR 20 in autumn 2018. In Poland, this translates into an exponential increase in electricity costs. Even today, *prices of energy on the Polish wholesale market are already among Europe's highest and among the highest compared to industrialised neighbouring countries. In line with the EU ETS Directive, Polish authorities are entitled to receive funds for those sectors or sub-sectors which are believed to be exposed to a significant risk of carbon leakage due to passing CO_2 emission costs through to power prices in order to compensate for these costs. The draft Act on CO_2 compensation provides for compensation to offset the costs of indirect emissions, with 57% to be allocated to chemical sectors and sub-sectors.*

- ***Regulations on the liquid fuels market and reduction of the grey market:***
  - *The Act Amending the Value-Added Tax Act and Certain Other Acts of July 7th 2016 (the Fuel Package) contains a list of conditions to be fulfilled by the entities seeking a licence to trade in liquid fuels. The purpose is to streamline the liquid fuel market in Poland and guarantee legal production and imports of fuels.*
  - *The Act Amending the Energy Law and Certain Other Acts of July 22nd 2016 (the Energy Package) introduces a number of changes in the Polish liquid fuel market, including new licensing regulations, a register of liquid fuels infrastructure, and extended reporting obligations regarding imports and production of fuels, control powers, etc.*
- ***Monitoring of road and rail freight transport*** *– the Act on a System of Monitoring Road Freight Transport of March 9th 2017. The purpose of the act is to further curtail the grey economy in fuel trade in Poland, and the legislation supplements the solutions introduced as part of the fuel package and the energy package. The act imposes an obligation to register road transport of goods considered to be sensitive and to establish a system for monitoring such transport. Since 2018, the system has been extended to include the transport of sensitive goods by rail.*
- ***Emission charge*** *− the emission charge is to be paid on motor fuels introduced to the domestic market. The obligation to pay the emission charge arises on the date of excise duty liability. Emission charge is calculated based on the quantity of motor fuels on which excise duty is paid. The rate for both motor gasolines and diesel oils is PLN 80 per 1,000 litres. The amount of emission charge is to be reported and paid by the 25th day of the month following the month in which the payment obligation arose or, in the case of importers, by the payment date of customs charges. Emission charge regulations are effective as of January 1st 2019.*
- ***Retail sales tax*** *– the tax is levied exclusively on retail sale to consumers, with the consumer understood as a natural person not engaged in any business activity and a natural person conducting business activity and purchasing goods without connection with that business activity, as well as farmers subject to lump-sum tax within the meaning of the VAT Act. A retail seller is be understood as a natural person (entered in the Central Register and Information on Economic Activity – CEiDG), a legal person (mainly companies operating under commercial law), and an unincorporated organisational unit, including civil-law companies which engage in retail sales in the course of their business. In the definition of retail sale, goods are understood as movables or parts of movables, and provision of services is excluded from the definition. The tax obligation arises when revenue earned in a given month exceeds PLN 17m (VAT exclusive), and tax is levied on the portion of revenue in excess of that amount earned from that moment. Monthly tax rates are as follows: 0.8% of the tax base, if revenue does not exceed PLN 170m (VAT exclusive); 1.4% of the excess over the tax base, if revenue exceeds PLN 170m (VAT exclusive). The Act will not enter into force before December 31st 2019.*
- ***Natural gas market*** *− the Act Amending the Energy Law and Certain Other Acts of November 30th 2016, which introduced a roadmap for the deregulation of gas prices in Poland as of October 2017, and imposed on importers the obligation to maintain emergency stocks of natural gas. The Act introduces the obligation to reserve additional capacity in gas interconnectors only for the purpose of maintaining gas stocks abroad, which increases the costs required to meet that obligation.*
- ***Ban on Sunday Trading*** *– the Act on Restricted Trading on Sundays and Public Holidays and Certain Other Days of January 10th 2018 has been in effect from March 1st 2018 and regulates retail trading. As of January 1st 2019, trading is allowed on last Sunday of each month and on three Sundays before public holidays (15 trading Sundays and 37 non-trading Sundays). As of January 1st 2020, trading will be allowed only on three Sundays before public holidays and on four additional Sundays throughout the year (7 trading Sundays and 45 non-trading Sundays). The Act provides that service stations are not covered by the trading ban.*
- ***Taxation of upstream activities in Poland*** *– tax on production of certain minerals, payable from 2020, calculated individually for each well, at 1.5%–6% of derived revenue, depending on the type of deposits and hydrocarbons. Production royalty, depending on the volume and quality – for natural gas: PLN 5.34–PLN 24.73/1,000 Nm^3; for crude oil: PLN 38.0–PLN 51.5/tonne. Extraction charge – fixed component (determined on a case-by-case basis) and variable component of 50% of the mineral production royalty for the previous year. Special hydrocarbon tax – payable from 2020, at 0%–25% of net cash flows, depending on the ratio of accumulated revenue to accumulated expenses, real property tax of up to 2% of the initial value of property, plant and equipment, CIT at the rate of 19%.*
- ***Taxation of upstream activities in Canada****: royalties – payable on wells spud on or after January 1st 2017. Royalty rate from 5% to 40%, depending on the type of hydrocarbons, market prices, and well output. Exemption on account of incurred costs of drilling and completion – relief in the form of reduced tax liabilities with respect to all new qualifying wells. Royalty of up to 5% on a well's early production until the well's total revenue from all hydrocarbon products equals the drilling and completion cost allowance, CIT at the rate of 27%.*

3.4. SIGNIFICANT AGREEMENTS, TRANSACTIONS AND PROCEEDINGS

3.4.1. Significant agreements

Material agreements announced in current reports

Year 2018

QUARTER 2	
Annex to PKN ORLEN agreement with Saudi Aramco for crude oil deliveries	The Management Board of PKN ORLEN informs that on 27 April 2018 it decided to sign an annex to the agreement concluded on 6 May 2016 ("Annex") with Saudi Aramco, headquartered in Dhahran, Saudi Arabia. According to the Annex concluded on 6 May 2016 Saudi Aramco will supply ORLEN Capital Group refineries crude oil in the amount of approximately 200 thousand tonnes per month and after concerning an annex signed on 27 April 2018 delivery increased to the amount of 300 thousand tonnes per month. PKN ORLEN has the right to decide on the destination for each delivery. Price of crude oil to be delivered will be calculated as per standard market practice. The agreement was signed for the period from 1 May 2018 to 31 December 2018 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 announcements no. 50/2018.
Signing a non-disclosure agreement concerning the intent to start the works and analysis on potential transaction on certain logistic assets of PKN ORLEN S.A.	The Management Board of PKN ORLEN informs that on 11 May 2018 there has been signed a non-disclosure agreement between: PKN ORLEN, PERN S.A. („PERN"), Operator Gazociągów Przesyłowych GAZ-SYSTEM S.A. („GAZ-SYSTEM"), Inowrocławskie Kopalnie Soli SOLINO S.A. („IKS SOLINO") and Kopalnia Soli Lubień Sp. z o.o. („KS Lubień"). The agreement defines the conditions of disclosing information in connection with the intent to cooperate in potential sales transaction of the part of PKN ORLEN logistic assets and shares of IKS SOLINO and KS Lubień held by the Issuer as well as in connection with the intent to set the cooperation on further use of abovementioned assets by PKN ORLEN and companies from ORLEN Group in case of their disposal to the benefit of PERN and GAZ-SYSTEM ("Transaction"). The Issuer informs that the Transaction model, the schedule and detailed rules of its finalization require detailed analysis that will be now prepared. Finalization of the Transaction will be possible, among others, after receiving appropriate corporate approvals and approvals of the appropriate administration authorities, if such approvals will be required. According to the assumptions of the parties of the agreement, the Transaction is aimed at creating a business partnership in transmission and storage infrastructure and in cavern projects that are realized, including energy safety of the State and realization of the "Polish Government Policy on logistic infrastructure in oil and gas sector" targets, described by the Polish Government in the resolution no 182/2017 as of 28 November 2017. The Issuer indicates that the agreement is not a binding commitment to execution of the Transaction. The Issuer will inform about next steps connected with further Transaction process in separate regulatory announcements. Regulatory announcements no. 53/2018.
QUARTER 3	
The consent to change the bond issue programme agreement from 2006 and commencement of works on issue of new series of bonds	PKN ORLEN informs that the Supervisory Board of PKN ORLEN, following its meeting on 24 October 2018 gave consent to change the Agreement for a Bond Issue Programme, signed on 27 November 2006 (with subsequent annexes) by the Company as the issuer and the consortium of banks ("Programme Agreement"), including increase of the programme limit to PLN 4 bn and to incur, by the Company, liabilities resulting from the changed Programme Agreement. The Company plans to start works on conducting the issue of unsecured, bearer bonds, which will be proposed to buy in the manner specified in Art. 33 point 2 of the Law on Bonds dated 15 January 2015 (Journal of Laws, 2018 point 483 with subsequent changes) under the bonds issue programme based on the Programme Agreement. Regulatory announcements no. 103/2018.

Contract with the auditor of financial statements

In accordance with the agreement of 21 March 2017 starting from the 1st quarter of 2017 interim reviews as well as audit of separate financial statements of PKN ORLEN and consolidated financial statements of the Group for particular periods of years 2017 and 2018 are performed by Deloitte Audyt spółka z ograniczoną odpowiedzialnością spółka komandytowa.
On 20 December 2018, the Supervisory Board of PKN ORLEN selected Deloitte Audyt spółka z ograniczoną odpowiedzialnością spółka komandytowa to conduct reviews of mid-year financial statements and audit of separate financial statements of PKN ORLEN and consolidated financial statements of the Group for 2019-2021. Further information concerning the agreement mentioned above are described in section 10.4.7. of the Consolidated Financial Statements for the year 2018.

3.4.2. Other transactions and proceedings

Proceedings in which the companies of the ORLEN Group act as the defendant:

- **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 299 million, translated using the exchange rate as at 31 December 2018 (representing CZK 1,789 million). Unipetrol RPA s.r.o. is one of eight defendants which the claim was brought against. At the request of the I.P.-95 s.r.o proceeding is pending concerning the accession to the claim as plaintiff NESTARMO TRADING LIMITED. The court refused the Company permission to enter to the case. In February 2018, the court dismissed in entirety claim ruling in favour of Unipetrol RPA s.r.o. On 3 April 2018, I.P.-95 s.r.o. appealed against the decision of the court of first instance. On 22 May 2018, the District Court in Ostrava obliged I.P. - 95 s.r.o. to pay the appeal fee. On 11 December 2018, the court of second instance dismissed the appeal of I.P.-95 s.r.o. from the judgment of the District Court in Ostrava. The judgment is binding. Currently I.P. - 95 s.r.o. has the option to file a cassation appeal against the judgment of the court of second instance. According to UNIPETROL RPA s.r.o. the claim is without merit.

- **Claim of Warter Fuels S.A. (before: OBR S.A.) against PKN ORLEN for compensation**

On 5 September 2014, OBR S.A. (currently: Warter Fuels 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 amount of the claim in the lawsuit was estimated by Warter Fuels S.A. in the amount of approximately PLN 83 million. The claim covers the adjudged sum of money from PKN ORLEN for Warter Fuels 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. So far, several hearings took place (last on 28 September 2018), during which witnesses submitted by the parties were heard by the court. The PKN ORLEN attorney submitted a request to suspend the proceedings due to parallel proceedings for determining the right to the disputed patent, the outcome of which will have significance for the resolution in the case of breach. The request was not considered yet. In the opinion of PKN ORLEN the above claims are without merit.

- **Polocktransneft Druzhba claim against AB ORLEN Lietuva**

On 21 September 2017, AB ORLEN Lietuva received from the court a claim brought by the Belarusian company Polocktransneft Druzhba (operator of the Belarus section of the Druzhba pipeline) for payment of compensation for crude oil (so-called 'technological oil') which from 1992 was located in Lithuanian section of the Druzhba pipeline and used by ORLEN Lietuva after operation of this section was stopped in 2006. Polocktransneft Druzhba believes that this oil was its property. The value of the claim is approximately PLN 315 million, translated using the exchange rate as at 31 December 2018 (representing USD 84 million). The claim also includes a request for procedural interest and litigation cost. ORLEN Lietuva responded to the claim. On 15 March 2018 a hearing took place. On 29 March 2018, the court dismissed the plaintiff's claim. Polokotransneft Druzhba appealed against the judgment dismissing the claim. ORLEN Lietuva responded to the appeal. The next date of hearing was set on 20 March 2019. According to ORLEN Lietuva, the above claim is without merit.

Except of described above proceedings, the Group has not identified any other significant contingent liabilities.

Significant transactions in the Group concluded on other than an arm's length basis.

In 2018 and in 2017 there were no related party transactions in the ORLEN Group concluded on other than an arm's length basis. The ORLEN Group companies' transactions and balances of settlements with related parties are presented in the Consolidated Financial Statement for the year 2018 in section 10.4.6.2., while the ORLEN Group companies' transactions with entities related to the State Treasury in section 10.4.6.3.

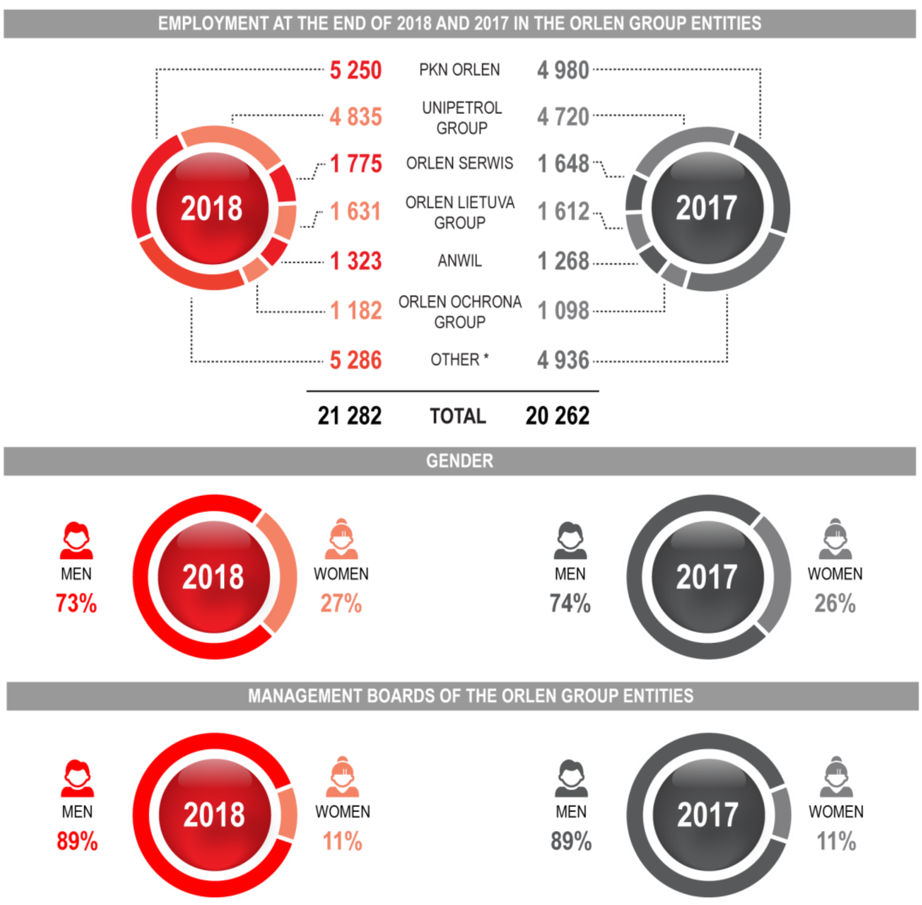
3.5. EMPLOYMENT AND PERSONNEL PROGRAMMES

Daniel Obajtek, CEO and President of the PKN ORLEN Management Board:
"Creation of good and stable employment conditions and investing in the development of our employees are our priorities. In response to the constantly changing market environment, launch of new innovative products and services, and emergence of new business areas, we focus on employee development and implement programmes aimed at enhancing their competencies and broadening their knowledge.
From the social perspective, the negotiations of the Collective Bargaining Agreement have definitely been one of the most important processes in the Company in recent time. I see the changes agreed upon with the trade unions as an investment which should bring positive effects for the Company in a short term.
Ethics in business is the number one principle and core value for our Company, and each project is implemented according to the rules of business ethics. We are consistent in our activities both outside and within the organisation. This is also reflected in our documented practices, processes and procedures. Last year we have made further changes in that area, including the adoption of a new anti-corruption policy. It was not by accident that we were awarded the TOP Employer title for the eighth time. It is a proof that in our HR practices we maintain the highest global standards and set trends."

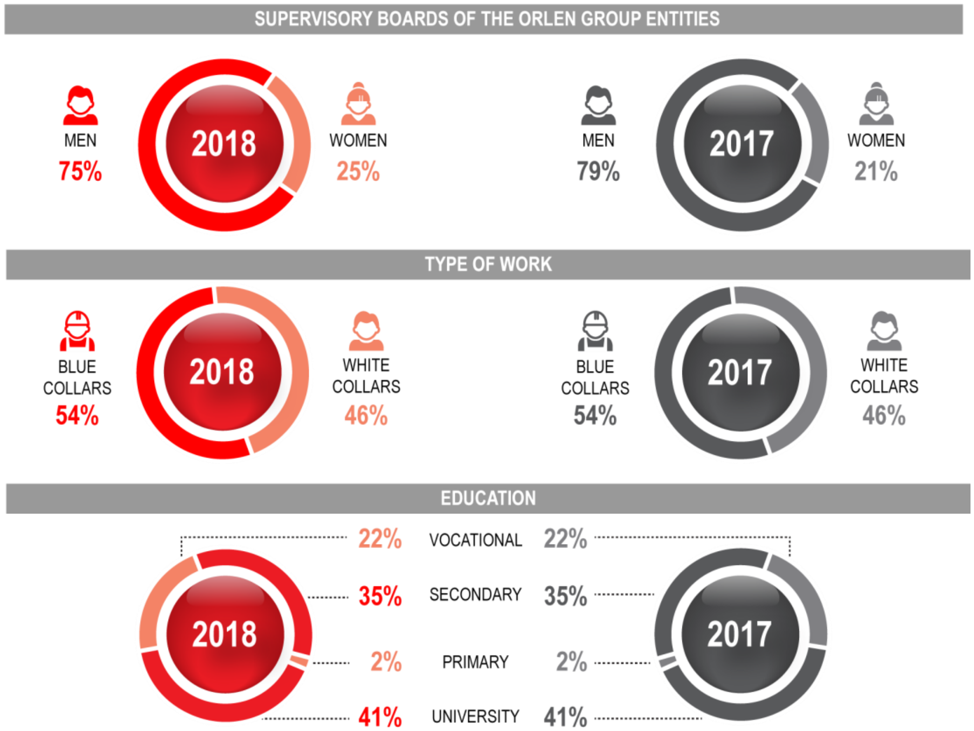
In 2018, the ORLEN Group's hiring policy was focused on recruiting top quality specialists for both day-to-day tasks and strategic projects. Expansion of the ORLEN Group's power generation, petrochemicals, maintenance services, IT and trade activities led to a 1 020 year-on-year increase in total workforce, to 21 282 employees.

In 2018, the average annualised workforce at the ORLEN Group was 20 876, an increase by 872 employees year on year.

DIAGRAM 28. Basic data concerning of the ORLEN Group employment.



* 2018: ORLEN Południe - 672, ORLEN Laboratorium - 640, ORLEN Centrum Usług Korporacyjnych - 482
* 2017: ORLEN Południe - 716, ORLEN Laboratorium - 614, ORLEN Centrum Usług Korporacyjnych - 455



The rules of remuneration in place at PKN ORLEN are laid down in the Collective Labour Agreement. The main components of remuneration are base pay (determined based on the Pay Grade Table and the Base Pay Table) and bonus.
Employees are covered by monthly, quarterly, quarterly/annual or annual bonus systems, depending on positions held. Employees are also entitled to receive an extra annual bonus for achievement of solidarity targets, and a number of allowances, including shift-work allowance, chemical emergency service allowance, or expat allowance. For particularly outstanding achievements, an employee may be awarded a prize, financed from the Employer Prize Fund. In 2018, amendments to the PKN ORLEN Collective Bargaining Agreement were agreed upon with the trade unions, including in the Pay Grade Table and the Base Pay Table. The amendments will take effect on April 1st 2019.
In 2018 and in early 2019, new Collective Bargaining Agreements were signed at ORLEN Południe, ORLEN Lietuva and Anwil, and will take effect in 2019.

In 2018, the average gross monthly remuneration (including base pay, bonuses, awards, lump-sum allowances and overtime) at the ORLEN Group was PLN 7 739.
At the end of 2018, another payroll agreement for 2019 was signed with the trade unions, defining the terms of obligatory and discretionary increases in salaries and additional one-off bonuses.

HR PROGRAMMES

Human resources management policy
People are invariably one of the key pillars of the ORLEN Group's strategy. In 2018, Group companies carried out initiatives arising from the updated ORLEN Group Human Resources Management Policy adopted in 2017. The new Policy reflects the belief emphasised in the Company's strategy, the HR strategy and in the Core Values and Standards of Conduct, which is that the Company's employees are one of its most precious assets, and their unique knowledge, skills and experience are vital for the competitive advantage of the ORLEN Group Companies.
In the updated Policy, priorities and key tasks have been defined based on best market practices. They reflect market challenges and trends in human capital development. The HR Policy defines activities in such areas as reinforcement of the Group's corporate culture, segment-based management, employee development, compensation and employee benefits, or performance management, to name just some.

Education and talent acquisition policy
PKN ORLEN undertakes targeted efforts to meet its talent acquisition and retention needs, considering specific target groups that are important for each segment, dedicated to current employees, prospective employees with specialist and expert knowledge, as well as students and graduates of vocational schools and universities. PKN ORLEN collaborates with the academic community on a regular basis, perceiving the need for synergies

between business and academia. Both PKN ORLEN and ORLEN Group Companies are able to offer a broad range of job opportunities to prospective employees.
PKN ORLEN cares for the professional development of not only its own employees, but also young people − students, university graduates and school leavers, by providing them with an opportunity to gain their first professional experience as interns and on work placement programmes. Every year, dozens of university graduates and school leavers are prepared to work for PKN ORLEN. In 2018, more than 90 persons participated in placements under the 'Headed for ORLEN' programmes and the 'Energy for the Future' programme run in cooperation with the Ministry of Energy. 114 individuals completed student internships, most of them in the production segment, but some also in other business areas.

Aware of the need to build a HR pipeline in professions which are important for the industry, considering in particular the nature of the ORLEN Group companies, in September 2018 PKN ORLEN signed a Declaration of Cooperation with the Mazovia Education Office (Mazowieckie Kuratorium Oświaty). In line with this Declaration, the ORLEN Group Companies can take patronage over school classes which run curricula matching the Companies' business profiles. As a result, students will obtain expert support during practical lessons. Moreover, they will have the opportunity to take part in study visits and internship programmes at the production plant. The ORLEN Group Companies worked with secondary technical schools and technical universities to align their curricula to the workforce and skills needs of the industry, and to help potential future employees develop necessary skillsets while still at school.

Since 2018, PKN ORLEN, ORLEN Laboratorium and the Anwil Group have been actively participating in Industry Seminars, a series of meetings at the Faculty of Chemistry of the Warsaw University of Technology. The Seminars are attended by students from the faculty and leading chemical industry companies. The purpose of the meetings is to equip students with practical knowledge based on actual business cases and to inspire them to choose their development paths with a view to getting a job with a given company.

Furthermore, PKN ORLEN participated in job fairs (Job Fair in Płock, Absolvent Talent Days in Warsaw, Academic Job Fair in Łódź, Job Fair at the Silesian University of Technology and the AGH University of Science and Technology in Kraków, Engineering Job Fair at the Warsaw University of Technology), and supported students and graduates in acquiring professional experience. Additionally, it carried out education and information activities, including: the ORLEN Knowledge Day (a series of meetings held at universities to present PKN ORLEN's business and innovative projects), and the Dignity Day organised by the PKN ORLEN Ethics Officer.

Development and training

The development efforts in 2018 focus on fostering innovation, engaging leadership as well as collaboration and feedback competence, in support of the business strategy objectives. We commenced the implementation of a management skills development programme, focusing on the exchange of best management practices in management by values, feedback standards, improving team performance, building multi-faceted cooperation and team innovation. Training programmes in anti-harassment, labour law, and management and business ethics were delivered. In addition, a programme for development of advanced analytical competence was set up, addressing precisely identified needs of particular business areas.
Among other important projects were competency development programmes dedicated to the Production Area: 'Train the Trainers' – for employees being prepared to deliver in-house training at the Production Area Training Centre for new employees, interns and trainees, and a line manager competence development programme for foremen. Professional advancement options, as in previous years, placed a strong focus on fostering a work safety culture through a variety of educational projects and obligatory training. A post-graduate course on industrial process safety, dedicated to PKN ORLEN, was held for the third time. The ORLEN Safe Driving Academy, aiming to help the participants master safe driving techniques and learn how to react in difficult situations on the road, was continued.
PKN ORLEN offers its employees a wide range of diverse development opportunities to cater to their individual needs. Under in-house programmes, employees had the opportunity to develop their skills in project management, trade and business negotiations, effective communication and cooperation on a team, innovation focused on pragmatic techniques, and other areas. They were also offered an opportunity to participate in specialist (open and closed) training courses, tailor-made for specific areas or individuals, such as advanced IFRS financial reporting, data analysis for analysts (Excel, Access, SQL, statistics, visualisation), management accounting and controlling, Behaviour Based Safety, big data, air protection, Agile PM, organisational knowledge management, E-procurement, Lean Management, process management, as well as professional firefighter training. Employees also took part in postgraduate courses, MBA programmes, coaching and mentoring activities. They were also offered opportunities to broaden and share their knowledge of the market through participation in trade conferences and events. They also continued to learn foreign languages as part of the PKN ORLEN Language Academy and summer English courses.

Development of the HR functions

For many years, the ORLEN Group's HR and payroll solutions have been adapted to effectively support business processes. Based on the HR Policy for the ORLEN Group, HR and payroll processes at the Transaction Center (TC) undergo continuous optimisation. IT systems are developed to streamline staff administration activities and improve the performance of HR processes across the Group. In 2018, a new system was implemented to handle the Companies' bonus processes. Furthermore, an application was deployed at PKN ORLEN to support the adaptation process, which is to be implemented by the ORLEN Group companies as well. Additionally, a cafeteria plan was established, offering even better access to attractive employee benefits. Work is under way to develop a single work time planning and reporting tool for all ORLEN Group Companies, which will help standardise the process across the Group. The continuous development of HR functions combined with process digitalisation support the improvement of HR processes, guaranteeing high quality and transparency.

Social dialogue and employee benefits

The principles of social dialogue at PKN ORLEN are founded on internal regulations and generally applicable laws, which facilitates development of constructive and lasting solutions in partnership with employee representatives. PKN ORLEN offers a uniform employee benefits package to employees of the Company and all ORLEN Group companies participating in the joint social benefits programme. The current package includes: co-financing of holidays or sanatorium treatment, child care, leisure activities for children and youth, school starting kits for children, recreation and sport activities, rehabilitation, cultural and educational activities, or physical therapy treatments; financial support for low-income families, non-repayable aid, repayable housing loans, and purchase of Christmas gifts for children.

Medical care

PKN ORLEN also provides extensive medical care going beyond the scope of occupational medicine. Medical services and a variety of healthcare programmes are offered in cooperation with Centrum Medyczne Medica Sp. z o.o. in Płock and the Military Institute of Medicine of Warsaw. In 2018, preventive medical check-ups at the workplace were carried out under the 'Prevention Close at Hand' project. Similar programmes of medical and preventive care are also operated by other companies of the ORLEN Group.

Family-Friendly Employer

As a company implementing modern-day solutions aimed at keeping the balance between work and family life, PKN ORLEN carries out the 'Family-Friendly Employer' programme, offering such benefits as additional two days off to care for a child under three years old, two days off to care for a disabled child under 24 years old, a nursery school for children of ORLEN Group employees, one additional hour for breastfeeding, medical care during pregnancy, baby feeding rooms, gifts for newborn babies, and providing employees on parental/childcare leaves with up-to-date information on developments across the Group. Many of the components of this programme have also been implemented by other ORLEN Group companies as part of good practice sharing.

3.6. CORPORATE SOCIAL RESPONSIBILITY („CSR")

PKN ORLEN's corporate social responsibility is about creating business value in a sustainable manner that ensures consistency between its business and social objectives, with future generations in mind. This broad approach to responsibility requires the implementation of CSR activities across all business areas, without restricting them to charity or sponsorships. CSR activities additionally involve educating stakeholders and inspiring in them a sense of responsibility, protecting health and safety of employees, commitment to employee development, optimisation of environmental impacts, promoting ethical values, anti-corruption measures, respect for human rights, customer focus and responsiveness to customer needs, and building partnership-based relations with trading partners.

Directions of CSR activities are defined in the CSR strategy, which is consistent with the business strategy. The ORLEN Group has in place a code of ethics entitiled 'Core Values and Standards of Conduct of PKN ORLEN', providing the employees with guidance on how to act ethically and responsibly both inside and outside the organisation. In 2018, PKN ORLEN continued the implementation of the 'PKN ORLEN CSR Strategy for 2015–2017'. Work was also in progress on the 'ORLEN Group CSR Strategy until 2022', a coherent CSR action plan based on a survey of actual needs of all stakeholder groups. The new CSR strategy has became part of the ORLEN Group's updated business strategy, adopted in December 2018. The Strategy's key objectives are to ensure consistency between PKN ORLEN's business and social objectives and build the Company's image as a CSR and sustainable development leader. The Strategy defines new areas of implementation of CSR initiatives, namely Society, Environment, Employees, Customers and Business Partners. An important tool in implementing the CSR strategy is the 'PKN ORLEN Charitable Giving Policy', which lays down the priorities in the Company's charitable engagement and the rules for granting, using and accounting for donations.

The 'PKN ORLEN's CSR Strategy for 2015–2017' pursued in 2018 defines three principal areas of activity: **Organisation, Close Environment and Distant Environment.**

In the first one, **Organisation**, the key goal is to build lasting relations with employees based on diversity, sense of security, development opportunities, and combining social and professional roles.

Implementation of the CSR strategy in the Organisation area

Open meetings on disabilities for ORLEN employees	An information campaign on disabilities at the workplace, building diverse teams and an inclusive work environment. The meetings took place in Warsaw and Płock.
The Health Zone	The health zone was established in Płock, Warsaw and Włocławek in Q4 2018, in cooperation with the PZU Group.
Health 50+ – a preventive healthcare programme for PKN ORLEN employees	The purpose of the programme was to offer a general health assessment, necessary check-ups and preventive consultations to employees over 50 years of age, and refer them to further diagnostics and treatment.
No to cancer in children	The campaign is addressed to the employees' children aged 9 months to 6 years and its purpose is to perform comprehensive health assessments.
The Health First Programme	The programme is implemented together with the ORLEN's Foundation Dar Serca for the inhabitants of Płock, Włocławek and Ostrów Wielkopolski. Its objective is to offer preventive medical check-ups in the framework of the nationwide Health First Programme.
Occupational Safety and Healthcare Day at the ORLEN Group	The programme is carried out on the premises of the Płock production plant, and its key theme is 'Building Safe ORLEN Together'.
The ORLEN Group Management development programme	The programme, based on the Leadership Performance Pipeline (LPP) concept, is run in cooperation with the Gdańsk Foundation for Management Development. The training programme was tailored to the Group's needs, and the ORLEN Group competency model implemented in September 2018 serves as a benchmark for the competencies developed during the workshops. The programme was at first launched for directors reporting directly to the PKN ORLEN's Management Board and representatives of the Management Boards of the Group Companies. As a next step, the activities will be extended to cover other management staff at PKN ORLEN, including production foremen.
The Chemists' Days in 2018	In 2018, the Chemists' Days were held as part of the celebrations commemorating the 100th anniversary of Poland's independence. For two years, the event has been open for the people of Płock. The ORLEN Olympic Games were held during the festivities as well. 2,000 athletes competed in 11 disciplines. All in all, the Chemists' Days attracted a crowd of 30,000.
Employee volunteering projects	In 2018, work was in progress on a new form of volunteer programme, tailored to the needs of employees and allowing the participation of employees from the ORLEN Group companies and external stakeholders, including employees' families. The programme was moved to the ORLEN's Foundation Dar Serca.
Become a Santa Claus Helper – Make Someone's Dreams Come True	As part of the Christmas employee volunteering campaign, Christmas gifts were collected for: The Róża Czacka Centre for Blind Children in Laski, a family in distress from Kotla (a village in Lower Silesia), and for the JASNA GÓRA Polish Diaspora Association in the Transnistrian region.

In **Close Environment,** the second pillar of the CSR Strategy, priority is given to developing social conscience and responsibility in trading partners and customers through sharing best practices and knowledge, and implementing stringent CSR standards. Our activities in this area are centred around building the image of a responsible company, pursuing social outreach projects, promoting CSR concepts among stakeholders, and encouraging their responsibility.

In 2018, in addition to continued projects from previous years, new major nationwide programmes reaching out to local communities were set up. To deliver on our priorities, we tapped on the resources of individual business areas within PKN ORLEN. For instance, service stations were used as venues for events and communication activities promoting our social campaigns. An important role in that area is played by the ORLEN's Foundation Dar Serca, which was established in 2001 to fulfil the social responsibility mission of its founder, PKN ORLEN. To enable the Foundation to expand its long-term, flagship programmes and create new ones, in 2018 PKN ORLEN increased financing for the Foundation's objects laid down in its Articles of Association. Active support was also provided to other foundations, including without limitation: the Grant Fund for Płock Foundation, the Foundation of the Ignacy Łukasiewicz Oil and Gas Industry Museum in Bóbrka, the Polish National Foundation, and the Grow Up with Us Foundation.

Implementation of the CSR strategy in the Close Environment area

Update of the PKN ORLEN S.A. Charitable Giving Policy	The Charitable Giving Policy was updated by indicating broader priorities for the Company's charitable activity. In addition to activities aimed at promoting and supporting activities for life and health and education and youth development, initiatives in the area of development of local communities, environmental protection, promotion of safety as well as sports and culture were also pointed out. The Charitable Giving Policy is an important part of the Company's corporate social responsibility, offering a tool supporting it in its role as a responsible undertaking and employer, member of the local community, and good neighbour.
'My Place on Earth' grant programme	As part of the programme, carried out by the ORLEN's DAR SERCA Foundation, more than PLN 2m was granted to local communities from all over Poland. 293 organisations received from PLN 3,000 to PLN 15,000 to implement projects that will make a difference in their immediate environments. The projects could focus on such areas as sports, safety, education, history, culture, or ecology.
Support programme for Fire Brigades	Under the programme, implemented by the ORLEN's DAR SERCA Foundation, more than PLN 2million was donated in 2018 to 360 volunteer and state fire-fighting units. The goal of this nationwide programme, pursued for many years, is to support fire fighters who every day risk their lives to protect the lives of other people, as well as promote heroic behaviour and values among the public and support the development of local communities.
Loyalty scheme for Volunteer Fire Brigades	The new scheme, intended as a means to support volunteer firefighting units, consists in the provision of fuel discount cards for the VFB fire fighters registered in the National Rescue and Firefighting System.
'Bona Fide' scholarship programme	The scholarship was established to give Poland's most talented students access to the best foreign universities from Shanghai Ranking's top 30. The programme is run by five corporate Foundations established by state-owned companies: the J.K. Steczkowski BGK Foundation, the Energa Foundation, the LOTOS Foundation, the Lotto Foundation, and the ORLEN's DAR SERCA Foundation.
'We keep watch! We remember!' programme	In this programme, the ORLEN's DAR SERCA Foundation allocated funds to restore honour and pay tribute to heroes killed in World War II. The essence of the initiative was to commemorate places that were historically important to local communities, but had been forgotten for many reasons.
'For Eagles' scholarship programme	A programme addressed to children of the employees of PKN ORLEN and the ORLEN Group companies, run by the ORLEN's DAR SERCA Foundation Foundation to support the employees and their families. In 2018, the Foundation granted 113 scholarships to the most gifted children who met several conditions.
'My Above-Average Interests' scholarship programme	The 10th edition of a scholarship programme for children from Płock and the Płock District, run by the ORLEN – GIFT FROM THE HEART Foundation. In the current edition, 124 students with passions will receive monthly grants to pursue their scientific, sports and social objectives.
Free Information System for the inhabitants of the Płock region	A new and innovative tool to communicate with local communities based on new technologies – an IT system used by PKN ORLEN to send text messages and e-mails about safety, the environment, charitable activities, sports and cultural events. In 2018, the system was tested among PKN ORLEN employees.
Loyalty scheme for individual shareholders: ORLEN IN YOUR WALLET	'ORLEN in Your Wallet' is the first long-term programme for retail investors in Poland. Its participants can take advantage of promotional offers for fuel and non-fuel products at the Company's service stations. The programme serves an educational purpose as well. Its objective is to improve the understanding of the capital market among Poles.

In **Distant Environment**, the third pillar of the CSR Strategy, the ORLEN Group aimed to implement its strategy, promote innovation and set the highest industry standards in business ethics and environmental protection.

In 2018, we continued to promote the principles of corporate social responsibility and ethics, we sought to deliver environmental protection solutions to our service station customers, and we were engaged in ensuring a level playing field to the socially excluded, especially to disabled persons.

Implementation of the CSR strategy in the Distant Environment area	
A pilot programme to build electric vehicle charging stations in Poland	In the pilot programme launched in 2018, PKN ORLEN will set up a network of electric vehicle charging stations to enable trouble-free movement of electric cars in Poland.
Partnership for accessibility	PKN ORLEN signed a partnership declaration, committing itself to cooperate under the governmental programme 'Accessibility Plus'. In all aspects of its business, PKN ORLEN is guided by the principle of accessibility and equal treatment, and it seeks to promote equal opportunities both within the company and in the parts of its environment which it can control and create.
Facilities for the disabled at PKN ORLEN service stations	The programme was designed to remove architectural barriers for the disabled, and to implement high standards in this respect at newly built stations.
We Fuel the Future – PKN ORLEN's series of expert publications	For almost ten years, PKN ORLEN has been preparing cross-cutting analytical reports on key issues and challenges of the fuel and energy sector and the economy as a whole. In 2018, the Company published "Pillars of long-term enterprise development. Vision, raw materials and talent." The analysis focused on the role of strategic planning in the long term, sound management of raw materials in the circular economy, and importance of human capital − talent management in organisations.

As part of the broad system of communicating its CSR activity, since 2015 PKN ORLEN has been publishing integrated annual reports, which combine financial statements with CSR reporting, as recommended by the International Integrated Reporting Council. The report also reflects the latest directions in the EU legislation on disclosure of non-financial and diversity information. Pursuant to Art. 49b.2 of the Accounting Act, PKN ORLEN and the ORLEN Group are required to produce a **non-financial report** for 2018. The report is available at http://www.ORLEN.PL.

3.7. ENVIRONMENTAL PROTECTION

Armen Artwich – Member of the Management Board for Corporate Affairs:
"In 2018, we made further efforts to adjust to the requirements of the BAT conclusions for the refining industry. PKN ORLEN and the ORLEN Group companies took formal and legal, investment and organisational measures to the benefit of the environment. The work we had done, including the implementation of the Leak Detection and Repair System (LDAR), allowed us to achieve conformity to the BAT conclusions.
Although LDAR is primarily a legal requirement, it is noteworthy that we were the first to implement the detection system in the refining area, not only at the Płock production plant, but also at the ORLEN Group companies, and it is us who create and set the standards in this respect.
In addition, the ORLEN Group's chemical plants were reviewed for conformity to the LVOC BAT Conclusions."

Reducing the environmental footprint has long been one of the ORLEN Group's top priorities. The projects carried out in 2018 chiefly involved adaptation of plant and process units to new environmental requirements and standards defined in the EU regulations. Those efforts included administrative work to have the terms of the integrated permits for the Group's plants amended, as well as capex projects related to the production plant and equipment.
Key initiatives in 2018 included the implementation of the leak detection and repair system for refinery units (LDAR), upgrade of the existing vapour recovery units at the railway terminal in Płock, installation of a continuous dust extraction system on the catalyst regeneration node at the FKK II unit, installation of flue gas waste heat recovery equipment at the DRW VI unit, installation of new low-emission burners in process furnaces at the Alkylation and HROS units, and construction of a continuous flue gas emission monitoring system across 12 emitters of the Refinery, including the DRW II, DRW III, DRW IV, DRW VI, REF V, REF VI, HRK, WW I, WW II, HOG, FKK II, Claus I and II units.
The investment projects helped reduce VOC emissions from loading and unloading operations, reduce particulate matter and NOx emissions, and cut down on fuel consumption, resulting in lower CO_2 emissions and savings on air emission charges.
A number of environmental protection projects were carried out at service stations and storage depots. The works involved ensuring proper water and wastewater management, upgrading linear drains, separators at service stations and car washes, and reducing air pollution.
Measures to ensure compliance with the BAT Conclusions for refineries were also taken by ORLEN Group companies in the Czech Republic and Lithuania.
In 2018, PKN ORLEN S.A. completed a project to design a tool for calculating the carbon footprint of the organisation and its key products. Determination of the organisation's carbon footprint is voluntary. The tool takes into account direct emissions, energy indirect emissions and other indirect emissions from the use of products placed on the market.

The ORLEN Group held the permits required by law and operated in compliance with their terms in 2018. Integrated permits and sectoral permits need to be updated on an on-going basis in keeping with the evolving legal environment and business needs. In 2018, the permit for greenhouse gas emissions for the Płock production plant was amended to cover the new Metathesis unit. A total of 110 water-law permits were obtained for service stations and fuel terminals.

The compliance of the measures with environmental regulations in 2018 was verified by the Płock and Włocławek Branches of the Provincial Inspectorate of Environmental Protection, which performed six inspections at PKN ORLEN's production units. As the inspections did not reveal any irregularities, the Company did not receive any follow-up recommendations and no sanctions were imposed. A total of 291 inspections were carried out within the regional structures of PKN ORLEN (fuel terminals and service stations, standalone assets) by PGW Wody Polskie, Provincial Inspectorates of Environmental Protection, district and municipal authorities, resulting in 21 follow-up instructions. The recommendations concerned, for instance, the design discharge of wastewater to the environment, wastewater testing for average daily parameters, and in-service maintenance of wastewater treatment facilities. No fines were imposed following the inspections.

In 2018, PKN ORLEN paid the environmental charges arising from the applicable legal regulations on time, and no additional fees were charged as a result of non-timely payments or incorrect calculation of environmental charges. The amount of the charges depends on how and to what extent the environment is used, on the type of substances released, and on the applicable rates, which are set by the Minister of the Environment on a yearly basis. Following the amendment to the Water Law Act made in 2018, water abstraction, discharge of wastewater to water or soil, and discharge of meltwater to water are not subject to environmental charges. Fees for water services, in turn, are paid to the Polish Waters State Water Management Agency.

The following environmental protection systems and certificates are in place:

- Quality Management System (ISO 9001: 2015, AQAP 2110),
- Environmental Management System (ISO 14001:2015),
- Occupational Health and Safety Management System (PN-N-18001),
- Information Security Management System (ISO/IEC 27001),
- Biomass and Biofuel Certification System (ISCC),
- Factory Production Control System (ZKP) – for bitumen production,
- Food Safety Management System (HACCP) based on Codex Alimentarius.
- Certificates of conformity to ISO 9001: 2015, AQAP 2110, ISO 14001:2015, PN-N-18001, ISO/IEC 27001, ISCC and ZKP.
- In addition, an Energy Management System based on the requirements of the ISO 50001 standard is being implemented. Its certification is expected in 2019.

The Integrated Management System in PKN ORLEN was also described in section 3.3.

3.8. OCCUPATIONAL HEALTH AND SAFETY

Protecting the health and safety of staff and stakeholders is a natural and inherent element of the ORLEN Group's business. In practice, it means that the Group makes every effort to prevent hazards, industrial accidents, fire and other unwanted incidents. This approach to safety management follows from the business philosophy adopted by the ORLEN Group: "People are our most valuable asset and must be provided with safe working conditions."

In 2018, the Safety Plus project was continued, involving the implementation of uniform safety standards across the Group's major production companies, covering 15 safety areas of critical importance to the fuel and energy industry. They are the highest possible safety standards, and project completion is scheduled for 2021.

Another tool supporting the implementation of uniform safety standards across the ORLEN Group are internal visits/audits carried out by expert teams. In 2018, eight consulting visits were carried out, as well as nine follow-up visits to review the level of changes made after the consulting visits.

In the process safety area, the provisions of the Process Safety Management System were modified in 2018, based on the provisions of the OSHA 1910.119 standard. The amended regulations were adopted for use starting from the beginning of 2019, enabling the Group to successfully pursue its operational excellence activities through, for instance, ensuring technical safety of its process, storage and auxiliary units.

In an effort to enhance accident-free safety culture at the ORLEN Group, we put a strong focus on building the awareness of safe work procedures and on creating proactive attitudes among our employees and contractors. The year 2018 saw the further implementation of the Employee Support System, which is aimed at improving the personal safety culture, thus mitigating risky behaviour of employees and contractors. The system follows the Behaviour-Based Safety approach preferred by manufacturing companies, which means that safety is based on staff practices. The method aims to reinforce safe behaviours at work and to promote best OHS practice.

Moreover, as part of a wide range of initiatives pursued at the ORLEN Group to foster work safety culture, the Group offers a variety of preventive programmes, incentive systems and competitions for employees and contractors. In 2018, the Group continued some of its best practices, including the 'Report a Safety Hazard' initiative, the OHS incentive programme, and the 'Safety First' project. The Occupational Health and Safety Week was also held across the ORLEN Group. This annual event is dedicated to promoting work safety and healthy lifestyles among the Group's employees and contractors, as well as the customers of PKN ORLEN S.A. service stations.

In 2018, through Centrum Edukacji sp. z o.o., PKN ORLEN S.A. continued its cooperation with the Łódź University of Technology in the delivery of special editions of a postgraduate programme on industrial process safety, in which ORLEN Group employees took part. Furthermore, the Company started cooperating with the Warsaw University of Technology. Employees of PKN ORLEN S.A. give lectures on the study subject 'Technical Safety', sharing hands-on knowledge and expertise with future engineers and prospective employees of the ORLEN Group.

The establishment of Section 2 of the Company Fire Brigade in September 2018 was a remarkable accomplishment in fire safety improvement on the premises of the Płock production plant. It is located close to critical oil processing facilities and enables an even faster response to hazards.
In 2018, as a result of the efforts to monitor work safety and simultaneously support the improvement of personal and process safety across the ORLEN Group, the Total Recordable Rate* (TRR) for employees and contractors was 1.03, and the T1 Process Safety Events Rate* (PSER) reached 0.07.
These values are comparable to or lower than the international industry benchmark.
The method of rate calculation is presented in Glossary of selected industry terms in the last section of this Report.

4. FINANCIAL RESULTS OF THE ORLEN GROUP

Wiesław Protasewicz – Member of the PKN ORLEN Management Board, Finance:

"Last year we proved that we are able to deliver excellent financial performance amid a highly volatile macroeconomic environment. The 32% year-on-year increase in crude oil prices squeezed our refining and petrochemical margins and, in consequence, the impact of macroeconomic parameters reduced our financial results by more than PLN 2.2bn year on year.

Despite the adverse effects of macroeconomic conditions, we generated PLN 8.3bn of LIFO-based EBITDA for the year, before adjustment for the reversal of impairment losses on non-current assets, and EBITDA in excess of PLN 9.8bn. Another record result of the retail segment, at PLN 2.8bn, also deserves a mention.

Last year, we also executed a number of processes of key importance for the ORLEN Group, including the squeeze-out of minority shareholders at Unipetrol, the launch of our far-reaching PLN 8.3bn Petrochemicals Development Programme, and embarking on a process to acquire control of Grupa LOTOS."

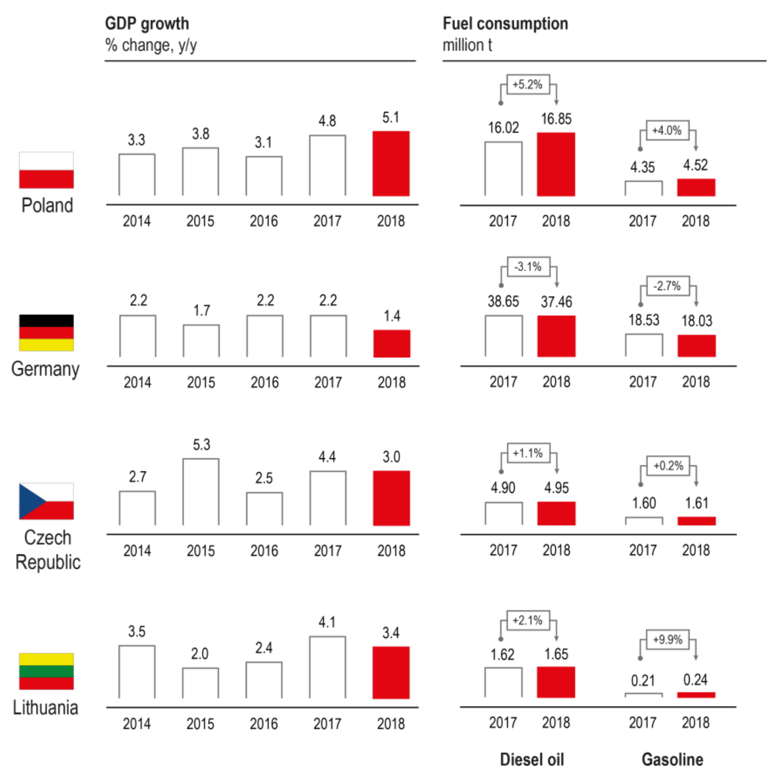
4.1. MACROECONOMIC SITUATION

The ORLEN Group operates within variable macroeconomic environment.

Economic situation on ORLEN Group's operational markets and fuel prices on global markets have significant impact on the level of the fuel and petrochemical products consumption and consequently on their volume and sales prices.

Basic indicator reflecting economic situation is **GDP index,** which determined by consumption, capital expenditures and export, allows to assess level of the economy is. Change of GDP ratio are typically correlated with the changes of **fuel consumption** and unemployment.

DIAGRAM 29 . GDP index and fuel consumption



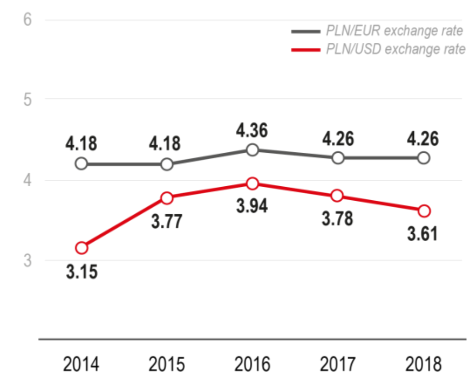
Source: GDP based on EUROSTATand the Central Statistical Office
Consumption – own preparation based on own estimation, databases form Energy Market Agency, the Lithuanian Statistical Office, the Czech Statistical Office and the German Oil Industry Association.

Prices of refined products and petrochemical products offered by the ORLEN Group are determined in most cases on the basis of their quotations on commodity markets denominated in foreign currencies.

The costs associated with the purchase of basic raw material, including crude oil and debt service are also primarily denominated in foreign currencies such as USD or EUR.

Consequently fluctuations in **exchange rates** of these currencies against zloty have a significant impact on the financial results of the ORLEN Group.

DIAGRAM 30. Average exchange rate.



Source: Based on rates of the National Bank of Poland (NBP).

The indicator used for the directional assessment of the impact of macroeconomic factors on the ORLEN Group's results in the **Model Downstream Margin**, reflecting the base structure of the input basket and of the refinery and petrochemical products obtained from the input material, calculated on the basis of market quotations.

DIAGRAM 31. Model Downstream margin [USD/bbl].

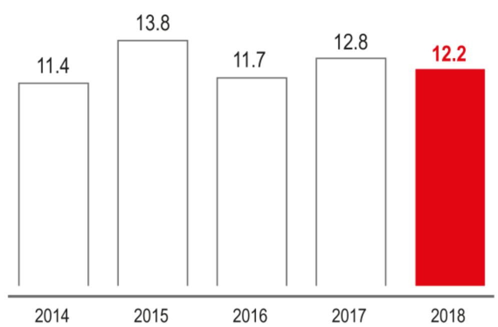


TABLE 18. The Downstream margin product structure – crack margins from quotations for base products.

Product	2018	2017	2016	2015	2014
Refinery products (USD/t)					
Gasoline	138	151	142	177	167
Diesel oil	102	86	71	108	108
Heavy heating oil	(146)	(112)	(125)	(142)	(225)
SN 150	191	295	139	177	161
Petrochemical products (EUR/t)					
Ethylene	641	653	610	602	589
Propylene	532	477	359	488	543
Benzene	261	398	296	278	432
Paraxylene	448	418	431	416	382

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 Glossary of selected financial concepts at the end of this report.

The ORLEN Group operating results are largely dependent on the difference between market prices of petroleum products and crude oil prices, as well as other raw materials needed for their manufacturing – so called „cracks". The purchase costs of raw materials and prices at which the ORLEN Group may ultimately sell refined petroleum products depends on many factors which are beyond its control, including:

- change in the supply / demand for refinery and petrochemical products,
- development of the production capacity of the world refining industry,
- changes in the operating costs associated with technological processes (energy costs, media, modernizations),
- amendments to environmental protection law, and other which might entail significant expenses for the ORLEN Group.

DIAGRAM 32. Model refining margin [USD/bbl].

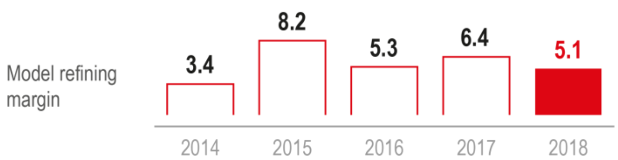
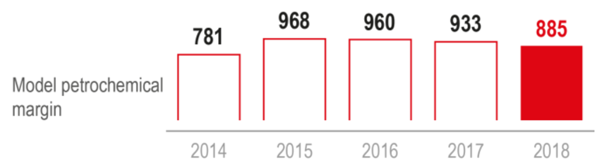


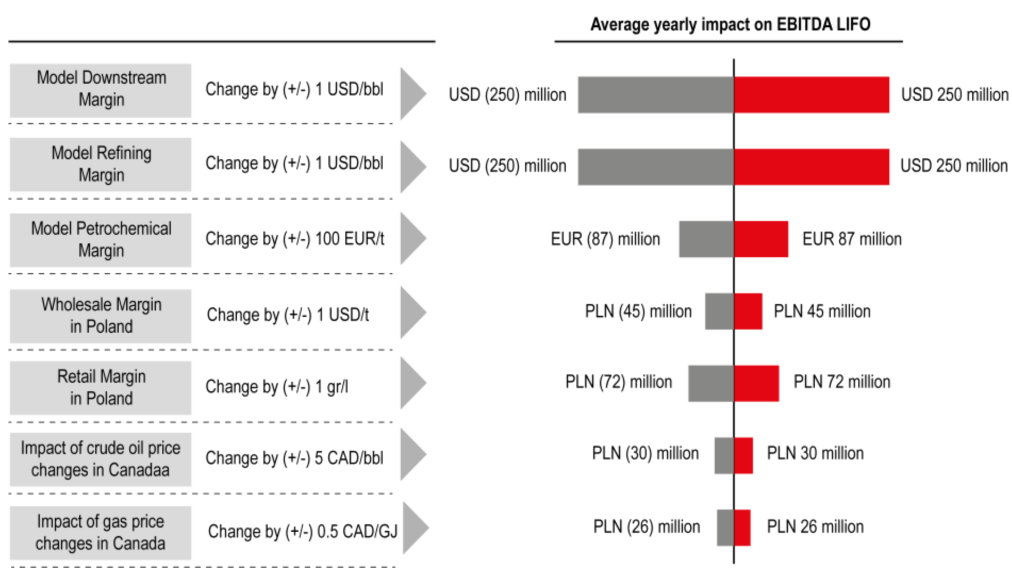
DIAGRAM 33. Model petrochemical margin [EUR/t].



Source: Own preparation based on Platts and ICIS data.

Sensitivity analysis

DIAGRAM 34. Sensitivity analysis of the change in the key macroeconomic parameters[1] [USD/EUR/PLN million].



- Estimates of impact of charges in **the model downstream margin and model refining margin** were performer assuming the average yearly processing capacity of crude oil in the ORLEN Group around **250** million bbl.
- Estimates of impact of changes in **the model petrochemical margin** were performed assuming the average yearly sale of polymers in the ORLEN Group at around **870** thousand tonnes per year[2].
- Estimates of the impact of changes in **wholesales margin** were performer assuming the average yearly volume of sales (gasoline and diesel oil) in Poland approximately **12.5** million tonnes per year.
- Estimates of impact of changes in **retail margin** were performer assuming the average yearly volume of sales of fuel in Poland of approximately **7.2** billion litres per year.
- Estimates of the impact of **changes in hydrocarbon quotations** in Canada were performer assuming the production of hydrocarbons at the level of **6.2** million boe/year.

1) 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.
2) It includes about 540 thousand tonnes of polymers from Unipetrol Group and about 330 thousand tonnes from BOP (50% of BOP's volumes consistent with PKN ORLEN share's in BOP).

4.2. FINANSIAL RESULTS

For information on the policies applied in the preparation of the full-year consolidated financial statements see section 5.2. of the Consolidated Financial Statements for 2018.

4.2.1. Overview of basic economic and financial figures and evaluation of the factors having a significant impact on the financial result achieved.

TABLE 19. Selected data from the consolidated statement of profit or loss and other comprehensive income.

Items, PLN million	2018	2017	2016	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Sales revenues	109 706	95 364	79 553	14 342	15.0%
Cost of sales	(97 265)	(81 766)	(68 223)	(15 499)	19.0%
Gross profit on sales	**12 441**	**13 598**	**11 330**	**(1 157)**	**(8.5%)**
Distribution expenses	(4 745)	(4 327)	(4 125)	(418)	9.7%
Administrative expenses	(1 590)	(1 537)	(1 426)	(53)	3.4%
Other operating income	2 150	1 243	2 163	907	73.0%
Other operating expenses	(1 152)	(568)	(707)	(584)	102.8%
Share in profit from investments accounted for under equity method	127	248	297	(121)	(48.8%)
Profit/(Loss) from operations under LIFO increased by amortisation and depreciation (EBITDA LIFO) before impairment allowances[1)]	**8 324**	**10 448**	**9 412**	**(2 124)**	**(20.3%)**
Profit/(Loss) from operations increased by amortisation and depreciation (EBITDA)	**9 888**	**11 078**	**9 642**	**(1 190)**	**(10.7%)**
Profit/(Loss) from operations (EBIT)	**7 215**	**8 657**	**7 532**	**(1 442)**	**(16.7%)**
Financial income	1 413	1 760	248	(347)	(19.7%)
Financial costs	(1 517)	(1 700)	(893)	183	(10.8%)
Net financial revenues and expenses	**(104)**	**60**	**(645)**	**(164)**	**-**
Profit before tax	**7 110**	**8 717**	**6 887**	**(1 607)**	**(18.4%)**
Income tax	(1 506)	(1 544)	(1 147)	38	(2.5%)
Net profit	**5 604**	**7 173**	**5 740**	**(1 569)**	**(21.9%)**

1) The net allowances for impairment of property, plant & equipment and intangible assets:
- *year 2018 in the amount of PLN 704 million – concerns mainly reversal of allowance for impairment of Unipetrol Group's assets in the downstream segment in the amount of PLN 741 million and allowances created for impairment of assets in the upstream segment in the amount of PLN (18) million.*
- *year 2017 in the amount of PLN (169) million – concerns mainly exploration assets of ORLEN Upstream Group in Poland.*
- *year 2016 in the amount of PLN 145 million – concerned 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 ORLEN Upstream Group in Poland in the amount of PLN (73) million and assets of ORLEN Oil in the amount of PLN (55) million.*

As at 31 December 2018, an impairment indicators were identified in the ORLEN Group in accordance with IAS 36 "Impairment allowances of assets" related to the approval on 20 December 2018 the ORLEN Group Strategy for 2019-2022 ("Strategy") by Management Board and the Supervisory Board of PKN ORLEN. The impairment tests were performed on the basis of assets of the ORLEN Group as at 31 December 2018 and the net cash flows projected in the approved within the Strategy the Mid-term Plan. For description of the methodology of impairment testing and recognition of impairment losses, see section 10.2.5. of the Consolidated Financial Statements for 2018.

For the complete consolidated statement of profit or loss and other comprehensive income, see section 1 of the Consolidated Financial Statements for year 2018.

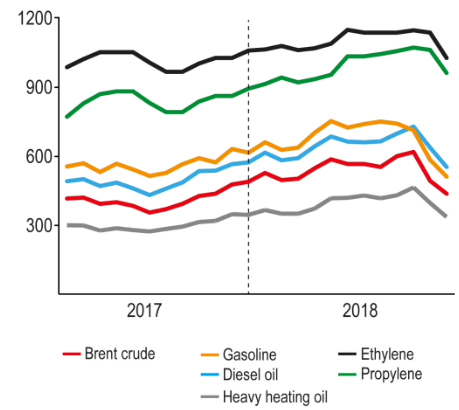
Sales revenue

In 2018, the ORLEN Group generated **revenue** of PLN 109,706 million, an increase of 15.0% on the previous year, reflecting rising volume and prices of the key ORLEN Group's products, affected by the upward trend in prices and of crude oil.

- In the **Downstream segment**, revenue increased by 16.7% year on year, driven by higher (by USD 17.1/bbl) market prices of crude oil and petroleum products. Compared with a year earlier, the segment reported a (0.6)% (y/y) decrease in sales volumes to 32.7 million tonnes, resulted mainly from a number of processing units being shut down in the petrochemical area of the ORLEN Group.
- Revenue of the **Retail segment** increased by 12.0% (y/y), which was chiefly an effect of higher sales volumes of fuels by 7.1% (y/y), non-fuels products and services as well as higher prices of fuels sold at the Company's service stations, driven by upward trend in crude oil prices.
- Revenue generated in the **Upstream segment** increased by 17.5% (y/y), mainly led by higher production of hydrocarbons by 14.1%(y/y).

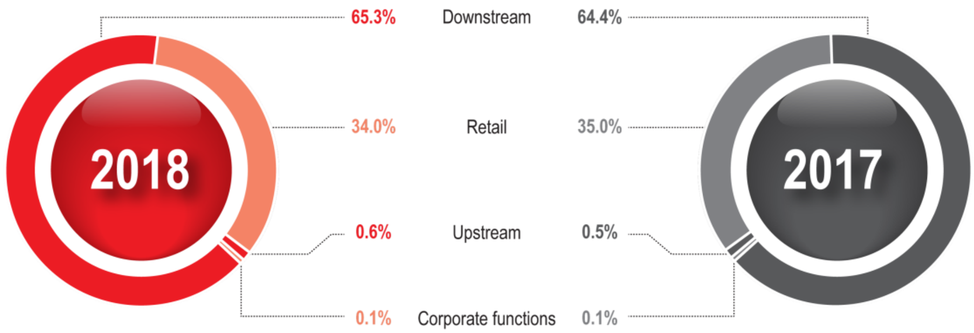
2018 recorded rising prices of the key ORLEN products: gasoline (up 21%), diesel oil (up 29%), heavy fuel oil (up 32%), ethylene (up 8%), and propylene (up 18%).

DIAGRAM 35. Quotation of crude oil and main products of the ORLEN Group



Source: Own preparation based on Platts and ICIS data.

DIAGRAM 36. Revenues from sales of the ORLEN Group by segment.



For description of changes in sales volumes of the operating segments, see section 3.2.

Poland continues to be the ORLEN Group's main market in terms of revenue, with PLN 49 800 million worth of products and services sold, followed by Germany PLN 16 776 million. In the Czech Republic, the Group earned revenue of PLN 14 461 million, and in the Baltic States – PLN 10 995 million.

Operating expenses

TABLE 20. Cost of goods sold in the ORLEN Group.

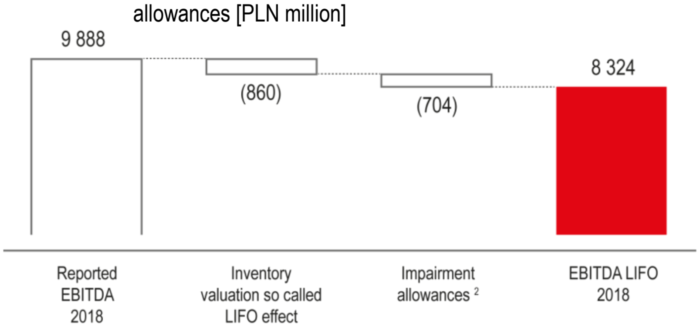
Item, PLN million	2018	2017	2016	structure 2018	structure 2017	structure 2016	change %
1	2	3	4	5	6	7	8=(2-3)/3
Materials and energy	(75 789)	(57 277)	(43 512)	72.7%	64.7%	59.0%	32.3%
Cost of merchandise and raw materials sold	(16 484)	(20 500)	(20 247)	15.8%	23.2%	27.4%	(19.6%)
External services	(4 593)	(4 218)	(4 073)	4.4%	4.8%	5.5%	8.9%
Employee benefits	(2 628)	(2 391)	(2 206)	2.5%	2.7%	3.0%	9.9%
Depreciation and amortisation	(2 673)	(2 421)	(2 110)	2.6%	2.7%	2.9%	10.4%
Taxes and charges	(1 540)	(1 204)	(1 129)	1.5%	1.4%	1.5%	27.9%
Other	(543)	(524)	(529)	0.5%	0.5%	0.7%	3.6%
Cost by nature	**(104 250)**	**(88 535)**	**(73 806)**	**100.0%**	**100.0%**	**100.0%**	**17.8%**
Change in inventories	479	688	(232)				30.4%
Cost of products and services for own use	171	217	264				21.2%
Operating cost	**(103 600)**	**(87 630)**	**(73 774)**				**18.2%**
Selling costs	4 745	4 327	4 125				9.7%
General and administrative costs	1 590	1 537	1 426				3.4%
Cost of goods sold	**(97 265)**	**(81 766)**	**(68 223)**				**19.0%**

Operating expenses increased by PLN (15 970) million (y/y), to PLN (103 600) million. The most important item of operating expenses was raw materials and consumables, mainly crude oil used in technological processes. A 32.3% (y/y) increase in the cost of raw materials and consumables was driven mainly by higher crude oil prices on global markets and increase by 152 thousands in crude oil throughput, to 33.4 million tonnes.
Above factors had an impact on increase by 8.0 pp (y/y) of the share of feedstock and raw material costs in the operating costs structure.
As a result of shorter (y/y) maintenance shutdown of Hydrocracking unit in PKN ORLEN and higher share of sweet crude oils in the crude oil processing structure, higher fuel yields was gained and that resulted in increase of fuel sales from own production and decrease by (7.4) pp (y/y) share of trade stocks purchased on the market.

Distribution costs rose on higher logistics costs as a result of increase in sales volumes of downstream and retail segment and rising costs of commissions paid to service stations operators, driven by high sales volume.
Higher **administrative expenses** attributable to considerable wage pressures from the labour market and an increase in the number of employees (see section 3.5).

Profit from operations under LIFO[1] increased by amortisation and depreciation before impairment allowances.

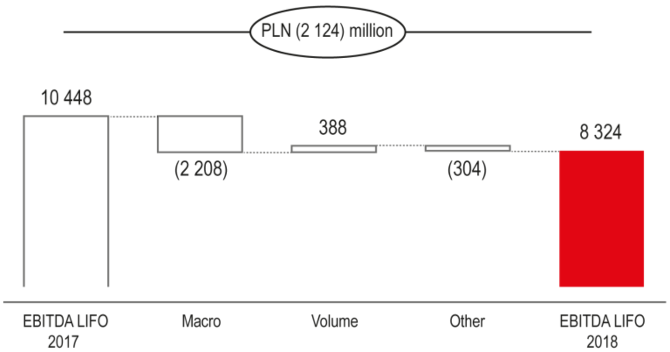
DIAGRAM 37. Reported EBITDA and EBITDA LIFO before impairment allowances [PLN million]



- The ORLEN Group's EBITDA LIFO of PLN 8 324 million in 2018, before impairment of non-curent assets.
- After accounting for the reversal of impairment, the ORLEN Group's EBITDA LIFO in 2018 was PLN 9 028 million.
- The positive impact of changes in oil prices on inventory valuation came in at PLN 860 million.
- As a result the ORLEN Group's EBITDA for 2018 amounted to PLN 9 888 million.

1) The definitions of LIFO method of inventories valuation is presented in Glossary of selected financial and industry concepts.
2) Mainly reversal of allowance for impairment of Unipetrol Group's assets in the downstream segment in the amount of PLN 741 million and allowances created for impairment of assets in the upstream segment in the amount of PLN (18) million.

DIAGRAM 38 Factors affecting change of EBITDA LIFO (y/y)[PLN milion].



The ORLEN Group's EBITDA LIFO before impairment of non-current assets was lower by PLN (2 124) million (y/y).

- Changes in macroeconomic factors lowered the ORLEN Group results by PLN (2 208) million (y/y) and included mainly the negative effect of higher costs of raw materials used for own Energy needs as a result of increase in crude oil process by 17 USD/bbl, decreasing of margins with reference to light distillates and heavy fractions, petrochemical products and fertilizers partly compensated by higher margins on medium distillates, PTA and PVC.
- The favourable market situation, despite the periodic unavailability of production installations, enabled to achieve higher sales volume by over 1% (y/y) and as a result the positive volume effect in the amount of PLN 388 million (y/y).
- The negative impact of other factors amounted to PLN (304) million (y/y) and included mainly:
  - PLN (550) million (y/y) – impact of change in the balance of other operating activities, after eliminating the effect of change of impairment allowances of assets, mainly related to the lower (y/y) compensation from insurers due to the steam cracker unit and FCC in Unipetrol Group in the amount of PLN (389) million (y/y) and lack of received in 2017 compensation for improper execution of the contract of the power plant CCGT in Włocławek in the amount of PLN (97) million
  - PLN 246 million (y/y) – other elements, including mainly the negative impact of net impairment allowances of inventories to net realisable value (so-called net realisable value) in the amount of PLN (318) million (y/y) and positive effects of higher trading margins in retail and wholesale and as well as the use of cheaper stocks of crude oil and products during the period of maintenance shutdowns from the first half of 2018.

Net financial revenues / expenses and net result

In 2018, net financial expenses amounted to PLN (104) million and included mainly surplus of negative net exchange differences of PLN (353) million, net interest expense of PLN (159) million and positive net impact of settlement and valuation of derivatives not designated for hedge accounting purposes within risk related to financing activities exposure, in the amount of PLN 437 million. After tax expense of PLN (1 506) million, the ORLEN Group posted a net profit of PLN 5 604 million, a decrease of PLN (1 569) million (y/y).

For detailed information of financial revenues and expenses (section 10.1.10) and income tax (section 10.1.11) see the Consolidated Financial Statements for year 2018.

Segments' results of the ORLEN Group

DIAGRAM 39. EBITDA LIFO – segments' results [PLN million].

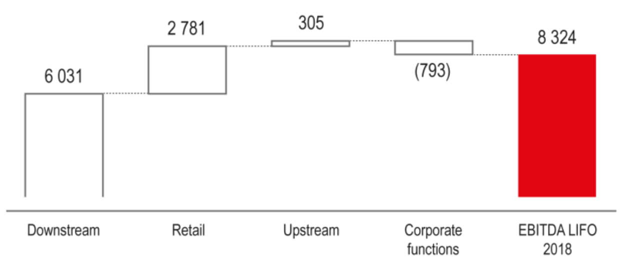
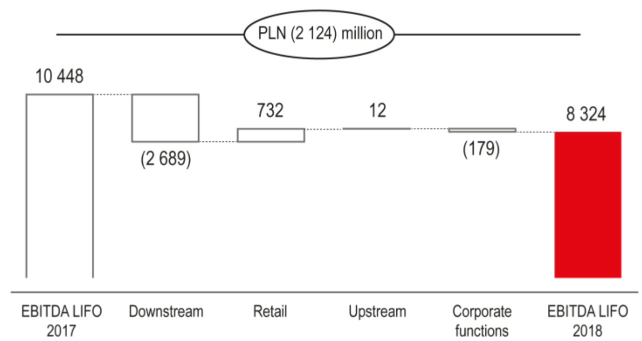


DIAGRAM 40. Change in segments' results [PLN million]



Downstream Segment

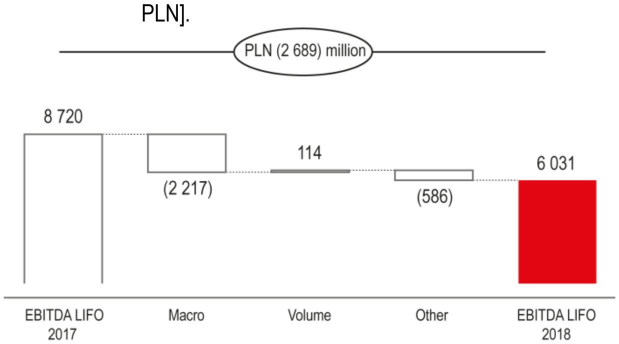
TABLE 21. Basic financial data of the Downstream segment.

Segment Downstream, PLN million	2018	2017	2016	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Segment revenues, including:	89 737	75 241	60 094	14 496	19.3%
Sales revenues from external customers	71 663	61 425	49 202	10 238	16.7%
Sales revenues from transactions with other segments	18 074	13 816	10 892	4 258	30.8%
Segments expenses	(85 204)	(68 410)	(54 939)	(16 794)	24.5%
Other operating income/expenses, net	1 137	854	1 640	283	33.1%
(Loss)/reversal of loss due to impairment of financial instruments	(5)	0	0	(5)	-
Share in profit from investments accounted for under equity method	127	247	298	(120)	(48.6%)
Profit from operations under LIFO increased by depreciation and amortisation (EBITDA LIFO) before impairment allowances1)	**6 031**	**8 720**	**8 107**	**(2 689)**	**(30.8%)**
Profit from operations under LIFO increased by depreciation and amortisation (EBITDA LIFO)	6 723	8 701	8 325	(1 978)	(22.7%)
Profit from operations increased by depreciation and amortisation (EBITDA)	7 583	9 500	8 410	(1 917)	(20.2%)
Profit from operations under LIFO (EBIT LIFO)	**4 932**	**7 133**	**7 008**	**(2 201)**	**(30.9%)**
Profit from operations (EBIT)	5 792	7 932	7 093	(2 140)	(27.0%)
CAPEX	2 451	2 925	3 533	(474)	(16.2%)

1) The net allowances for impairment of property, plant & equipment and intangible assets:

- *year 2018 in the amount of PLN 704 million – related mainly to reversal of allowance for impairment of Unipetrol Group's assets in the downstream segment in the amount of PLN 691 million,*
- *year 2017 in the amount of PLN (19) million – related mainly to allowance created for impairment of assets of ORLEN Asfalt of PLN (8) million of Unipetrol Group of PLN (6) million,*
- *year 2016 in the amount of PLN 218 million - related mainly to reversal of allowance for impairment of Unipetrol Group's refining assets of PLN 316 million and allowance created for impairment of assets of Orlen Oil in the amount of PLN (55) million.*

DIAGRAM 41. Downstream Segment – factors impact (y/y) [million PLN].



The Downstream segment's EBITDA LIFO before impairment of non-current assets was PLN 6 031 million in 2018 and was lower by (2 689) million (y/y).

- Negative impact of macroeconomic factors amounted to PLN (2 217) million and include in particular negative effects of higher raw materials used for own energy needs as a result of higher crude oil prices by USD 17/bbl, decreasing of margins with reference to light distillates and heavy fractions, petrochemical products and fertilizers partly compensated by higher margins on medium distillates, PTA and PVC.
- The continuing favourable condition on fuel market, resulting from the successful measures to curb the grey market, compensated impact of scheduled maintenance shutdowns in petrochemical area and as a result total volume impact amounted to PLN 114 million (y/y).
- The negative impact of other factors amounted to PLN (586) million (y/y) and included mainly:
  - PLN (428) million (y/y) – impact of change in the balance of other operating activities, after eliminating the effect of change of impairment allowances of assets, mainly related to the lower (y/y) compensation from insurers due to the steam cracker unit and FCC in Unipetrol Group in the amount of PLN (389) million (y/y) and lack of received in 2017 compensation for improper execution of the contract of the power plant CCGT in Włocławek in the amount of PLN (97) million.
  - PLN (158) million (y/y) – other elements, including mainly the negative impact of net impairment allowances of inventories to net realisable value in the amount of PLN (318) million (y/y) and positive effects of higher trading margins and as well as the use of cheaper stocks of crude oil and products during the period of maintenance shutdowns from the first half of 2018.

Taking into account reversal of impairment allowances of PLN 692 million, the ORLEN Group's EBITDA LIFO for 2018 was PLN 6 723 million.

The positive effect of changes in crude oil prices on the valuation of inventories was PLN 860 million and resulted in the ORLEN Group's EBITDA to PLN 7 583 million.

The segment's capital expenditure decreased by PLN (474) million (y/y) to PLN 2 451 million – the key capital expenditure projects are described in section 4.4.

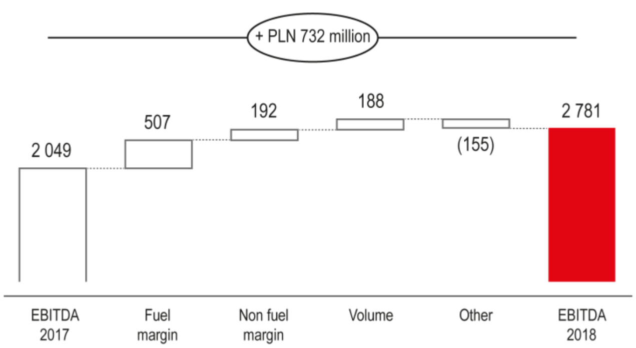
Retail Segment

TABLE 22. Basic financial data for the Retail segment.

SEGMENT DETAL, PLN million	2018	2017	2016	change	change%
1	2	3	4	5=(2-3)	6=(2-3)/3
Segment revenues, including:	37 474	33 630	30 121	3 844	11.4%
Sales revenues from external customers	37 339	33 350	29 841	3 989	12.0%
Sales revenues from transactions with other segments	135	280	280	(145)	(51.8%)
Segment expenses	(35 139)	(31 986)	(28 681)	(3 153)	9.9%
Other operating income/expenses, net	(27)	(28)	(38)	1	3.6%
Profit from operations increased by depreciation and amortisation (EBITDA) before impairment allowances 1)	(2)	0	0	(2)	-
Profit from operations increased by depreciation and amortisation (EBITDA)	**2 781**	**2 049**	**1 801**	**732**	**35.7%**
Profit from operations (EBIT)	2 767	2 038	1 794	729	35.8%
CAPEX	**2 306**	**1 616**	**1 402**	**690**	**42.7%**
Segment revenues, including:	832	678	479	154	22.7%

1) The net allowances for impairment of property, plant & equipment and intangible assets:
- *year 2018 in the amount of PLN (14) million – related mainly to PKN ORLEN S.A. of PLN (15) million,*
- *year 2017 in the amount of PLN (11) million – related mainly to Unipetrol Group of PLN (7) million.*
- *Year 2016 in the amount of PLN (7) million – related mainly to PKN ORLEN S.A. of PLN (6) million*

DIAGRAM 42. Retail segment – factors impact (y/y) [PLN million].



In 2018, the Retail segment's EBITDA before impairment of non-current assets reached record level of PLN 2 781 million and was higher by PLN 732 million (y/y).

- Positive effect of higher fuel and non-fuel margins on all operating markets.
- Higher by 7 % (y/y) sales volume on all markets.
- The impact of the other factors related mainly to increased costs of operations of fuel stations resulting from the higher sales volume.

Taking into account impairment allowances of PLN (14) million, the ORLEN Group's EBITDA for 2018 was PLN 2 767 million.

The segment's capital expenditures increased by PLN 154 million (y/y) to PLN 832 million – the key capital expenditure projects are described in section 4.4

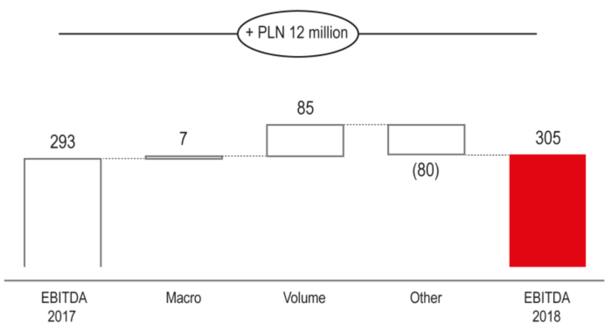
Upstream segment

TABLE 23. Basic financial data for the Upstream segment.

Upstream segment, PLN million	2018	2017	2016	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Segment revenues, including:	605	515	442	90	17.5%
Sales revenues from external customers	605	515	442	90	17.5%
Sales revenues from transactions with other segments	0	0	0	0	-
Segment expenses	(570)	(540)	(537)	(30)	5.6%
Other operating income/expenses, net	(56)	(141)	(23)	85	(60.3%)
(Loss)/reversal of loss due to impairment of financial instruments	0	0	0	0	-
Share in profit from investments accounted for under equity method	0	1	(1)	(1)	-
Profit from operations increased by depreciation and amortisation (EBITDA) before impairment allowances1)	**305**	**293**	**255**	**12**	**4.1%**
Profit/(Loss) from operations increased by depreciation and amortisation (EBITDA)	287	153	182	134	87.6%
(Loss) from operations (EBIT)	**(21)**	**(165)**	**(119)**	**144**	**(87.3%)**
CAPEX	740	778	525	(38)	(4.9%)

1) The net allowances for impairment of property, plant & equipment and intangible assets:
- *year 2018 in the amount PLN (18) million – concerns mainly exploration assets of ORLEN Upstream Group in Poland,*
- *year 2017 in the amount PLN (140) million – concerned mainly exploration assets of ORLEN Upstream Group in Poland,*
- *year 2016 in the amount PLN (73) million – concerned mainly allowance created for impairment of exploration assets of ORLEN Upstream Group in Poland.*

DIAGRAM 43. Upstream segment – factors impact (y/y) [PLN milion].



The Upstream segment's EBITDA before impairment of non-current assets was PLN 305 million in 2018 and was higher by PLN 12 million PLN (y/y).

- Positive impact of increase in CLS crude oil and NGL condensate prices at lower AECO gas quotations.
- Positive impact of higher by 14 % (y/y) hydrocarbons production mainly on Canadian market by 16.7 (y/y).
- Other factors included mainly the negative effect of net other income/(expenses) after eliminating the impact of impairment allowance of PLN (38) million (y/y) resulting mainly from settlement and valuation of derivative financial instruments.

Taking into account impairment allowances of PLN (18) milion, the ORLEN Group's EBITDA for 2018 was PLN 287 million.

The segment's capital expenditure decreased by PLN (38) million (y/y) , to PLN 740 million – the key expenditure projects are described in section 4.4.

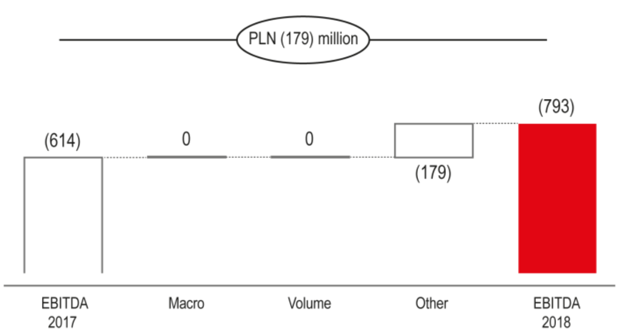
Corporate Functions

TABLE 24. Basic financial data for Corporate Functions.

Corporate Functions segment. PLN million	2018	2017	2016	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Segment revenues. including:	530	416	351	114	27.4%
Sales revenues from external customers	99	74	68	25	33.8%
Sales revenues from transactions with other segments	431	342	283	89	26.0%
Segment expenses	(1 327)	(1 132)	(1 072)	(195)	17.2%
Other operating income/expenses. net	(56)	(10)	(123)	(46)	460.0%
(Loss)/reversal of loss due to impairment of financial instruments	(9)	0	0	(9)	-
Share in profit from investments accounted for under equity method	0	0	0	0	-
(Loss) from operations increased by depreciation and amortisation (EBITDA) before impairment allowances1)	**(793)**	**(614)**	**(751)**	**(179)**	**29.2%**
(Loss) from operations increased by depreciation and amortisation (EBITDA)	(749)	(613)	(744)	(136)	22.2%
(Loss) from operations (EBIT)	**(862)**	**(726)**	**(844)**	**(136)**	**18.7%**
CAPEX	257	221	136	36	16.3%

1) The net allowances for impairment of property, plant & equipment and intangible assets::
- *year 2018 and 2017 amounted to respectively: PLN 44 and 1 million – related mainly to reversal of impairment allowances of Unipetrol Group,*
- *year 2016 amounted to PLN 7 million – related mainly to the impairment of PKN ORLEN.*

DIAGRAM 44. Corporate Functions – factors impact (y/y) [PLN million].



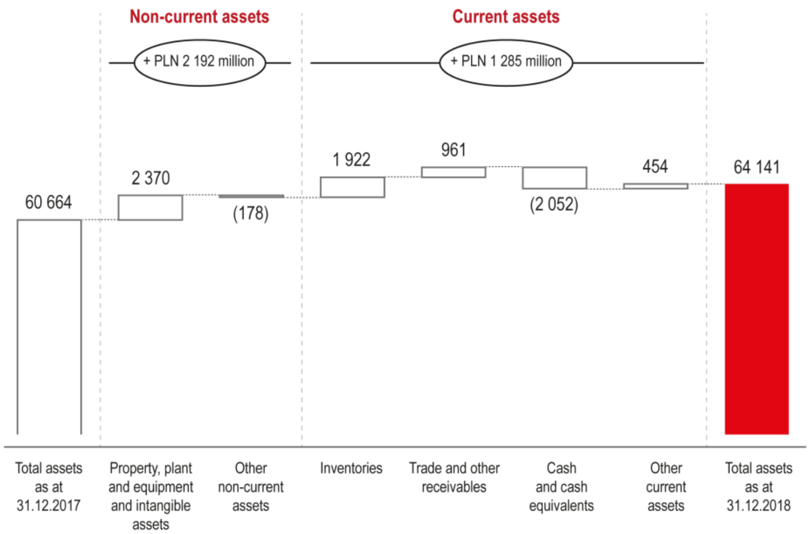
In 2018, EBITDA reported by the Corporate Functions segment was lower by PLN (179) million (y/y).

- Negative effect of change in net other income/ (expenses) of PLN (46) million (y/y) including mainly donation for charity and social needs among others for the "ORLEN – DAR SERCA" Foundation and Polish National Foundation – for detailed information concerning foundation activities see section 3.6.
- Market pressure put on pay level (y/y).

The capital expenditure incurred in 2018 as part of corporate function increased by PLN 36 million (y/y) to PLN 257 million - the key expenditure projects are described in section 4.4.

4.2.2. Statement of financial position

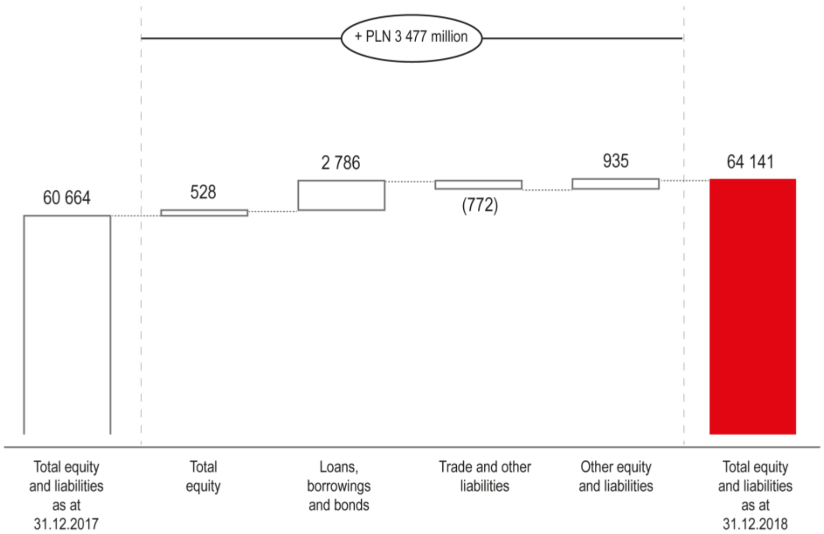
DIAGRAM 45. Change of selected items from consolidated assets [PLN million].



As at 31 December 2018, the ORLEN Group's total assets grew by PLN 3 477 million compared with the end of 2017.

- This came chiefly as a result of:
  - increase of property, plant and equipment and intangible assets value as an effect of incurred capital expenditure of PLN 4 280 million (including construction of Polyethylene III in the Unipetrol Group, the CCGT and Metathesis unit in Płock, PPF Splitter unit in Lithuania, growth of fuel stations and upsteam projects in Canada); amortisation and depreciation of PLN (2 673) million and impact of reversal of impairment allowances related mainly to Unipetrol Group and Upstream Group in the net amount of PLN 704 million.
  - decreasing valuation of derivatives by PLN (142) million and decrease of investments accounted for under equity method by PLN (65) million.
- The key contributors to growth of current assets were:
  - increase in inventories caused by higher prices of raw materials and products,
  - increase of trade and other payables driven by the higher product prices and growing volume sales.
  - decrease in cash and cash equivalents
  - increase in other current assets mainly form growth of receivables on settled derivatives by PLN 180 million and valuation of derivatives by PLN 90 million.

DIAGRAM 46. Changes of selected items from consolidated equity and liabilities [PLN million].



ORLEN Group's total equity and liabilities increased by PLN 3 477 million in comparison to 31 December 2017.

- The increase in equity results mainly from recognition of PLN 5 604 million net profit for 2018 and the effect of exchange gains/(losses) on translating the subisiaries' equity expressed in foreign currencies of PLN 375 million. At the same time there were a decrease in equity attributable to non-controlling interest by PLN (3 002) million, mainly as a consequence of redemption by PKN ORLEN shares in Unipetrol a.s. and dividend payments from the previous year's profit in the amount of PLN (1 284) million.
- The Group's debt has increased as a result of net loans, borrowings and bonds incurred in the amount of PLN 2 535 million and PLN 251 million net effect of exchange losses on remeasurement and valuation of foreign currency debt and interest.
- The decrease of trade and other payables due to early payment for purchases of feedstock and trade liabilities.
- Other equity and liabilities includes mainly change of balance on provisions for CO_2 emissions and energy certificates in the total amount of PLN 408 million and increase of deferred tax liabilities of PLN 350 million.

As at 31 December 2018, the area of the ORLEN Group's freehold land was 31.9 million m^2 .The Group also held land with an areas of 33.2 million m^2 under perpetual usufruct, lease and other arrangements. For information on the Surface area of land used by the Upstream segment, see section 3.2.3.2.
The key facilities used for accommodation and social purposes include: the Srebrna Palace near Płock, a commercial hotel and accommodation facilities for employees in Płock, PKN ORLEN's Conference Centre ("Engineer's House") in Płock, the Education Centre Schools in Płock, The ORLEN Club in Płock, the Bóbrka Holiday Resort (Separate Assets), the Sanatorium and Leisure Centre in Ustka, and the Holiday Resort in Zarzeczewo.

For the complete consolidated statement of financial position, see section 2 of the Consolidated Financial Statements for 2018.

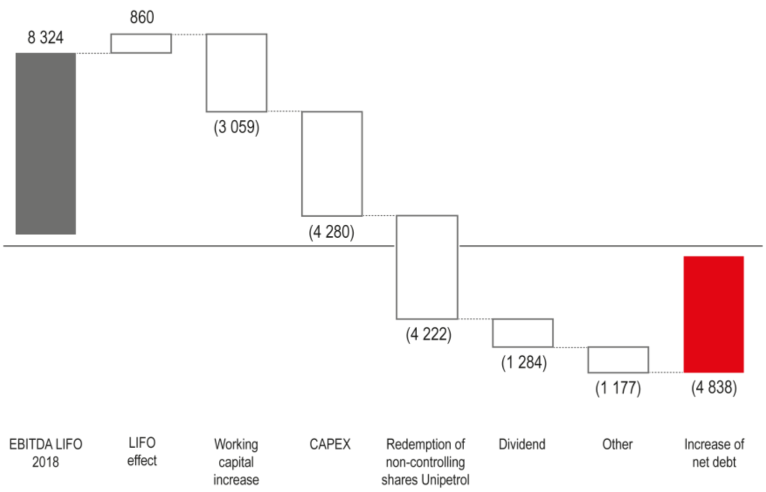
4.2.3. Statement of cash flows

TABLE 25. Consolidated statement of cash flows.

Item, PLN million	2018	2017	2016	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Net cash from operating activities, including:	**4 980**	**8 050**	**9 331**	**(3 070)**	**(38.1%)**
Change in working capital	**(3 059)**	**(1 967)**	**816**	**(1 092)**	**55.5%**
Net cash (used in) investing activities	**(3 798)**	**(3 925)**	**(4 436)**	**127**	**(3.2%)**
Net cash (used in) financing activities	**(3 237)**	**(2 832)**	**(2 210)**	**(405)**	**14.3%**
Net increase/(decrease) in cash and cash equivalents	**(2 055)**	**1 293**	**2 685**	**(3 348)**	**-**
Effect of exchange rate changes on cash and cash equivalents	3	(121)	39	124	-
Cash and cash equivalents, beginning of the period	6 244	5 072	2 348	1 172	23.1%
Cash and cash equivalents, end of the period	**4 192**	**6 244**	**5 072**	**(2 052)**	**(32.9%)**

The cash balance in 2018 decreased by PLN (2 052) million to PLN 4 192 million as at 31 December 2018.

DIAGRAM 47. Free cash flows [PLN million].

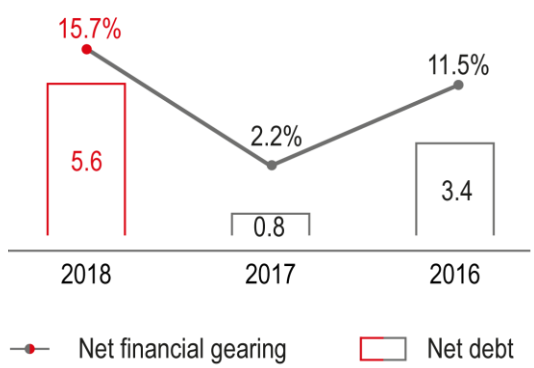


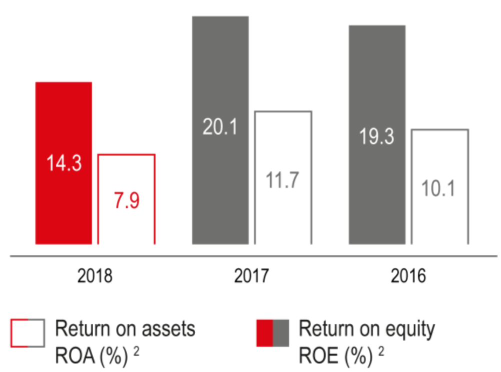
Increase of net debt by PLN (4 838) million in comparison with the end of 2017.

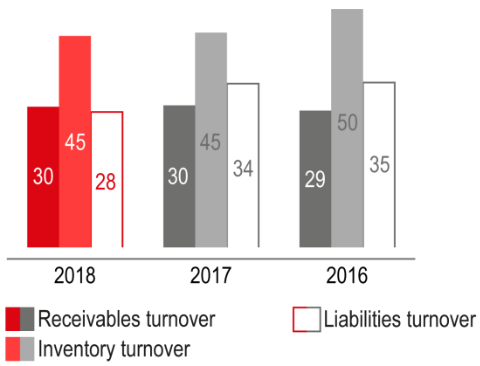
- EBITDA LIFO before impairment allowances amounted to PLN 8 324 million with the positive impact of growth in crude oil prices on inventory valuation amounting to PLN 860 million.
- Negative effect of a PLN (3 059) million increase in net working capital, due mainly to higher balances of inventories, driven by higher prices of crude oil and petroleum products, and trade receivables which increased on The Group's growing revenues.
- Net expenditure on acquisition of property, plant and equipment, intangible assets and perpetual usufruct of land of PLN (4 280) million.
- Redemption of non-controlling shares Unipetrol a.s. in the amount PLN (4 222) million.
- Paid dividends in the amount of PLN (1 284) million, i.e. PLN 3 per share.
- Other: mainly income tax paid of PLN (1 039) million and other items, including interest paid, elimination of profits earned by equity accounted entities and exchange gain/(losses).

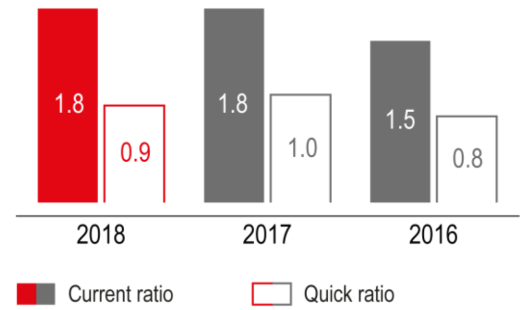
4.2.4. Financial ratios

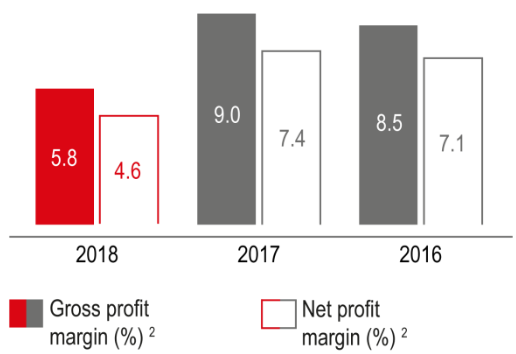
DIAGRAM 48. Financial ratios[1].











- Presented financial ratios confirm stable standing of the ORLEN Group.
- Increase of profitability ratios and safe level of liquidity ratios.
- Growth of net debt in 2018 (y/y) contributed to an increase of of net financial gearing ratio (y/y).

1) The methodology of calculating ratios is presented in *Glossary of selected financial terms* *in the last section of the foregoing Report.*
2) 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 any financial forecasts for 2018.

Change of the ORLEN Group operating results relative to the data presented in the Q4 2018 report issued on 24 January 2019 includes mainly:
- update as at 31 December 2018 of impairment allowances of property, plant and equipment, intangible assets and other non-current assets by the Upstream Group in connection with the received report on mineral resources valuation in Canada, which was prepared, in accordance with the standards applicable on the Canadian market, by an independent company,
- update of allowances in connection with the application of a uniform discount rate in the whole ORLEN Group,
- update of estimation of inventory to net realizable value by current exercise prices;

For detailed information on adjusted items of the statement of profit or loss and other comprehensive income and the statement of financial position see section 6 of the ORLEN Group Consolidated Financial Statement for 2018.

4.3. FINANCIAL RESOURCES MANAGEMENT

4.3.1. General management policies

Liquidity management

The ORLEN Group uses cash-pool arrangements to effectively manage its current liquidity and optimise finance costs. As at the end of 2018, the Group uses the following cash pool systems, managed by PKN ORLEN:
- two dedicated cash pool systems for Polish companies of the ORLEN Group. As at 31 December 2018 above systems were used by 25 companies of the ORLEN Group,
- an international cash pool system for foreign companies of The ORLEN Group. As at 31 December 2018 above system were used by eight companies of the ORLEN Group.

As part of central liquidity management, PKN ORLEN may issue bonds and notes within predefined limits and may acquire bonds issued by the ORLEN Group companies.

In 2018, The ORLEN Group placed cash in bank deposits. Decisions regarding placement of cash with banks are made with a view to maximising returns and are based on regular reviews of the banks' financial condition. All deposit-taking banks used by the Group are required to have a short-term investment-grade deposit rating.

Working capital management

The ORLEN Group manages its working capital in a flexible way in the volatile macroeconomic environment with a range of tools used to its level optimization.

Those tools include non-resource factoring arrangements whereby short-term trade receivables are sold at discount before their maturity date and the bank assumes the risk of creditor's default. In 2018 PKN ORLEN did not carry out factoring services.

PKN ORLEN also uses reverse factoring instruments, whereby its trading partners my receive payments for supplies of services with a discount but before due date specified in the respective sale contracts.

As at the end of 2018, the net working capital was PLN 16,386 million, having increased by PLN 3 371 million as compared to the level at the end of 2017.

4.3.2. Loans, borrowings, and bonds

The ORLEN Group cooperates with banks that have high credit ratings, enjoy strong market position and offer banking services at attractive prices. This approach ensures access to high quality sources of external financing.

TABLE 26. Sources of financing.

Item, PLN million	2018	2017	2016	zmiana	zmiana %
1	2	3	4	5=(2-3)	6=(2-3)/3
Bank loans	2 263	48	939	2 215	4 614.6%
Borrowings	0	0	1	0	-
Debt securities	7 528	6 957	7 495	571	8.2%
Financial indebtedness[1]	**9 791**	**7 005**	**8 435**	**2 786**	**39.8%**
By maturity:					
Non-current	8 598	6 688	7 446	1 910	28.6%
Current	1 193	317	989	876	276.3%

1) doesn't include liabilities from finance lease

DIAGRAM 49. The debt structure [%].

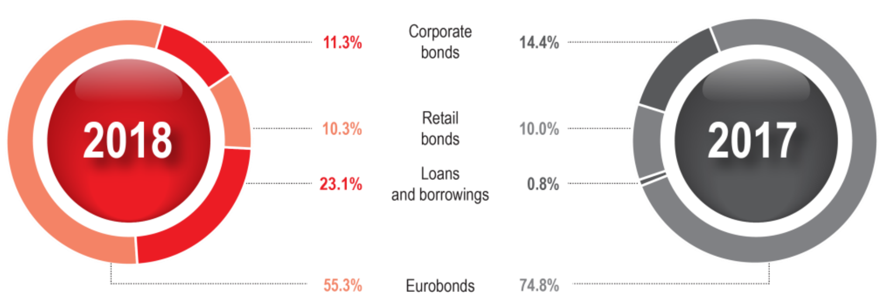


TABLE 27. Credit facilities in force in the ORLEN Group as at 31 December 2018 (excess PLN 100 million).

Company	Bank name	Loan amount[1]	Agreement date	Payment date	Base costs (interest rate)
PKN ORLEN	Bank consortium (BNP Paribas as agent)	EUR 1 500 million (EUR 6 450 million)	2014	2021	Floating rate + margin
PKN ORLEN	PKO BP	PLN 700 million	2008	Revolving loan	Floating rate + margin
PKN ORLEN	PKO BP	EUR 100 million (PLN 430 million)	2017	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
Unipetrol Group	ING	CZK 4 000 million (PLN 669 million)	2014	Revolving loan	Floating rate + margin
Unipetrol Group	(Česká spořitelna)	CZK 4 000 million (PLN 669 million)	2014	2019	Floating rate + margin
Unipetrol Group	Commerzbank	CZK 1 000 million (PLN 167 million)	2007	Revolving loan	Floating rate + margin
ORLEN Upstream Group	Citibank, Canadian branch	CAD 70 million (PLN 193 million)	2015	Revolving loan	Floating rate + margin

1) The amounts recalculated to PLN according to National Bank of Poland rates: EUR/PLN, CZK/PLN, USD/PLN, CAD/PLN from 31 December 2018.

None of the above credit facilities is secured with a pledge, mortgage of transfer of ownership of non-current assets.

ORLEN Group companies are required to maintain certain financial indicators within ranges agreed in their credit facility agreements. In 2018, the financial indicators assessed by the lending banks were maintained at safe levels. The ratio of consolidated net debt to EBITDA before impairment of non-current assets, representing one of the covenants in a credit facility agreement used by PKN ORLEN was 0.58.
The Group's financial indicators reported for 2018 and presented in section 4.2.4. confirm the Group's ability to pay its liabilities under the credit facility agreements and other agreements with banks and financial institutions.

For additional information on the ORLEN Group's debt structure, see section 10.2.7. of the Consolidated Financial Statements for 2018.

4.3.3. Issue of bonds and use of proceeds

In 2018, the ORLEN Group had in place three domestic bond programmes and two eurobond programmes from year 2014 and 2016.

Since 2006, PKN ORLEN has used non-public bond programme under an agreement with a syndicate of Polish banks. On December 2018, PLN 2 000 million debt limit has been increased to PLN 4 000 million. Funds obtained from the issue are allocated to financing ongoing operations. In 2012, within Programme Agreement PKN ORLEN issued 7-year corporate bonds with variable interest rate, the nominal value of PLN 1 000 million. On 27 February 2019 above bonds were redeemed, according to primary maturity date.
The other two domestic bond programmes are public programmes, predominantly for retail investors. These are Bond Programme 1 established in 2013-2014 and Bond Programme 2 set launched in 2017-2018. Under Bond Programme 1 PKN ORLEN issued five series of 4-year floating-rate retail bonds with a total nominal value of PLN 900 million, and one series of 6-year fixed-rate bonds with a nominal value of PLN 100 million. In 2017 the Company redeemed four series of bonds, issued under this programme of total value PLN 700 million. In 2018 the Company redeemed one series of bonds within this programme with nominal value of PLN 200 million.

The last tranche under Programme 1 of PLN 100 million is scheduled for redemption in April 2020. The bonds were rated 'A(pol)' by Fitch Polska S.A.
Under Bond Programme 2 PKN ORLEN issued four series of 4-year retail bonds with a total nominal value of PLN 800 million and one series of 5-year bonds with a nominal value of PLN 200 million, of which in 2018 issued three series of 4-year bonds with a total nominal value PLN 600 million. All series include floating – rate bonds. The programme was rated 'A (pol)' by Fitch Polska S.A.

The bonds issued under the public bond programmes have been listed on the Warsaw Stock Exchange and are trade on a regulated market (Catalyst).
The nominal value of the eurobonds issued in 2014 and 2016 outstanding at the end of 2018 was EUR 1 250 million (PLN 5 375 million, translated at the mid-rate quoted by the National Bank of Poland for EUR/PLN on 31 December 2018). Whereas the nominal value of public bonds issues under Programme 1 and 2 amounted to PLN 1 100 million, as at the end of 2018.

For additional information on bond issues, see section 10.2.7. of the Consolidated Financial Statements for 2018.

4.3.4. Borrowings granted and received

Listed below are loan agreements between the Parent (lender) and ORLEN Group companies (borrowers) which were in effect at the end of 2018:

– CAD 100 million loan advanced to ORLEN Upstream Canada in January 2016. In December 2018, the loan amount was once again increased to CAD 291.5 million (PLN 805 million at the mid-rate quoted by the National Bank of Poland for CAD/PLN on 31 December 2018). The outstanding balance as at 31 December 2018 was CAD 276.5 million (PLN 764 million at the mid-rate quoted by the National Bank of Poland for CAD/PLN on 31 December 2018). The loan amount available as at 31 December 2018 was CAD 15 million (PLN 41 million at the mid-rate quoted by the National Bank of Poland for CAD/PLN on 31 December 2018).

– PLN 50 million long-term investment loan advanced to IKS Solino in June 2014. The loan will be repaid in instalments, with the final maturity repayment date set for 31 December 2024. As at 31 December 2018, the outstanding balance of the loan was PLN 33 million,

– PLN 90 million investment loan advanced to ORLEN Południe in June 2018. The loan payment was divided into tranches.. The outstanding balance as at 31 December 2018 was PLN 53 million. Total loan amount available as at 31 December 2018 was PLN 37 million. The final maturity repayment date was set for 30 June 2021.

Listed below are loan agreements between the Parent (borrower) and ORLEN Group companies (lenders) which were in effect at the end of 2018:

– EUR 740 million log-term loan agreement with ORLEN Capital of June 2016, with the repayment date set for 7 June 2023. The outstanding balance as at 31 December 2018 was EUR 740 million (PLN 3 184 million at the mid-rate quoted by the National Bank of Poland for EUR/PLN on 31 December 2018) - see section 4.3.3.,

– EUR 496 million long term loan agreement with ORLEN Capital of June 2014, with the repayment date set for 30 June 2021. The outstanding balance as ate 31 December 2018 was EUR 496 million (PLN 2 131 million at the mid-rate quoted by the National Bank of Poland for EUR/PLN on 31 December 2018) - see section 4.3.3.,

Intra–Group loans and borrowing are eliminated in the course of standard consolidation procedures.

4.3.5. Sureties, guarantees and other contingent liabilities

As at 31 December 2018, the ORLEN Group recognised in off-balance sheet records, rights of perpetual usufruct of land amounted to PLN 752 million, received under administrative decision.

As at 31 December 2018, the ORLEN Group increased of-balance-sheet liabilities under guarantees and sureties by PLN 632 million to PLN 13 775 million. In year 2018 above amount included:

– guarantees and sureties provided to subsidiaries in favour of third parties, for total amount of PLN 10 570 million, mainly to secure payment by ORLEN Capital of its future liabilities under two eurobonds issues (see section 4.3.4), and timely payment of liabilities by the subsidiaries,

– excise bonds and excise duty on products and goods undergoing the suspended excise collection procedure, of PLN 2 626 million,

– guarantees in respect of liabilities towards third parties issued in the course of day-to-day operations, including civil-law performance guarantees and public-law guarantees required under generally applicable laws to ensure the proper conduct of licensed activities in the liquid fuels sector and the payment of tax and customs liabilities arising from such activities, for a total amount of PLN 579 million.

For more information on guarantees and sureties, see section 10.3.5.4 of the Consolidated Financial Statement for 2018.

For description of contingent liabilities, see section 10.4.4 of the Consolidated Financial Statement for 2018.

4.3.6. Financial instruments

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 PKN ORLEN Supervisory Board.
Market risk management policy and hedging strategies define principles of measurement of individual exposure, parameters and the time horizon of risk hedging and hedging instruments. Market risk management is performed using derivatives which are used solely to reduce the risk of changes in fair value and the risk of changes in cash flows.
Market risk is the possible negative impact on the Group's performance resulting from changes in market price of commodities, exchange rates and interest rates.

The ORLEN Group uses the following financial instruments to hedge its cash flows:

- cash flows from operating activity – currency forwards,
- cash flows relating to payments in foreign currencies – spot or forward currency contracts,
- cash flows relating to change of margin on refinery and petrochemical products – commodity swaps,
- cash flows resulting from periodic increase in operating inventories – commodity swaps,
- related to the time mismatch resulting from crude oil and products purchased and sold by the sea - using commodity swaps,
- related to probable liabilities and receivables including claim for selected customers of price formulas based on fixed price - using commodity,
- cash flows relating to interest payments on external financing- interest rate swaps (IRS) and cross-currency interest rate swaps (CIRS),
- cash flows relating to the obligation to account for CO_2 emission – spot or forward contracts to purchase CO_2 certificates.

For more information on financial instruments, see section 10.3. of the Consolidated Financial Statements for 2018.

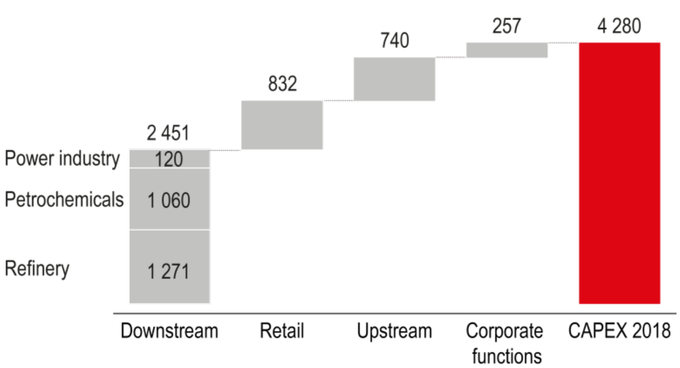
4.3.7. Ratings

In 2018 PKN ORLEN ratings at the investment level in two leading rating agencies: Fitch Ratings Ltd. and Moody's Investor Services remained unchanged, respectively BBB- with a stable outlook and Baa2 with a stable outlook.

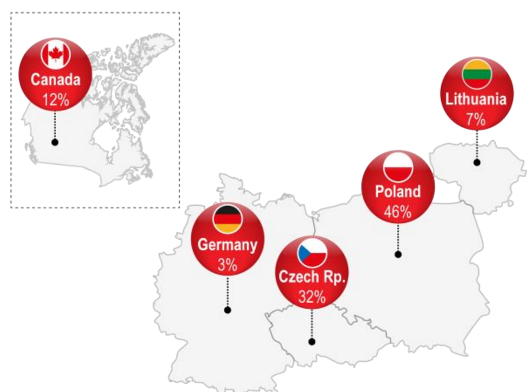
For description of the ratings assigned to bonds and notes issued by the ORLEN Group, see section 4.3.3.

4.4. REALISATION OF INVESTMENTS PLANS

DIAGRAM 50. Capital expenditures (CAPEX). [PLN million].



SCHEME 10. Capital expenditures by operating markets [%].



The most significant investments realised in 2018 comprised of:

Downstream

- Construction of CCGT in Włocławek and Płock with infrastructure,
- Construction of polyethylene unit (PE3) in Litvinov,
- Construction of PPF Splitter unit in Lithuania,
- Construction of a metathesis unit in Płock.

Retail

- 64 new services stations opened (44 in Poland, 9 in Germany, and 11 in the Czech Republic)
- 109 service station upgraded and rebranded (13 in Poland , 1 in Germany and 95 in the Czech Republic),
- 306 new Stop Cafe/Star Connect (including O!SHOP outlets)

Upstream

- Canada – PLN 534 million / Poland – PLN 206 million.

Assessment of project implementation

The ORLEN Group manages the structure of its capital expenditure in response to market situation, and focuses on the most effective investment projects. For description of key projects planned for the following years, see section 4.5.

The ORLEN Group financial condition is stable, with cash flows and available financing sources sufficient to implement the investment plans.
For information on the level of selected financial ratios, confirming feasibility of the investment plans, see section 4.2.4.

4.5. DEVELOPMENT PROSPECTS

Market prospects in 2019

Expected macroeconomic environment	• **GDP forecast for 2019** - Poland 3.6%, the Czech Republic 3.3%, Germany 1.5%, Lithuania 2.8%. • **Brent crude price** – crude oil price are expected to remain at a comparable level with the average price in 2018. Predicted pressure on crude oil price due to forecasted slowdown of global economy and growth of crude oil production in USA will be limited by the effect of agreement between OPEC+ countries on decreasing crude oil production by 1.2 million bbl/d. • **Downstream margin** – expected to remain at comparable level with the average downstream margin in 2018. • Refining margin with differential Brent/Ural is expected to growth as an effect of growing demand for medium distillates and falling demand for Ural crude oil resulting from upcoming implementation of IMO regulation in 2020. Positive impact of refining margin with differential Brent/Ural growth will be offset in relation with decline of petrochemical margins as a result of start-up of new petrochemical capacity which based mainly on less expensive feedstock. Supporting factor for downstream margin is predicted further increase of fuel and petrochemical products consumption on home markets.
Projected market trends	• **Fuel consumption** – expected stabilisation of demand for gasoline and slightly higher demand for diesel oil in Czech Republic, Germany and Lithuania. In Poland further growth of demand for gasoline and diesel oil is expected.
Legislative changes	• **Restricted Sunday trade** – in 2019 trade in Poland will be permitted only on the last Sunday of the month. The Sunday trade ban does not apply to petrol stations. • **Emission charges** – entering into force since 2019. • **NIT** – in 2019 basic level of NIT is 8.0% PKN ORLEN will be able to reduce the blending ratio to 5.57%.
Investment activities of the ORLEN Group	• **Main development investments in 2019:** **Downstream** • Expansion of fertilizer production capacity in Anwil • Construction of a polyethylene unit in Czech Republic • Construction of installations within the framework of Petrochemistry Development Programme • Preparatory project for construction of Visbraking unit in Płock • Construction of charges for electric cars in Poland • Preparatory project for construction of Offshore Wind Farms on the Baltic Sea.

Retail

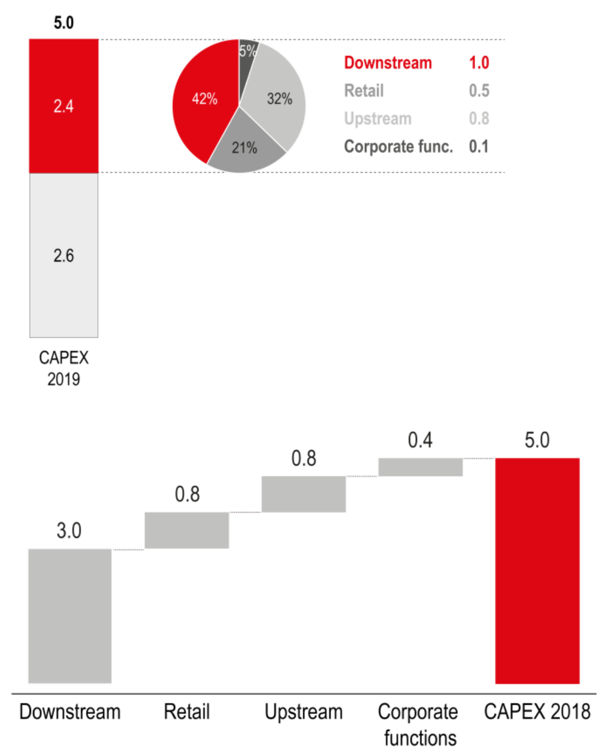
- Expansion of the service station chain (35 new CODO stations)
- Development of the Stop Cafe 2.0 food service format (more than 180 new catering outlets)
- Launch of new services and products

Upstream

- Capital expenditure: Canada – c.a. PLN 600 million/ Poland – c.a. PLN 200 million

- **CAPEX 2019**

DIAGRAM 51. The level of capital expenditures by segments in 2019 [PLN billion]



Scheduled maintenance shutdowns

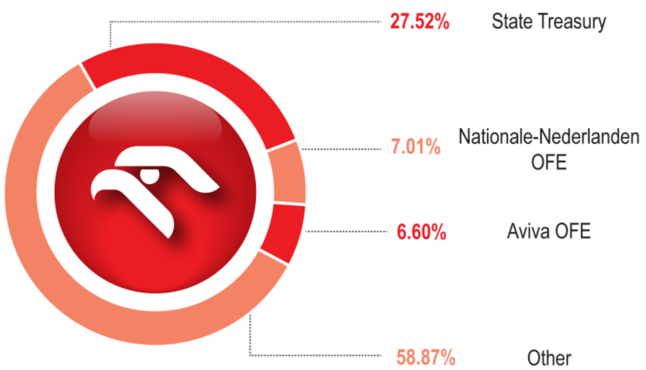
- **Maintenance shutdowns of production units at the ORLEN Group in 2019:**
  - **PKN ORLEN:** lower scope of scheduled maintenance shutdowns – HOG unit and Oil Block annual shutdown; scheduled for April 2019 start-up of CCGT Włocławek unit after turbine repair; there are no scheduled significant shutdowns in petrochemical area.
  - **ORLEN Lietuva Group:** lower scope of scheduled maintenance shutdowns – spring short maintenance shutdown and shutdown of Visbraking and Vaccume Flasher unit.
  - **Unipetrol Group**: lower scope of scheduled maintenance shutdowns in refining area – scheduled shutdowns of Hydrocracker and Visbreaking unit in Litvinov refinery. There are no scheduled significant shutdowns in petrochemical area.
  - **Anwil:** scheduled shutdown of Fertilizers Complex in the summer 2019 and PVC Complex in the fall 2019
  - **BOP:** scheduled shutdown of PE2 unit.

5. PKN ORLEN – PARENT OF THE ORLEN GROUP

Sections of the Directors' Report on PKN ORLEN's operations presented further in this Directors' Report on the ORLEN Group's were prepared in accordance with Par. 71.8 of the Minister of Finance's Regulation on current and periodic information to be published by issuers of securities and conditions for recognition as equivalent of information whose disclosure is required under the laws of a non-member state, dated 29 March 2019.

5.1. PKN ORLEN'S EQUITY AND SHAREHOLDING STRUCTURE

DIAGRAM 52. Shareholding structure of PKN ORLEN. 1)



1) Based on disclosures provided for the purpose of the PKN ORLEN Extraordinary General Meeting of 2 February 2018.

- The share capital of PKN ORLEN is divided into 427 709 061 ordinary bearer shares with a par value of PLN 1.25 per share. PKN ORLEN shares are freely transferable.
- The PKN ORLEN Management Board has no knowledge of any agreements which would results in future changes of holdings of Company shares.
- In 2018, the ORLEN Group did not operate any employee stock option scheme.
- In 2018, PKN ORLEN did not buy back its own shares.
- As at 31 December 2018, members of the PKN ORLEN Management Board did not hold any shares of the Company.
- As at 31 December 2018, none of the members of the Parent's Supervisory Board held any PKN ORLEN shares.

5.2. PKN ORLEN ON THE STOCK EXCHANGE

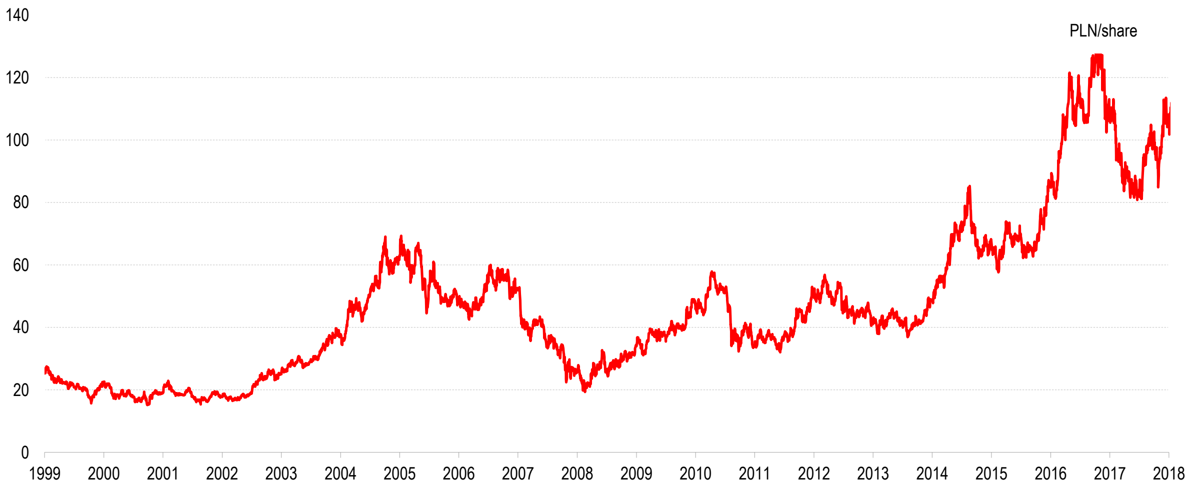
PKN ORLEN shares are traded on the main market of the Warsaw Stock Exchange in the continuous trading system and are included in the WIG, WIG20, WIG30, WIG-Poland general market indices and in the WIG-FUELS industry index.
In 2018, the blue-chip WIG20 index and the all-cap WIG index decreased by, respectively, 7.5% and 9.5% year on year. In this period, the price of PKN ORLEN shares increased by 2.0% year on year. Total return on PKN ORLEN shares (price appreciation + dividend) was 5.69% in PLN and 2.59% in EUR. In the previous year, 210 716 551 PKN ORLEN shares were traded on the main market, a decrease of 0.77% on 2017.

TABLE 28. Key data regarding PKN ORLEN's share.

Key data	Unit	2018	2017	2016	change %
1	2	3	4	5	6=(3-4)/4
Net profit attributable to equity owners of the Parent Company	PLN mn	5 556	6 655	5 261	-16.5%
Highest share price[1]	PLN	113.50	134.00	87.17	-15.3%
Lowest share price[1]	PLN	80.76	81.18	57.64	-0.5%
Share price at the year-end[1]	PLN	108.15	106.00	85.30	2.0%
Average price in the period[1]	PLN	94.83	109.37	68.56	-13.3%
P/E[2] ratio average		7.3	7.0	5.6	4.3%
P/E[2] ratio at the end of the year		8.4	6.8	6.9	23.5%
Number of shares	Item	427 709 061	427 709 061	427 709 061	0.0%
Capitalisation at the year end	PLN mn	46 257	45 337	36 484	2.0%
Average daily trading value	PLN mn	81	91	73	-11.0%
Average daily trading volume	Item	853 103	849 437	1 059 622	0.4%

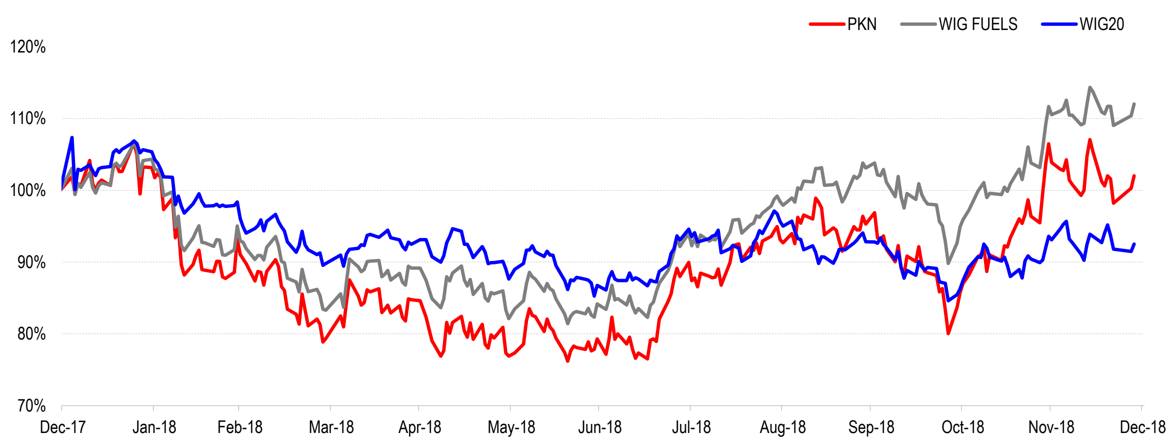
1) Share price according to a closing share price.
2) P/E – stock market price (P) / value of net profit per one share (earnings per share – EPS).

DIAGRAM 53. Quotations of PKN ORLEN on WSE in 1999 – 2018.



Source: Own preparation based on the Warsaw Stock Exchange

DIAGRAM 54. Quotations of PKN ORLEN, WIG20 and WIG-FUELS on WSE in 2018[1)]



1) Percentage change of quotations of PKN ORLEN, WIG 20 in relation to the listing of 29 December 2017.
Source: Own preparation based on the Warsaw Stock Exchange.

5.3. DIVIDEND POLICY

For the past six years, the Company has implemented a dividend policy factoring in its financial ratios, overall financial condition and expansion plans. The recommendation of profit distribution for PKN ORLEN for 2018 is presented section 10.2.8.5 of Consolidated Financial Statement for 2018.

5.4. OPERATING ACTIVITY

Curbing the grey fuel market in Poland coupled with a stronger economic growth and favourable labour market (decrease of unemployment rate) led to, for another year, record-breaking sales results.

In 2018, the total volume sales (after elimination of intra-Group crude sales) reached the level of 19 038 thousand tonnes, an increase of 7.4% (y/y).

TABLE 29. Sales of PKN ORLEN in the Downstream and the Retail segments [in PLN million/thousands of tonnes].

Sales	2018		2017		2016		change %	
	Value	Volume	Value	Volume	Value	Value		
1	2	3	4	5	6	7	8=(2-4)/4	9=(3-5)/5
Downstream Segment	**66 434**	**13 339**	**53 410**	**12 312**	**38 859**	**11 064**	**24.4%**	**8.3%**
Light distillates [1)]	4 171	1 668	3 378	1 525	3 112	1 595	23.5%	9.4%
Medium distillates [2)]	18 687	7 136	14 048	6 416	10 242	5 294	33.0%	11.2%
Heavy fractions [3)]	3 632	2 450	2 708	2 278	1 803	2 077	34.1%	7.6%
Monomers [4)]	3 072	807	2 898	843	2 390	789	6.0%	(4.3%)
Aromas [5)]	505	168	562	182	533	212	(10.1%)	(7.7%)
PTA	1 528	508	1 398	523	1 571	605	9.3%	(2.9%)
Other [6)]	34 839	602	28 418	545	19 208	492	22.6%	10.5%
Retail Segment	**20 483**	**5 699**	**16 530**	**5 411**	**14 712**	**5 057**	**23.9%**	**5.3%**
Light distillates [1)]	6 487	2 040	5 450	1 932	4 699	1 810	19.0%	5.6%
Medium distillates [2)]	11 142	3 659	8 709	3 479	7 714	3 247	27.9%	5.2%
Other [7)]	2 854	0	2 371	0	2 299	0	20.4%	-
Total	**86 917**	**19 038**	**69 940**	**17 723**	**53 571**	**16 121**	**24.3%**	**7.4%**

1) Gasoline, LPG.
2) 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 revenues from the sale of crude oil to the ORLEN Group companies in the amount of PLN 32 090 million in 2018, PLN 26 388 million in 2017 and PLN 17 968 million in 2016. Also includes revenues from the sale of segment services. Other volume – consists mainly of acetone, butadiene, phenol, glycols, ethylene oxide and sulphur. Other volume doesn't include sales of crude oil to the ORLEN Group companies in the amount of 17 088 thousand tonnes in 2018, 17 806 thousand tonnes in 2017, 14 845 thousand tonnes in 2016.
7) Other (in value terms) - includes revenues from sales of non-fuel goods and services

The sales of PKN ORLEN's **Downstream segment** (after elimination of intra-Group crude sales) in 2018, increased by 8.3% (y/y) to 13 339 thousand tonnes.
The highest increase was reported for middle distillates, mainly on higher sales of diesel oil and Jet A-1 aviation fuel by, respectively, 10.6% and 25.2% (y/y).
Steady growth of diesel oil consumption is visible starting from 2016. Data of Energy Market Agency concerning fuel consumption on the Polish market were presented in section 4.1. PKN ORLEN S.A. has remained the main supplier of foreign fuel companies in Poland (BP, Shell, Amic) and has constantly increased its share in aviation fuel market to circa 83%.
In 2018, sales of light distillates increased on higher sales volumes of gasolines by 7.2% (y/y) and LPG by 24.8% (y/y).
Sales of heavy fractions increased by 7.6% (y/y) on higher volumes of heavy heating oil as a result of extended shutdown of Petroleum Tar Hydrodesulphurisation unit. A share of heavy fractions in segments' sales structure remained on the comparable level (y/y).
Decreased by (4.3)% (y/y) sales of monomers and by (7.7)% (y/y) sales of aromas is the consequence of regular maintenance shutdown of Olefin unit from Q4 2018. Lower by (2.9)% PTA sales results from reduced production capacities during planned maintenance shutdown of the unit in 2018.

Stable development of service stations network comprising construction of facilities with high volume potential, modernizations and closing inefficient stations, as well as expending non-fuel services resulted with an increase of fuel volume sales in **Retail segment** by 5.3% (y/y) to 5 699 thousand tonnes. Increase in sales of all fuels was mostly a consequence of higher fuel consumption on the Polish market.

For detailed description of sales trend and efficiency measures taken in the Retail segment in Poland, see section 3.2.2.4.
For description of the **supply sources** for the Downstream and Retail segments, see sections 3.2.1.5. and 3.2.2.5.

In 2018, 2017 and 2016, the share of the Company's revenue from sales to three customers in the Downstream segment exceeded **10% of total revenue**, and came in at PLN 51 263 million, PLN 41 886 million and PLN 29 044 million. The customers were PKN ORLEN's related parties, and the transactions involved mainly sale and purchase of refining and petrochemical products and services.

In 2018 and 2017, PKN ORLEN **did not conclude any transactions** with related parties **other than on an arms' length basis**. For information on the Company's related-party transactions, see section 10.4.6.2. of PKN ORLEN Financial Statements for 2018. For information on transactions between PKN ORLEN and related parties of the State Treasury, see section 10.4.6.3.
Summary of significant transactions (over PLN 100 million) in 2018 between the **Parent and its related parties** is presented in the table below.

TABLE 30. Significant transactions in the ORLEN Group in 2018 [PLN million].

Counterparty	Sales of Parent Company	Purchases of Parent Company
ORLEN Paliwa Sp. z o.o.	18 863	1 356
ORLEN Lietuva AB	18 034	2 086
RPA s.r.o.	14 401	683
BOP Sp. z o.o.	2 778	26
ORLEN Asfalt Sp. z o.o.	1 017	0
Anwi S.A.	662	83
ORLEN Oil Sp. z o.o.	232	89
ORLEN Południe S.A.	155	1 281
ORLEN Koltrans Sp. z o.o.	7	174
Orlen Serwis S.A.	6	123
ORLEN Projekt Sp. z o.o.	1	102

5.5. FINANCIAL

For detailed information on the policies applied by PKN ORLEN S.A. in the preparation of full-year financial statements, see section 5.2. of the Financial Statement of PKN ORLEN for 2018.

5.5.1. Overview of key economic and financial data, and discussion of the factors with a significant impact on the net profit.

TABLE 31. Selected data of profit or loss and other comprehensive income.

Item, PLN million	2018	2017	2016	change	change%
1	2	3	4	5=(2-3)	6=(2-3)/3
Sales revenues	86 997	70 012	53 633	16 985	24.3%
Cost of sales	(78 781)	(62 106)	(46 664)	(16 675)	26.8%
Gross profit on sales	**8 216**	**7 906**	**6 969**	**310**	**3.9%**
Distribution expenses	(2 850)	(2 547)	(2 310)	(303)	11.9%
Administrative expenses	(809)	(799)	(739)	(10)	1.3%
Other operating income	431	449	246	(18)	(4.0%)
Other operating expenses	(354)	(222)	(297)	(132)	59.5%
Share in profit from investments accounted for under equity method	(10)	0	0	(10)	-
Profit/(Loss) from operations under LIFO increased by amortisation and depreciation (EBITDA LIFO)	**5 000**	**5 327**	**4 846**	**(327)**	**(6.1%)**
Profit/(Loss) from operations increased by amortisation and depreciation (EBITDA)	5 989	6 028	5 011	(39)	(0.6%)
Profit/(Loss) from operations (EBIT)	**4 624**	**4 787**	**3 869**	**(163)**	**(3.4%)**
Financial income	3 275	3 793	2 963	(518)	(13.7%)
Financial costs	(1 641)	(1 533)	(763)	(108)	7.0%
Net financial revenues and expenses	**1 634**	**2 260**	**2 200**	**(626)**	**(27.7%)**
Profit before tax	**6 255**	**7 047**	**6 069**	**(792)**	**(11.2%)**
Income tax	(821)	(945)	(705)	124	(13.1%)
Net profit	**5 434**	**6 102**	**5 364**	**(668)**	**(10.9%)**

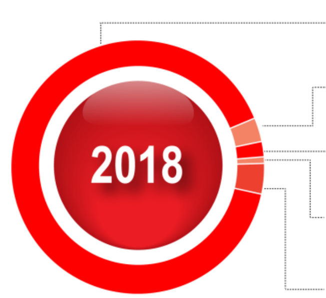
For the complete separate statement of profit or loss and other comprehensive income, see section 1 of the Financial Statements of PKN ORLEN for 2018.

Revenues

PKN ORLEN' revenue was PLN 86,997 million, an increase of 24.3% (y/y) achieved largely on higher crude oil prices and, consequently, higher prices of PKN ORLEN products.

- Revenue of the **Downstream segment** increased up 24.4% (y/y), mainly as a result of higher market prices of products (fuel prices) as well as higher fuel sales (sales volume). Higher fuel sales reflect the continued favourable market conditions, including the effects of legislation enacted in August 2016 to curb the grey fuel market in Poland (fuel consumption).
- Revenue of the **Retail segment** increased by 23.9% (y/y), primarily as a result of higher sales volumes as well as increase in prices of fuels at the Company's service stations due to higher crude oil prices.
- Revenue of the **Corporate Functions** increased by 11.1% y/y.

DIAGRAM 55. PKN ORLEN revenues by countries [1)]



Value	Country	Share
49 571	Poland	90,4%
1 696	Switzerland	3,1%
1 041	Germany	1,9%
412	Czech Republic	0,8%
2 095	Other	3,8%

1) Without crude oil sales

The remaining sales are attributable to customers from Ukraine, Lithuania, Latvia, Estonia, Finland and the United Kingdom.
For detailed information on changes in sales volumes in each segment, see section 5.4.

Data concerning revenues from contracts with customers by criterions and revenues by geographic market were presented in the Financial Statement of PKN ORLEN for 2018 in sections 8.1.1. and 8.1.2. respectively.

Operating costs by nature and functions

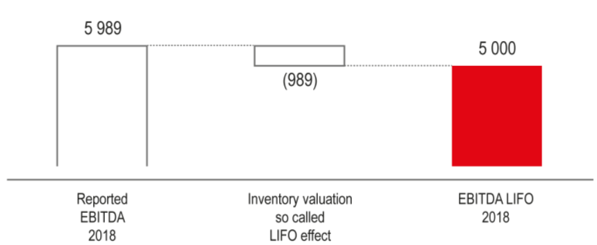
TABLE 32. Cost of goods sold in PKN ORLEN.

Item, PLN million	2018	2017	2016	structure 2018	structure 2017	structure 2016	change %
1	2	3	4	5	6	7	8=(2-3)/3
Materials and energy	(37 420)	(26 223)	(21 181)	45.1%	39.6%	43.0%	42.7%
Cost of merchandise and raw materials sold	(39 299)	(34 251)	(22 826)	47.4%	51.8%	46.3%	14.7%
External services	(2 729)	(2 478)	(2 243)	3.3%	3.7%	4.5%	10.1%
Employee benefits	(839)	(780)	(732)	1.0%	1.2%	1.5%	7.6%
Depreciation and amortisation	(1 365)	(1 241)	(1 142)	1.6%	1.9%	2.3%	10.0%
Taxes and charges	(1 092)	(971)	(919)	1.3%	1.5%	1.9%	12.5%
Other	(256)	(235)	(252)	0.3%	0.3%	0.5%	8.9%
Cost by nature	**(83 000)**	**(66 179)**	**(49 295)**	**100.0%**	**100.0%**	**100.0%**	**25.4%**
Change in inventories	364	500	(608)				(27.2%)
Cost of products and services for own use	196	227	190				(13.7%)
Operating cost	**(82 440)**	**(65 452)**	**(49 713)**				**26.0%**
Selling costs	2 850	2 547	2 310				11.9%
General and administrative costs	809	799	739				1.3%
Cost of goods sold	**(78 781)**	**(62 106)**	**(46 664)**				**26.8%**

The operating expenses increased by PLN (16 821) million (y/y) to the level of PLN (83 000) million. The largest item in the cost structure was costs of materials and energy, mainly crude oil used in the technological processes. A 42.7% (y/y) increase in this cost item was mostly attributable to higher prices of crude oil on global markets as well as higher by 635 tonnes crude oil processing which amounted 15.9 million tonnes. The above indicators influenced on an increase by 5.5. pp (y/y) the share of feedstock in the overall cost structure.
As a result of shorter (y/y) shut down of Hydrocracking unit in PKN ORLEN and higher share of sweet crudes in the crude slate, higher fuel yield was reached, which influenced on an increase in fuel sales from own production and a decrease by (4.5) pp (y/y) in share of merchandise purchased from the market.
An increase in **distribution costs** was mainly driven by higher logistics costs due to higher wholesale and retail sales volumes as well as higher costs of commissions paid to service station operators driven by high sales volume.
An increase in **administrative expenses** as a result of strong wage pressures from the labour market as well as increase headcount in the Company's fastest growing business units.

Profit from operations according to inventory valuation under LIFO method[1] increased by depreciation & amortisation (EBITDA LIFO)

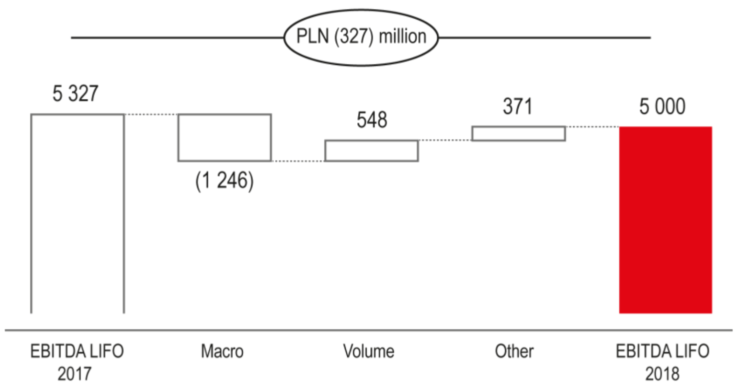
DIAGRAM 56. Reported EBITDA and EBITDA LIFO [PLN million].



- In 2018 **PKN ORLEN's EBITDA LIFO** was PLN 5 000 million.
- The positive impact of changes in oil prices on inventory valuation, included in EBITDA, came in at PLN 989 million.
- As a result, **EBITDA** of PKN ORLEN for 2018 amounted to **PLN 5 989 million**.

1) The definitions of LIFO method of inventories valuation is presented in *Glossary of selected financial and industry concepts.*

DIAGRAM 57. Factors affecting change of EBITDA LIFO (y/y) [PLN million].



PKN ORLEN's EBITDA LIFO decreased by PLN (327) million (y/y).

- Changes of macroeconomic factors decreased PKN ORLEN's results by **PLN (1 246) million (y/y)** and included mainly the negative effects of higher costs of raw materials used for own energy needs as a result of an increase in crude oil prices, decreasing of margins with reference to light distillates and heavy fractions, petrochemical products partly compensated by higher margins on medium distillates, PTA.
- The continuing favourable market situation in Downstream and Retail segments compensated the influence of the periodic unavailability of Olefin unit installation in petrochemical area and, as a result, total volume effect amounted to **PLN 548 million (y/y).**
- The positive impact of other factors amounted to **PLN 371 million (y/y)** and included mainly:
  - effects of higher trading margins in Downstream and Retail segments as well as the use of cheaper stocks of crude oil and products during the period of maintenance shutdowns from the first half of 2018.
  - **PLN (150) million (y/y)** – impact of change in the balance of other operating activity mainly related to the lack of received in 2017 compensation for improper execution of the contract of the power plant CCGT Włocławek in the amount of **PLN (97) million**.

Net finance income/(costs) and net profit

In 2018, net finance income was PLN 1 634 million and mainly included the following items:

- PLN 1 005 million net reversal of impairment losses on shares, mainly of ORLEN Upstream shares in the amount of PLN 987 million,
- PLN 870 million revenues from dividends received mainly from ORLEN Deutschland, Anwil and Basell ORLEN Polyolefins,
- net settlement and valuation of financial instruments of PLN 362 million.
- PLN (382) million exchange gains on foreign currency loans and other items
- net interest of PLN (216) million.

After PLN (821) million taxes, PKN ORLEN posted a net profit of PLN 5 434 million for 2018, an decrease of PLN (668) million (y/y).

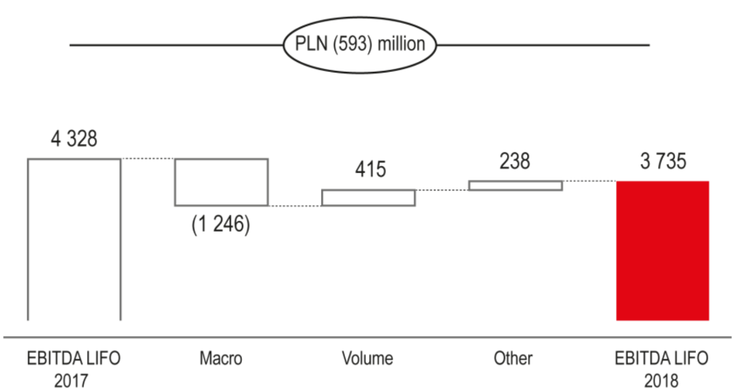
PKN ORLEN's results by segments

Downstream Segment

TABLE 33. Basic financial data of the Downstream segment.

Downstream Segment, PLN million	2018	2017	2016	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Segment revenues. including:	80 579	64 522	48 046	16 057	24.9%
Sales revenues from external customers	66 434	53 410	38 859	13 024	24.4%
Sales revenues from transactions with other segments	14 145	11 112	9 187	3 033	27.3%
Segment expenses	(77 042)	(60 649)	(44 642)	(16 393)	27.0%
Other operating income/expenses. net	182	269	85	(87)	(32.3%)
(Loss)/reversal of loss due to impairment of financial instruments	4	0	0	4	-
Profit from operations under LIFO increased by depreciation and amortisation (EBITDA LIFO)	**3 735**	**4 328**	**4 135**	**(593)**	**(13.7%)**
Profit from operations increased by depreciation and amortisation (EBITDA)	4 724	5 029	4 300	(305)	(6.1%)
Profit from operations under LIFO (EBIT LIFO)	**2 734**	**3 441**	**3 324**	**(707)**	**(20.5%)**
Profit from operations (EBIT)	3 723	4 142	3 489	(419)	(10.1%)
CAPEX	733	1 352	1 595	(619)	(45.8%)

DIAGRAM 58. Downstream Segment - Factors affecting change of EBITDA LIFO (y/y) [PLN million].



In 2018, the Downstream segment posted EBITDA LIFO of PLN 3 735 million and was lower by PLN (593) million (y/y).

- Negative effect of macroeconomic factors amounted to **PLN (1 246) million (y/y)** and included mainly the negative effects of higher costs of raw materials used for own energy needs as a result of an increase in crude oil prices by 17 USD/bbl, decreasing of margins with reference to light distillates and heavy fractions, petrochemical products partly compensated by higher margins on medium distillates and PTA.
- An increase in internal fuel consumption as an effect of curbing of the grey market balanced the effects of lower petrochemical volumes due to the periodic unavailability of production installations and, as a result, positive effect amounted to PLN **415 million (y/y)**.
- The positive impact of other factors amounted to **PLN 238 million (y/y)** and included mainly effects of higher trading margins as well as the use of cheaper stocks of crude oil and products during the period of maintenance shutdowns from the first half of 2018 as well as negative impact of change in the balance of other operating activity of PLN (87) million related to the lack of received in 2017 compensation for improper execution of the contract of the power plant CCGT Włocławek in the amount of PLN (97) million
- The positive impact of changes in crude oil prices on inventory valuation amounted to PLN 989 million and as a result EBITDA of the segment for 2018 amounted to **PLN 4 724 million**.

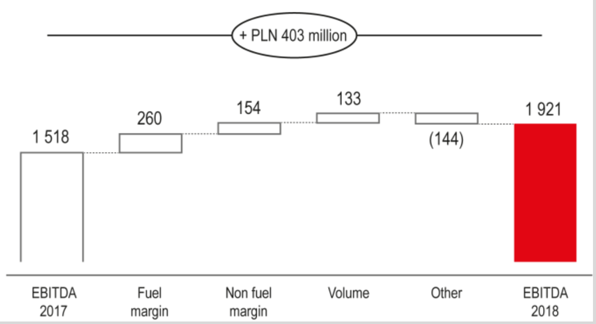
The segment's capital expenditure decreased by PLN (619) million (y/y) and amounted to PLN 733 million.

Retail Segment

TABLE 34. Basic financial data for the Retail segment.

Retail Segment, PLN million	2018	2017	2016	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Segment revenues, including:	20 483	16 530	14 712	3 953	23.9%
Sales revenues from external customers	20 483	16 530	14 712	3 953	23.9%
Sales revenues from transactions with other segments	0	0	0	0	-
Segment expenses	(18 811)	(15 251)	(13 589)	(3 560)	23.3%
Other operating income/expenses, net	(34)	(26)	(37)	(8)	30.8%
Profit from operations increased by depreciation and amortisation (EBITDA)	**1 921**	**1 518**	**1 335**	**403**	**26.5%**
Profit from operations (EBIT)	**1 638**	**1 253**	**1 086**	**385**	**30.7%**
CAPEX	458	400	276	58	14.5%

DIAGRAM 59. Retail Segment – factors impact (y/y) [PLN million].



EBITDA of the was higher by PLN 403 million (y/y) and amounted to PLN 1 921 million.

- The positive impact of higher by 5.3% (r/r) volumes of retail sales.
- The positive effect of higher fuel and non-fuel margins in the total amount of PLN 414 million (y/y).
- The other factors include mainly higher (y/y) operating costs of service stations incurred on higher sales volumes.

The segment's capital expenditure increase by PLN 58 million (y/y) and amounted to PLN 458 million.

Upstream

TABLE 35. Basic financial data for the Upstream segment.

Upstream segment, PLN million	2018	2017	2016	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	0	0	(11)	0	-
Other operating income/expenses, net	0	1	(3)	(1)	-
Profit/(Loss) from operations increased by depreciation and amortisation (EBITDA)	**0**	**1**	**(14)**	**(1)**	**-**
Profit/(Loss) from operations (EBIT)	**0**	**1**	**(14)**	**(1)**	**-**
CAPEX	0	0	0	0	-

Since 2016, the main PKN ORLEN's upstream activities has been driven by ORLEN Upstream, which operates through its Poland- and Canada-based subsidiaries.

Corporate Functions

TABLE 36. Basic financial data for Corporate Functions

Corporate Functions segment, PLN million	2018	2017	2016	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Segment revenues, including:	165	162	149	3	1.9%
Sales revenues from external customers	80	72	62	8	11.1%
Sales revenues from transactions with other segments	85	90	87	(5)	(5.6%)
Segment expenses	(817)	(754)	(745)	(63)	8.4%
Other operating income/expenses, net	(71)	(17)	(96)	(54)	317.6%
(Loss) from operations increased by depreciation and amortisation (EBITDA)	**(656)**	**(520)**	**(610)**	**(136)**	**26.2%**
(Loss) from operations (EBIT)	**(737)**	**(609)**	**(692)**	**(128)**	**21.0%**
CAPEX	167	159	115	8	5.0%

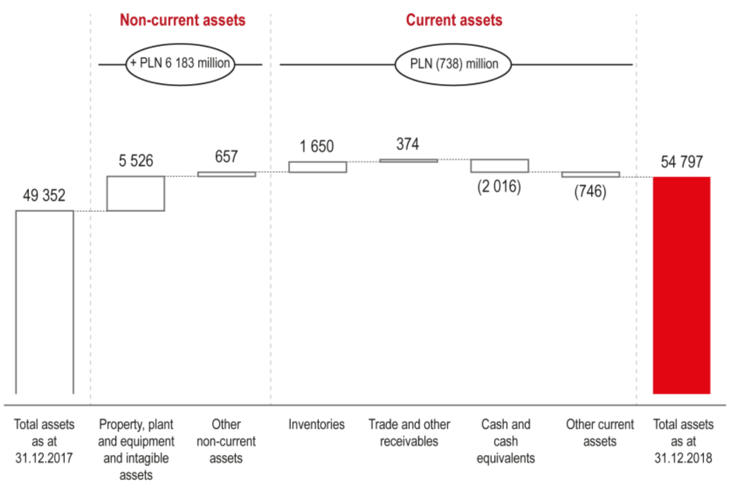
EBITDA of Corporate Functions decreased by PLN (136) million (y/y) as a result of:

- negative effect of a change in net other income/(expenses) of PLN (54) million (y/y), including mainly donations for charitable and social purposes to, among others, ORLEN's Dar Serca Foundation and Polish National Foundation – more information about the foundation's activities are presented in section 3.6.
- wage pressures from the labour market (y/y).

The segment's capital expenditure increased by PLN 8 million (y/y) and amounted to PLN 167 million and related mainly to IT projects.

5.5.2. Statement of financial position

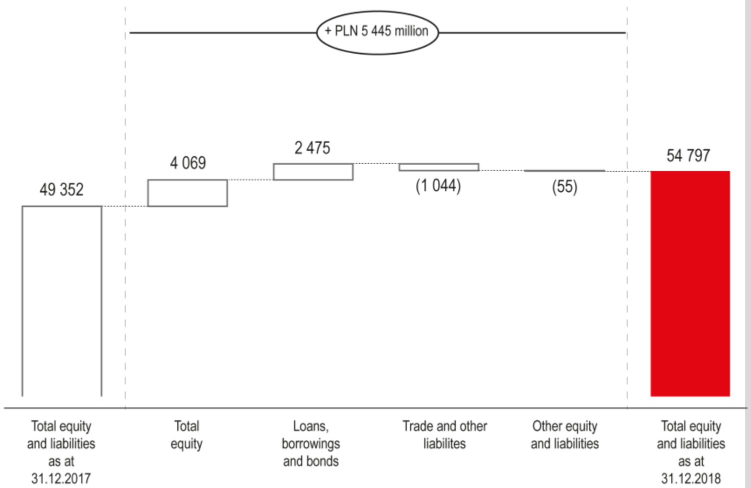
DIAGRAM 60. Selected items of financial position – Assets [PLN million].



Total assets of PKN ORLEN S.A. as at 31 December 2018 increased by PLN 5 445 million in comparison to the end of 2017.

- An increase of tangible assets mainly due to:
  - an increase of shares in related parties as a result of acquisition of Unipetrol shares in the amount of **PLN 4 222 million**, reversal of impairment losses on ORLEN Upstream shares in the amount of PLN 987 million as well as capital increase and additional payments to equity of ORLEN Upstream in the amount of **PLN 248 million** and Baltic Power in the amount of **PLN 54 million**.
  - an increase by **PLN 824 million** of other financial assets as a result of reclassification of loans granted to Upstream Canada.
- An increase of current assets mainly due to:
  - an increase in inventories as a result of higher prices of raw materials and as a consequence of products.
  - an increase in trade and other receivables resulting frm higher product prices as well as higher volume sales
  - a decrease in cash.
- A decrease of other current assets mainly due to reclassification of the loans mentioned above.

DIAGRAM 61. Selected items of financial position – Total equity and liabilities [PLN million].



- Equity as at 31 December 2018 amounted to **PLN 31 634 million**, an increase of **PLN 4 069 million** relative to the end of 2017, mainly due to:
  - recognition of the 2018 net profit of **PLN 5 434 million**,
  - payment of dividend from the 2017 profit of **PLN (-) 1 283 million**,
  - decrease in the hedging and revaluation reserves in the total amount pf **PLN (56) million**.
- As at 31 December 2018, debt increased by **PLN 2 475 million (y/y)** to **PLN 9 763 million**, due to taking of borrowings, loans and bonds net of **PLN 2 233 million,** the effect of net exchange losses of **PLN 242 million** on remeasurement of borrowings denominated in foreign currencies and valuation of debt.
- Decrease in trade and other liabilities as at the end of 2018 mostly due to early payment for purchases of crude oil and trade liabilities.

For the complete separate statement of financial position, see section 2 of the Financial Statements of PKN ORLEN for 2018.

5.5.3. PKN ORLEN's shares in related parties presented as long-term investments – synthetic financial data of the most significant entities.

Unipetrol 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. In 2005 PKN ORLEN acquired 62.99% of Unipetrol a.s. shares. In 2018 PKN ORLEN completed the process of acquisition of the rest of the shares from the shareholders and as a result became a 100% owner of Unipetrol.

The core business activity of the Unipetrol Group is crude oil throughput, production and distribution of refining, petrochemical and chemical products.

TABLE 37. Basic operation and financial data of the Unipetrol Group (complaint with the data prepared for the purpose of the ORLEN Group consolidation).

Item	Unit	2018	2017	2016	change	change%
1	2	3	4	5	6=(3-4)	7=(3-4)/4
Sales revenue	PLN million	21 745	19 811	14 179	1 934	9.8%
Profit from operations under LIFO increased by depreciation and amortisation (EBITDA LIFO) before impairment allowances[1]	**PLN million**	**1 454**	**2 394**	**1 652**	**(940)**	**(39.3%)**
Profit from operations increased by depreciation and amortisation (EBITDA)	PLN million	2 079	2 408	1 939	(329)	(13.7%)
Net profit	PLN million	1 406	1 403	1 308	3	0.2%
Equity capital	PLN million	9 811	8 123	6 794	1 688	20.8%
Total assets	PLN million	14 683	12 361	11 215	2 322	18.8%
Employment as at 31 December	employees	4 835	4 720	4 576	115	2.4%

1) Impairment allowances of non-current assets recognized in 2018, 2017 and 2016 amounted to: PLN 741 million, PLN (12) million and PLN 300 million respectively.

ORLEN Lietuva 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 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 market, land and sea export utilising Klajpedos Nafta terminal.

TABLE 38. Basic operation and financial data of the ORLEN Lietuva Group (complaint with the data prepared for the purpose of the ORLEN Group consolidation).

Item	Unit	2018	2017	2016	change	change%
1	2	3	4	5	6=(3-4)	7=(3-4)/4
Sales revenue	PLN million	20 093	17 042	14 279	3 051	17.9%
Profit from operations under LIFO increased by depreciation and amortisation (EBITDA LIFO) before impairment allowances[1]	**PLN million**	**201**	**1 074**	**1 093**	**(873)**	**(81.3%)**
Profit from operations increased by depreciation and amortisation (EBITDA)	PLN million	192	1 142	1 006	(950)	(83.2%)
Net profit	PLN million	97	908	944	(811)	(89.3%)
Equity capital	PLN million	1 961	1 692	1 639	269	15.9%
Total assets	PLN million	3 688	3 994	3 485	(306)	(7.7%)
Employment as at 31 December	employees	1 631	1 612	1 582	19	1.2%

1) Impairment allowances of non-current assets recognized in 2018, 2017 and 2016 amounted to: PLN 0 million, PLN (1) million and PLN (10) million respectively.

Anwil S.A.

Anwil S.A. was established on 15 March 1993 due to transformation of the State-owned company into sale-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 2018.

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 39. Basic operation and financial data of Anwil S.A. (complaint with the data prepared for the purpose of the ORLEN Group consolidation).

Item	Unit	2018	2017	2016	change	change %
1	2	3	4	5	6=(3-4)	7=(3-4)/4
Sales revenue	PLN million	2 345	2 413	2 474	(68)	(2.8%)
Profit from operations increased by depreciation and amortisation (EBITDA) before impairment allowances[1]	**PLN million**	**371**	**502**	**578**	**(131)**	**(26.1%)**
Profit from operations increased by depreciation and amortisation (EBITDA)	PLN million	371	502	575	(131)	(26.1%)
Net profit	PLN million	209	325	533	(116)	(35.7%)
Equity capital	PLN million	1 060	1 157	1 234	(97)	(8.4%)
Total assets	PLN million	1 521	1 619	1 594	(98)	(6.1%)
Employment as at 31 December	employees	1 323	1 268	1 244	55	4.3%

1) Impairment allowances of non-current assets in 2018, 2017 and 2016 amounted to: PLN 0 million, PLN 0 million and PLN (3) 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 2018. ORLEN Deutschland GmbH carries out mostly activities related to retail sales of fuel activities in Germany.

TABLE 40. Basic operation and financial data of ORLEN Deutschland GmbH (complaint with the data prepared for the purpose of the ORLEN Group consolidation).

Item	Unit	2018	2017	2016	change	change%
1	2	3	4	5	6=(3-4)	7=(3-4)/4
Sales revenue	PLN million	13 907	14 850	13 704	(943)	(6.4%)
Profit from operations under LIFO increased by depreciation and amortisation (EBITDA LIFO) before impairment allowances[1]	**PLN million**	**537**	**286**	**295**	**251**	**87.8%**
Profit/(Loss) from operations increased by depreciation and amortisation (EBITDA)	PLN million	537	285	294	252	88.4%
Net (loss)	PLN million	298	116	129	182	156.9%
Equity capital	PLN million	679	603	518	76	12.6%
Total assets	PLN million	1 756	1 691	1 622	65	3.8%
Employment as at 31 December	employees	160	155	146	5	3.2%

1) Impairment allowances of non-current assets in 2018, 2017 and 2016 amounted to: PLN 0 million, PLN (1) million and PLN (1) million respectively.

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 2018. The business activities of the Company include: exploration and recognition of hydrocarbons reserves, extraction of crude oil and natural gas.

TABLE 41. Basic operation and financial data of the ORLEN Upstream Group (complaint with the data prepared for the purpose of the ORLEN Group consolidation)

Item	Unit	2018	2017	2016	change	change%
1	2	3	4	5	6=(3-4)	7=(3-4)/4
Sales revenue	PLN million	605	526	460	79	15.0%
Profit from operations under LIFO increased by depreciation and amortisation (EBITDA LIFO) before impairment allowances[1]	**PLN million**	**310**	**294**	**270**	**16**	**5.4%**
Profit/(Loss) from operations increased by depreciation and amortisation (EBITDA)	PLN million	292	154	197	138	89.6%
Net (loss)	PLN million	(91)	(30)	(189)	(61)	203.3%
Equity capital	PLN million	2 953	2 800	2 768	153	5.5%
Total assets	PLN million	4 334	3 949	3 946	385	9.7%
Employment as at 31 December	employees	147	148	146	(1)	(0.7%)

1) Impairment allowances of non-current assets recognized in 2018, 2017 and 2016 amounted to: PLN (18) million, PLN (140) million and PLN (73) million respectively.

5.5.4. Statement of cash flows

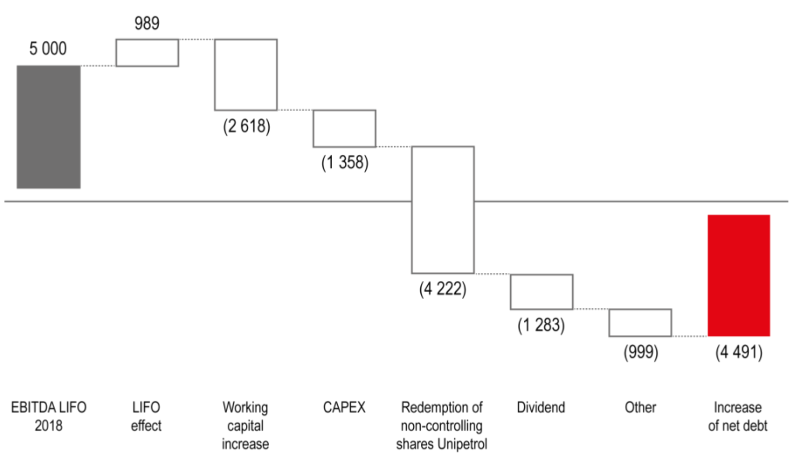
TABLE 42. Selected items of statement of cash flows.

Item, PLN million	2018	2017	2016	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Net cash from operating activities	**2 695**	**4 445**	**5 434**	**(1 750)**	**(39.4%)**
Change in working capital	(2 618)	(814)	502	**(1 804)**	**221.6%**
Net cash (used in) investing activities	**(4 755)**	**(405)**	**(1 873)**	**(4 350)**	**1 074.1%**
Net cash (used in) financing activities	**16**	**(1 092)**	**(1 970)**	**1 108**	**-**
Net increase/(decrease) in cash and cash equivalents	**(2 044)**	**2 948**	**1 591**	**(4 992)**	**-**
Effect of exchange rate changes on cash and cash equivalents	28	(34)	8	62	-
Cash and cash equivalents, beginning of the period	5 477	2 563	964	2 914	113.7%
Cash and cash equivalents, end of the period	**3 461**	**5 477**	**2 563**	**(2 016)**	**(36.8%)**

In 2018, after taking into account revaluation of cash attributable to exchange differences, the cash balance decreased by PLN (2 016) million (y/y), to PLN 3 461 million as at 31 December 2018.

For the complete separate statement of cash flows, see section 4 of the Financial Statements of PKN ORLEN for 2018.

DIAGRAM 62. Free cash flow [PLN million].



An increase in net debt by PLN (4 491) million relative to the end of 2017.

- EBITDA LIFO in the amount of PLN 5,000 million with the positive impact of changes in crude oil prices on inventory valuation in the amount of PLN 989 million.
- Negative impact of increase in net working capital by PLN (2 618) million mainly due to an increase in inventories driven by higher prices of crude oil and products.
- Payments on acquisition of property, plant and equipment, intangible assets and perpetual usufruct rights to land of PLN (1 358) million.
- Redemption of non-controlling shares Unipetrol a.s. in the amount of PLN (4 222) million.
- Dividends paid in the amount of PLN (1 283) million, i.e. PLN 3 per share.
- Other: mainly income tax paid in the amount of PLN (548) million and interest paid in the amount of PLN (305) million.

5.5.5. Differences between financial results disclosed in the full-year report and previously published financial forecasts for the year

PKN ORLEN did not publish any financial forecasts for 2018.

The change of PKN ORLEN results for 2018, relative to the data presented in Q42018 report issued on 24 January 2019 concerns mainly the reversal of impairment losses on ORLEN Upstream shares in the amount of PLN 987 million, what increased net profit, relative to net profit presented in Q42018 report, by PLN 987 million.

Detailed information on changed items of Statement of profit or loss and other comprehensive income and Statement of financial position were presented in section 6 of the Financial Statements of PKN ORLEN for 2018.

5.6. DEBT AND FINANCING SOURCES

5.6.1. Loans, borrowings and debt securities

PKN ORLEN cooperates with banks that have high credit ratings and a strong market position and offer terms that allow the Company to minimise costs of banking services. This approach makes it possible to use high quality banking services and maintain security of surplus cash placed with the banks.

TABLE 43. Sources of financing.

Item, PLN million	2018	2017	2016	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Bank Loans	2 151	0	757	2 151	-
Borrowings	5 386	5 257	5 578	129	2.5%
Debt securities	2 226	2 031	2 503	195	9.6%
Financial indebtedness[1]	**9 763**	**7 288**	**8 838**	**2 475**	**34.0%**
By maturity:					
Non-current	8 641	6 736	7 503	1 905	28.3%
Current	1 122	552	1 335	570	103.3%

1) doesn't include liabilities from finance lease.

Detailed information on the parameters of credit agreements and financing banks are described in section 4.3.2.

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 2018 amounted to PLN 6 302 million. In 2018 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.

Additional information on the debt structure of PKN ORLEN is presented in section 8.2.6.1 of the Financial Statements of PKN ORLEN for 2018.

PKN ORLEN may issue bonds within the set limits as well as purchase bonds issued by companies from the ORLEN Group. At the end of 2018, the total value of PKN ORLEN issued bonds amounted to PLN 2 226 million. Detailed information concerning the bond issuance is set out in section 4.3.3.

5.6.2 Guarantees, sureties and other contingent liabilities

As at 31 December 2018, PKN ORLEN recognised in off-balance sheet records, rights of perpetual usufruct of land amounted to PLN 627 million, received under administrative decision.

As at 31 December 2018 PKN ORLEN possessed off-balance liabilities arising out of the issued guarantees and sureties for the overall of PLN 12 661 million, which represents an increase by PLN 583 million in comparison to the end of 2017. In 2018 the amount included:

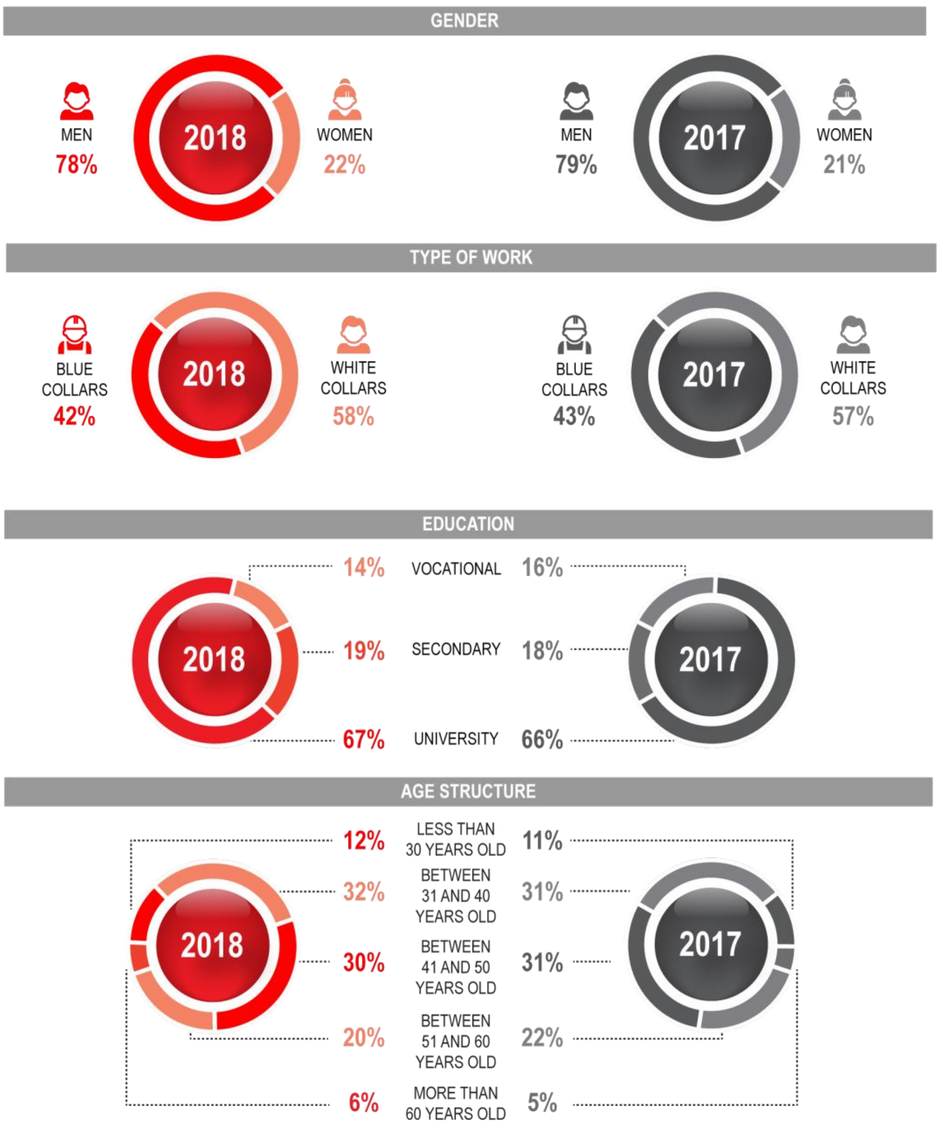
- sureties and guarantees issued to subsidiaries to the benefit of third parties of PLN 9 962 million, which related mainly to timely payment of liabilities by the subsidiaries
- securities for excise and excise duty on products and goods undergoing the procedure of suspended excise collection in the amount of PLN 2 231 million,
- guarantees concerning liabilities towards third parties issued in the course of normal business operations mainly relate to: 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 468 million.

Additional information on sureties and guarantees is presented in section 8.3.5.4 of the Financial Statement of PKN ORLEN for 2018. Contingent liabilities were presented in section 8.4.5.2 of the Financial Statement of PKN ORLEN for 2018.

5.7. EMPLOYMENT

The ongoing development projects in logistics, procurement, power generation, IT, and retail sales brought about an increase in PKN ORLEN's headcount by 270 employees as at the end of 2018.

DIAGRAM 63. Employment structure in professional groups and age structure in PKN ORLEN.



Personnel programs realised in PKN ORLEN are described in section 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 agreements

REMUNERATION POLICY

Remuneration for Members of the Management Board at PKN ORLEN is determined by the Supervisory Board taking into account the relevant resolution of the General Meeting, in connection with the Act on the Rules of Remunerating Persons Who Direct Certain Companies, and recommendations of its Nomination and Remuneration Committee. The main components of the Management Board Members remuneration include:

- fixed monthly base pay,
- annual bonus (variable pay) depending on their performance against certain quantitative and qualitative targets and achievement of identifiable separate objectives,
- severance pay for contract termination by the Company,
- non-compete compensation.

All components of the remuneration are governed by a contract between a Member of the Management Board and the Company.

Benefits for directors reporting to the Management Board at PKN ORLEN may include, in particular: a company car, variable universal life insurance, additional medical cover for the director and their closest family, including the right to preventive healthcare, sports programmes and rehabilitation, partial coverage of rented accommodation costs, coverage of relocation costs if the relocation takes place during the director's employment, benefits defined in the Rules of Participation in the Company Social Benefits Fund, and the right to participate in the Employee Pension Plan on the terms applicable at the Company.

The remuneration policy in place at PKN ORLEN supports the achievement of the Company's goals, including in particular a long-term increase of its shareholder value and stability of operations.

Bonus systems for key executive personnel of the ORLEN Group

The bonus 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. The targets set are qualitative as well as quantitative and are settled after the end of the year for which they were set.

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

In the second half of 2018 based on the resolution of the Ordinary General Meeting of PKN ORLEN of 17 July 2018 changes were introduced to the contracts of the Management Board Members of PKN ORLEN regarding non-competition.Pursuant to the contracts, the Management Board Members of PKN ORLEN and the Management Board Members of the ORLEN Group companies are obliged to refrain from competitive activities for a period of 6 months, after the date of termination of the contract. During this period, they receive a remuneration (compensation) of 50% or 100% of the six-month basic salary, payable in 6 equal monthly instalments. Non-competition clauses in contracts after termination of the function of the Management Board Member shall enter into force only after 3 or 6 months as the Management Board Member.

In addition, contracts provide for the payment of severance pay in the event of termination or cancelation of the contract by the Company, for reasons other than a breach of basic, essential obligations under the contract, provided fulfilling the function of the Management Board Member for a period of at least 12 months. In this case, the severance pay is three times monthly basic salary.

Directors directly reporting to the PKN ORLEN Management Board are normally required to refrain from competitive activities for a period of 6 months. During this time, they receive a remuneration of 50% of the six-month basic salary, payable in 6 equal monthly instalments. The severance pay for terminating the contract by the Employer is normally six times monthly basic salary.

Additional information regarding general terms of remuneration, conditions for granting annual bonuses, and non-competition agreements are presented in section 6.8.

5.8.2 Remuneration of management and supervisory bodies

TABLE 44. Remuneration paid to the Company's Management Board Members fulfilling their function in 2018 and 2017 [PLN thousand].

Item	2018	2017
Daniel Obajtek [1)]	867	-
Wojciech Jasiński [2)]	83	1 226
Mirosław Kochalski [3)]	83	1 127
Sławomir Jędrzejczyk [4)]	-	796
Armen Artwich [5)]	284	-

Piotr Chełmiński [6)]	-	676
Patrycja Klarecka [7)]	448	-
Zbigniew Leszczyński	859	943
Krystian Pater [8)]	194	1 012
Wiesław Protasewicz [9)]	854	396
Michał Róg [5)]	304	-
Maria Sosnowska [10)]	83	396
Józef Węgrecki [11)]	686	-
Total:	**4 745**	**6 572**

[1)] Remuneration for the period of holding the position of President of the Management Board since 6 February 2018
[2)] Remuneration for the period of holding the position of President of the Management Board to 5 February 2018
[3)] Remuneration for the period of holding the position of Vice-President of the Management Board to 5 February 2018
[4)] Remuneration for the period of holding the position of Vice-President of the Management Board to 30 June 2017
[5)] Remuneration for the period of holding the position of Member of the Management Board since 1 September 2018
[6)] Remuneration for the period of holding the position of Member of the Management Board to 30 June 2017
[7)] Remuneration for the period of holding the position of Member of the Management Board since 24 June 2018
[8)] Remuneration for the period of holding the position of Member of the Management Board to 22 March 2018
[9)] Remuneration for the period of holding the position of Member of the Management Board since 1 July 2017
[10)] Remuneration for the period of holding the position of Member of the Management Board since 1 July 2017 to 5 February 2018
[11)] Remuneration for the period of holding the position of Member of the Management Board since 23 March 2018

TABLE 45. Bonuses potentially due to Management Board Members in function in the given year to be paid in the following year [PLN thousand].

Item	2018	2017
Daniel Obajtek [1)]	766	-
Wojciech Jasiński [2)]	-	1 177
Mirosław Kochalski [2)]	-	1 117
Sławomir Jędrzejczyk [3)]	-	750
Armen Artwich [4)]	284	
Piotr Chełmiński [3)]	-	630
Patrycja Klarecka [5)]	443	-
Zbigniew Leszczyński	853	936
Krystian Pater [6)]	-	966
Wiesław Protasewicz [7)]	853	396
Michał Róg [4)]	284	-
Maria Sosnowska [8)]	-	396
Józef Węgrecki [9)]	661	-
Total:	**4 144**	**6 368**

[1)] Bonus potentially due for holding position for the period since 6 February 2018
[2)] Bonus potentially due for holding position for the period to 5 February 2018
[3)] Bonus potentially due for holding position for the period since 30 June 2017
[4)] Bonus potentially due for holding position for the period since 1 September 2018
[5)] Bonus potentially due for holding position for the period since 24 June 2018
[6)] Bonus potentially due for holding position for the period to 22 March 2018
[7)] Bonus potentially due for holding position for the period since 1 July 2017
[8)] Bonus potentially due for holding position for the period since 1 July 2017 roku to 5 February 2018
[9)] Bonus potentially due for holding position for the period since 23 March 2018

In 2018, based on the court settlement, an annual bonus for year 2011 with interest, in the amount of PLN 615 thousand, was paid to the former Management Board's Member, Mr Marek Serafin.

TABLE 46. Remuneration and other benefits paid and due to former Management Board Members [PLN thousand].

Item	2018	2017
Wojciech Jasiński 1)	320	-
Mirosław Kochalski 1)	427	-
Sławomir Jędrzejczyk 2)	-	750
Piotr Chełmiński 2)	-	630
Krystian Pater 1)	427	-
Total:	**1 174**	**1 380**

1) In 2018 severance and non-competition compensation paid.
2) In 2017 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 2018 and 2017 were acting as the Management or 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. As at the 31 December 2018 no Member of the PKN ORLEN Management Board held position in Supervisory Board of Unipetrol a.s.

TABLE 47. Remuneration of the Members of the Supervisory Board of PKN ORLEN [PLN thousand].

Item	2018	2017
Izabela Felczak-Poturnicka 1)	124	53
Angelina Sarota 2)	11	124
Agnieszka Biernat-Wiatrak 3)	105	-
Mateusz Bochacik	117	112
Adrian Dworzyński 2)	10	110
Artur Gabor 4)	-	74
Andrzej Kapała 5)	59	-
Wojciech Kryński 1)	114	53
Agnieszka Krzętowska 2)	10	114
Radosław Kwaśnicki	114	111
Jadwiga Lesisz 6)	277	-
Małgorzata Niezgoda 7)	113	-
Wiesław Protasewicz 8)	-	57
Józef Węgrecki 9)	101	-
Anna Wójcik 5)	59	-
Total:	**1 214**	**808**

1) For the period of holding position since 30 June 2017
2) For the period of holding position to 2 February 2018
3) For the period of holding position since 2 February 2018
4) For the period of holding position to 31 August 2017
5) For the period of holding position since 26 June 2018
6) For the period of holding position since 2 February 2018, since 23 March 2018 to 23 June 2018 delegated to temporarily perform duties of the Member of Management Board
7) For the period of holding position since 5 January 2018
8) For the period of holding position to 28 June 2017
9) For the period of holding position since 5 February 2018 to 22 March 2018, during the period delegated to temporarily perform duties of the Member of Management Board

Remuneration of key executive personnel of the ORLEN Group

TABLE 48. Remuneration of key executive personnel of the ORLEN Group [PLN thousand].

Item	2018	2017
Remuneration and other benefits of members of key executive personnel:		
- other key executive personnel of the Company	39 479	29 707
- key executive personnel of the subsidiaries of the ORLEN Group	139 128	128 974
Total:	**178 607**	**158 681**

6. CORPORATE GOVERNANCE STATEMENT

6.1. CORPORATE GOVERNANCE RULES

In 2018, PKN ORLEN applied all the principles included in the code "Best Practice for GPW Listed Companies 2016" ("Code of Best Practice") applicable on the Warsaw Stock Exchange. The code is available on the Warsaw Stock Exchange website https://www.gpw.pl/best-practice and on the PKN ORLEN corporate website www.orlen.pl in the section dedicated to the Company's shareholders https://www.orlen.pl/EN/InvestorRelations/ShareholderServicesTools/Pages/WSEBestPractice.aspx .

Communication with the capital market

The Company communicates with the capital market through the following channels:

- Investor Relations section of its corporate website, which provides financial and operating data and information on the Company's macro environment.
- Expert's blog written by PKN ORLEN's Chief Economist at http://napedzamyprzyszlosc.pl/, containing commentary on current market developments, expert publications, and coverage of industry conferences.
- Social media: Corporate Twitter account (https://twitter.com/PKN_ORLEN); Press Officer's Twitter account (https://twitter.com/RzecznikORLEN); Corporate Facebook page (https://www.facebook.com/ORLEN.Official); LinkedIn (https://pl.linkedin.com/company/pkn-orlen-s.a.); YouTube (https://www.youtube.com/channel/UC4n9_g-u8r3JErOSyOdECZQ/featured) and Instagram (https://www.instagram.com/pkn.orlen/).
- Closed one-on-one or group meetings, held both in Poland and abroad, also as teleconferences.
- Press conferences open to the general public, streamed live over the Internet and interpreted into English. The conferences follow all major corporate events such as the release of quarterly results or strategy announcement.
- Series of meetings with investors, held both in Poland and abroad (roadshows).
- Meetings of capital market participants with the Company's key managers in the headquarters and places where PKN ORLEN conducts its operations (site visits).
- The Investor and Analyst Days organised from time to time – workshops concerning various areas of the Company's activity, run by representatives of the Management Board, executive directors and selected managers.

PKN ORLEN's achievements in 2018:

- Innovative ORLEN IN WALLET scheme for individual shareholders was launched, offering discounts on products sold at the Company's service stations and opportunity to enrol on the Investment Academy programme run under the auspices of CFA Society Poland.
- Sixth in a row dividend payout of PLN 3 per share.
- Retail bond issue programme with a total value of PLN 1bn was closed.
- Quarterly and half-year reports were issued around 24 days after closing the relevant financial periods.
- PKN ORLEN was selected for inclusion in the RESPECT Index of socially responsible companies.

Company's response to publicly voiced opinions and information injuring its reputation

At PKN ORLEN, there is an internal regulation in place concerning image-building activities, interaction with the media as well as passing of information, relevant to PKN ORLEN's image, to the Corporate Communication Department's Executive Director. It requires a multi-stage verification of information concerning the Company and its representatives before it is made public.

The regulation also sets out the rules of response where any opinions or information shared in the public domain may harm PKN ORLEN's reputation. Such response is coordinated by the Executive Director for Corporate Communication.

Corporate Social Responsibility activities of PKN ORLEN

PKN ORLEN's corporate social responsibility is to create business value in a sustainable manner that ensures consistency between its business and social objectives, with future generations in mind. This broad approach to responsibility requires the implementation of CSR activities across all business areas, CSR activities involve educating stakeholders and inspiring in them a sense of responsibility, protecting health and safety of employees, commitment to employee development, optimisation of environmental impacts, promoting ethical values, anti-corruption measures, respect for human rights, customer focus and responsiveness to customer needs, and building partnership-based relations with business partners.

In 2018, PKN ORLEN pursued its CSR strategy adopted in previous years, but also commenced work to draft the 'ORLEN Group CSR Strategy until 2022'. The latter document was approved by the Company"s Strategy Committee in December 2018. The strategic priorities are to build PKN ORLEN's image as a leader of CSR and sustainable development, seek to achieve consistency between PKN ORLEN's business and CSR objectives, generate CSR synergies across the Group, commit to the United Nations' Sustainable Development Goals, and support the 'Accessibility Plus' programme.

PKN ORLEN's sponsorship focus is on selected themes including professional and amateur sports, culture and art, promotion of the Polish economy, international promotion of Poland, education and knowledge advancement, social projects, and initiatives in the areas of national history, memory and tradition. PKN ORLEN is committed to engagement with its local communities. Special attention is paid to Płock, where PKN ORLEN delivers cross-sectoral partnerships, charity, sponsorship and volunteer service projects. In 2018, as many as 98 such projects were run in Płock. An important category of activities are social sponsorship events, aimed to improve the quality of local residents' lives, chiefly in small communities, and to build strong relations with all stakeholders. A total of 173 such projects were run by the Company.

PKN ORLEN communicates its CSR initiatives via the Responsible Business section of its corporate website and its annual integrated reports available online (https://www.orlen.pl/PL/Odpowiedzialny_Biznes/Strony/default.aspx). The website's content includes the Company's Sponsorship Policy https://www.orlen.pl/PL/Odpowiedzialny_Biznes/Sponsoring/Strony/Sponsoring.aspx) and Charitable Giving Policy (https://www.orlen.pl/PL/Odpowiedzialny_Biznes/Dobroczynnosc/Strony/Dobroczynnosc.aspx).

6.2. CONTROL, RISK MANAGEMENT AND COMPLIANCE SYSTEM

The Company's system of internal control and risk management in the preparation of financial statements is implemented through:

- verification whether uniform accounting policies are applied by the ORLEN Group companies as regards the recognition, measurement and disclosures in accordance with the International Financial Reporting Standards (IFRSs) as adopted by the European Union,
- following and monitoring compliance with the relevant accounting standards,
- internal controls, including separation of duties, multi-stage data verification, accuracy reviews of data received and independent checks,
- following uniform templates of separate and consolidated accounts and periodic verification whether they are properly applied by the ORLEN Group companies,
- verification of the consistency of the ORLEN Group companies' financial reports with data entered into the integrated IT system used to prepare the ORLEN Group's consolidated financial statements,
- auditor's review of Q1, H1 and Q3 financial statements and audit of full-year financial statements of PKN ORLEN and the ORLEN Group,
- procedures to authorise, approve and assess financial statements before they are issued,
- independent and objective evaluation of the risk management and internal control systems.

Economic events at PKN ORLEN are recorded in an integrated financial accounting system. Security and availability of information contained in the financial accounting system are controlled at all levels of the database, applications and presentations, as well as at the operating system level. System integration is ensured by data entry control systems (validation, authorisation, a list of values) and logs of changes. PKN ORLEN keeps its IT system up to date with the changing accounting policies and other legal requirements. PKN ORLEN's solutions are implemented into systems of the ORLEN Group companies.

In order to ensure that uniform accounting policies are applied, the ORLEN Group companies have to follow, for the purpose of preparing consolidated financial statements, the accounting policy adopted by PKN ORLEN and approved by the ORLEN Group companies (the "Accounting Policy"). The Accounting Policy is periodically updated to ensure compliance with any new legislation.

Consolidated financial statements are prepared based on the integrated IT system where the process of consolidating data sourced from reporting packages provided by each ORLEN Group company is performed. Designed for financial management and reporting purposes, the system enables the unification of financial information. Performance and budget-related data, forecasts and statistics are gathered in one place, which ensures direct control and data compatibility.

The data is reviewed for cohesion, completeness and consistency, which is achieved thanks to embedded controls checking the compatibility of data entered by the respective companies.

In order to keep mitigating risks associated with the preparation of financial statements, they are reviewed by an auditor quarterly, i.e. more often than required by applicable laws. Q1, H1 and Q3 financial statements are reviewed by the auditor, whereas full-year financial statements are subject to an audit.

As per the relevant procedure in place at PKN ORLEN (meeting all applicable requirements), the auditor of the Company's financial statements is appointed by the Supervisory Board based on a recommendation from the Audit Committee and a report on the tender process held by the Audit Committee. Deloitte Audyt Spółka z ograniczoną odpowiedzialnością, Spółka komandytowa has been appointed as a qualified auditor of PKN ORLEN's financial statements for 2017–2018. During audit work, the auditor makes an independent assessment of the reliability and accuracy of separate and consolidated financial statements and confirms that the internal control and risk management system is effective. The auditor presents the audit and review findings to the Management Board and the Audit Committee of the Supervisory Board.

The Audit Committee, appointed by the Supervisory Board in the exercise of its powers, is a supervisory body with some of its powers and responsibilities defined in the Act on Statutory Auditors, Audit Firms, and Public Oversight of May 11th 2017, including the following:

- monitoring the preparation of the ORLEN Group's financial statements to ensure compliance with the Group's Accounting Policy and applicable laws,
- monitoring the independence of the qualified auditor and the auditing firm,
- monitoring the effectiveness of the internal control, internal audit and risk management systems.

The Company has in place certain procedures to authorise financial statements, under which periodic reports are submitted to the Management Board and then to the Supervisory Board's Audit Committee for its opinion. Once the Audit Committee's opinion is received and the auditor completes its review or audit of the financial statements, they are authorised for issue by the PKN ORLEN Management Board by means of a qualified electronic signature and then released to the public by the Investor Relations Office.

Full-year financial statements are also presented to the Supervisory Board for final assessment and control of the financial reporting process. The Supervisory Board is an independent body ensuring the reliability and accuracy of information disclosed in the financial statements of PKN ORLEN and the ORLEN Group.

The Financial Control, Risk and Compliance Management Office operates within the Management Board Member for Corporate Affairs function, with a primary responsibility for the implementation of internal control, risk and compliance management processes. The Office is divided into:

- Financial Control Department, responsible for detecting any irregularities and business misconduct, verifying compliance of conduct of PKN ORLEN and ORLEN Group employees with applicable laws, internal organisational rules and professional standards, estimating the impact of any potential irregularities or misconduct, defining corrective measures and designating responsible persons, as well as assessing internal organisational documents. The Department's staff carry out inspections in accordance with an annual inspection schedule (scheduled financial inspections) as well as ad hoc and preliminary inspections. Reports on scheduled and ad hoc inspections provide post-inspection orders/recommendations designed to mitigate the identified irregularities and misconduct, whereas preliminary inspections lead to the issuance of proposals of recommended actions based on the inspection findings to the extent necessary to identify any irregularities. Twice a year the Financial Control, Risk and Compliance Management Office prepares a report for the Company's Management Board on the completed financial inspections and progress in the implementation of post-inspection orders/recommendations,

- Enterprise Risk Management Department, which coordinates – in line with the applicable policy and procedure – the enterprise risk management process by providing tools and methodological support to participants of the risk self-assessment process and testing of controls deployed at PKN ORLEN and the Group companies. Its tasks are to support business areas in the implementation of project objectives, with a minimum expense of work and optimisation of the project value by carrying out regular training sessions in identification, description and assessment of project-related risks, as well as workshops and consultations for project managers and other persons involved in project work. Its work also includes strategic risk management, from monitoring, to assessment to reporting of risks related to the delivery of strategic objectives. The Enterprise Risk Management Department prepares regular reports on risk management at PKN ORLEN and other ORLEN Group companies, which are then presented to the relevant Management Boards,
- Compliance Management Department, which supervises compliance by the ORLEN Group companies with applicable laws, internal regulations, voluntary standards of conduct and ethical standards. The key objective of the ORLEN Group's compliance system is to proactively monitor the regulatory environment of all corporate business processes and to ensure a uniform approach to implementing and reporting compliance requirements across the Group. At PKN ORLEN, the compliance system is a dispersed function, where compliance risk is managed by Directors reporting directly to a Management Board Member under the supervision of the Head of the Financial Control, Risk and Compliance Management Office. The compliance management process is regularly reported to the Company's Management and Supervisory Boards.

6.3. MAJOR SHAREHOLDINGS

In 2018 and until the date of authorisation of this report, there were no changes in the structure of shareholders holding more than 5% of the PKN ORLEN share capital. The number of shares held by shareholders is presented based on the most recent official data acquired by the Company.

The Company's Articles of Association do not impose any restrictions on the transferability of PKN ORLEN shares. However, such restrictions may be stipulated by generally applicable laws including, without limitation, the Act on State Property Management and the Act on Control of Certain Investments.

TABLE 49. PKN ORLEN's shareholding structure as at January 1st 2018, December 31st 2018 and the date of authorisation of this report.

Shareholder	Number of shares and votes at a general meeting (as at Jan 1 2018*)	Percentage of share capital and total voting rights at the General Meeting (as at Jan 1 2018*)	Number of shares and voting rights at the General Meeting (as at Dec 31 2018**)	Percentage of share capital and total voting rights at the General Meeting (as at Dec 31 2018**)	Number of shares and voting rights at the General Meeting (as at the report authorisation date**)	Percentage of share capital and total voting rights at the General Meeting (as at the report authorisation date**)
State Treasury	117 710 196	27.52%	117 710 196	27.52%	117 710 196	27.52%
Nationale-Nederlanden OFE	33 000 000	7.72%	30 000 000	7.01%	30 000 000	7.01%
Aviva OFE	29 900 000	6.99%	28 240 000	6.60%	28 240 000	6.60%
Others	247 098 865	57.77%	251 758 865	58.87%	251 758 865	58.87%
Total	**427 709 061**	**100.00%**	**427 709 061**	**100.00%**	**427 709 061**	**100.00%**

** According to information from the PKN ORLEN AGM convened for June 30th 2017.*
*** According to information from the PKN ORLEN AGM convened for June 26th 2018 and adjourned to July 17th 2018.*

6.4. SPECIAL CONTROL POWERS AND VOTING RIGHTS

Detailed rules for the exercise of special control powers and voting rights are laid down in PKN ORLEN's Articles of Association. According to the provisions of the Articles of Association, one PKN ORLEN share confers one voting right at the Company's General Meeting. The voting rights of shareholders have been capped in the Articles of Association so that none of them may exercise more than 10% of total voting rights existing at the Company as at the date when the General Meeting is held. The cap on voting rights does not

apply to the State Treasury and the depositary bank which has issued, on the basis of an agreement with the Company, depositary receipts in respect of Company shares (if this entity exercises voting rights conferred by Company shares).
Shareholders whose voting rights are aggregated or reduced are jointly referred to as a "Shareholder Grouping". Detailed rules of such aggregation and reduction are specified in the Articles of Association. Shareholders forming a Shareholder Grouping may not exercise more than 10% of total voting rights existing at the Company as at the date when the General Meeting is held.
If the aggregated number of shares registered at the General Meeting by shareholders forming a Shareholder Grouping exceeds 10% of total voting rights at the Company, the voting rights resulting from the number of shares held are subject to reduction, the rules of which have been specified in detail in the Articles of Association.
The cap on voting rights described above does not apply to subsidiaries of the State Treasury.

The State Treasury is entitled to appoint and remove one Member of the Supervisory Board. Furthermore, one Member of the PKN ORLEN Management Board is appointed and removed by the Supervisory Board upon the State Treasury's motion.

Additionally, in accordance with the Articles of Association, as long as the State Treasury is entitled to appoint a Member of the Supervisory Board, a resolution granting consent for transactions involving any sale or encumbrance of shares in the following companies: Naftoport Sp. z o.o., Inowrocławskie Kopalnie Soli S.A. as well as the company to be established to operate the pipeline transport of liquid fuels, will require a vote in favour of its adoption by the Supervisory Board Member appointed by the State Treasury.

Special rights vested in the State Treasury as the Company's shareholder may also result from generally applicable provisions of law, i.e:

- the Act on Special Rights Vested in the Minister Competent for Energy and their Exercise in Certain Capital Companies or Groups Conducting Business Activities in the Electricity, Crude Oil and Gas Fuel Sectors, dated March 18th 2010;
- the Act on Control of Certain Investments, dated of July 24th 2015;
- the Act on State Property Management, dated December 16th 2016.

6.5. AMENDMENTS TO ARTICLES OF ASSOCIATION

Any amendment to PKN ORLEN's Articles of Association requires a resolution of the General Meeting and has to be entered in the business register. A resolution of the General Meeting to amend the Company's Articles of Association is passed by three-quarters of votes. The General Meeting may authorise the Supervisory Board to formulate the consolidated text of the Articles of Association or make other editorial changes as set out in a resolution passed by the General Meeting.
Once the amendments to the Articles of Association are entered in the business register, PKN ORLEN publishes a relevant current report.

6.6. GENERAL MEETING

Proceedings and powers of PKN ORLEN's General Meeting are set out in the Articles of Association and the Rules of Procedure for the General Meeting, available on PKN ORLEN's website:http://www.orlen.pl/EN/Company/Pages/CorporateBylaws.aspx.
The Company sets the venue and date of a General Meeting so as to enable participation by the largest possible number of shareholders. General Meetings of PKN ORLEN are held at the Company's registered office in Płock, but may also be held in Warsaw. General Meetings may be attended by members of the media.

PKN ORLEN takes relevant measures to ensure that drafts of General Meeting resolutions contain a justification helping shareholders cast an informed vote. All the materials are available to shareholders at the Company's headquarters in Płock and office in Warsaw, as well as on the corporate website at www.orlen.pl starting from the date of a notice convening the General Meeting.

Convening and calling off the General Meeting

The General Meeting is convened by way of a notice published on the Company's website and a current report.

The Annual General Meeting should be held no later than within six months from the end of every financial year. An Extraordinary General Meeting is convened by the Management Board on its own initiative, upon the Supervisory Board's motion or upon the motion of a shareholder or shareholders representing no less than one-twentieth of the Company's share capital, within two weeks of submitting the motion. The Supervisory Board may convene an Extraordinary General Meeting if it sees fit to do so. In addition, the Supervisory Board may convene an Extraordinary General Meeting if the Management Board fails to do so within two weeks of the Supervisory Board's submitting the relevant request. An Extraordinary General Meeting may also be convened by shareholders representing at least one half of the share capital or at least one half of total voting rights at the Company.
The Company arranges for an internet broadcast of the General Meeting and offers simultaneous interpretation into English. The Company does not provide for shareholders' participation in a General Meeting using means of electronic communication through real-time bilateral communication where shareholders could take the floor during the General Meeting from a location other than the venue of the General Meeting.
Shareholders may exercise voting rights during a General Meeting either in person or through a proxy.

In accordance with the Rules of Procedure for the General Meeting, a General Meeting may be called off if there are extraordinary impediments to its holding or its holding would be obviously groundless. The cancellation or rescheduling of a General Meeting should be effected forthwith once the circumstances requiring its cancellation or rescheduling have occurred, but no later than seven days prior to the day when the General Meeting was to be held. If the cancellation or rescheduling of a General Meeting cannot be effected within the deadline specified above, the General Meeting should be held as originally scheduled. If it is impossible or excessively difficult to hold that General Meeting due to existing circumstances, the cancellation or rescheduling of the General Meeting may be effected at any time prior to the day when the General Meeting was to be held. The cancellation or rescheduling of a General Meeting is effected by way of a notice posted on the Company's website together with reasons and in compliance with other legal requirements. Only the body or person who has convened a General Meeting is entitled to cancel it. A General Meeting with the agenda containing specific issues put thereon at the request of eligible entities, or which has been convened at such request, may only be cancelled with the consent of such requesting entities.

Powers and responsibilities of the General Meeting

The General Meeting is authorised in particular to:

- review and approve the Company's full-year financial statements; annual Directors' report on the Company's operations; consolidated financial statements of the ORLEN Group and Directors' report on the ORLEN Group's 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 coverage of loss, and on the application of funds set aside from earnings,
- appoint the Supervisory Board Members, subject to the provisions of Art. 8.2 of the Articles of Association, and establish policies for their remuneration,
- increase and reduce the share capital unless the Commercial Companies Code or the Company's Articles of Association stipulate otherwise,
- decide on any claims for redress of damage caused upon the Company's formation or when managing or supervising the Company,
- grant consent to any sale or lease of the business or its organised part, and creation of limited property rights in the business or its organised part,
- grant consent to any sale of real property, perpetual usufruct or interest in real property with a net carrying value exceeding 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 funds of the Company,
- resolve to cancel shares and buy shares to be cancelled, and establish the terms of such cancellation,
- issue convertible bonds or bonds with pre-emptive rights and issue warrants,
- dissolve, liquidate and restructure the Company or merge it with another company,
- conclude group contracts within the meaning of Art. 7 of the Commercial Companies Code.

Participation in the General Meeting

In accordance with the Commercial Companies Code, the right to participate in the Company's General Meeting is vested only in persons that are the Company's shareholders sixteen days before the date of the General Meeting (record date).
Shareholders may communicate with the Company via the corporate website, using the contact form available at: http://www.orlen.pl/EN/InvestorRelations/GeneralMeetings/Contact/Pages/default.aspx, or through email (at: walne.zgromadzenie@orlen.pl). Through this channel, shareholders may send an electronic notice of proxy or proxy document enabling the identification of the principal and the proxy together with other related documentation. A section dedicated to the Company's General Meetings contains some useful materials for shareholders, including a guideline entitled "How to participate in the General Meeting", information about upcoming General Meetings along with relevant materials, materials pertaining to General Meetings held in the past, including texts of resolutions passed and video files with internet broadcasts of General Meetings.
The General Meeting may be attended by Members of the Management Board and the Supervisory Board, who can participate and speak, even if they are not shareholders, without any invitation. The Annual General Meeting may be attended by Members of the Management Board and the Supervisory Board whose mandates expired before the date of the General Meeting but who still performed their functions during the financial year for which the Directors' report and the financial statements are to be approved by the Annual General Meeting.

General Meetings may also be attended by other persons invited by the body convening the General Meeting or allowed to enter the meeting room by the Chairman, especially qualified auditors, legal and financial advisers and the Company's employees. Subject to the applicable law and with due consideration of the Company's interests, PKN ORLEN may allow its General Meetings to be attended by members of the media. The Management Board ensures that each General Meeting is attended by an independent expert in commercial law.

Voting at the General Meeting

Unless stated otherwise in the Commercial Companies Code or the Articles of Association, resolutions of the General Meeting are passed by an absolute majority of the votes cast. One PKN ORLEN share confers one voting right at the Company's General Meeting. Limitations on the shareholders' voting rights are described in the section on special control powers and voting rights.

General Meetings in 2018

In 2018 two General Meetings were held: an Extraordinary General Meeting held on February 2nd 2018 and the Annual General Meeting held on June 26th 2018, which was adjourned and then resumed on July 17th 2018.

During the Extraordinary General Meeting, the Company's shareholders amended Resolution No. 4 of the Extraordinary General Meeting of January 24th 2017 on the remuneration policy for persons directing certain companies, setting up a list of Management Objectives and additional Management Objectives that would condition the payment of variable pay components for 2018.

The Annual General Meeting held on June 26th 2018 passed resolutions concerning:

- approval of the annual Directors' reports on the operations of the Company and the ORLEN Group as well as the financial statements for 2017,

- acknowledgement of the fulfilment of duties by all the Supervisory and Management Board Members,
- allocation of the net profit for the 2017 financial year in the following manner:
  1) PLN 1 283 127 183 to be paid as dividend (PLN 3 per share)
  2) the balance of PLN 4 818 665 392.09 to be transferred to the Company's statutory reserve funds.
- appointment of Andrzej Kapała to the Company's Supervisory Board,
- amendment of the Company's Articles of Association to enable the Management Board to vote on resolutions using means of remote communication and arrange Supervisory Board meetings.

After the adjournment, the Annual General Meeting passed a resolution to amend the Extraordinary General Meeting's resolution of January 24th 2017 on the remuneration policy for persons directing certain companies.

6.7. MANAGEMENT AND SUPERVISORY BODIES

Apart from generally applicable laws, the operating procedures of PKN ORLEN's Supervisory Board, its Committees and Management Board are set out in PKN ORLEN's Articles of Association and the Rules of Procedure for the Supervisory Board or the Management Board, as appropriate. The proceedings of the management and supervisory bodies at PKN ORLEN are also subject to the corporate governance principles set out by the Warsaw Stock Exchange.
In order to achieve the highest standards in the performance of the Management Board's and Supervisory Board's duties defined in the generally applicable laws and internal regulations, as well as to ensure that these duties are discharged effectively, the Management Board and Supervisory Board Members must possess extensive qualifications and experience. The current composition of the Management and Supervisory Boards ensures a good balance and diversity in terms of gender, educational background, age and professional experience.

Any outside employment of the Management Board Members is assessed by the Supervisory Board, which − pursuant to the Company's Articles of Association − grants permission to Management Board Members to serve on the supervisory or management bodies of any other entities and to receive remuneration for such service.

6.7.1. The Management Board

Composition of PKN ORLEN Management Board and division of remits

TABLE 50. Composition of PKN ORLEN Management Board as at January 1st 2018.

Name and surname	Position held on PKN ORLEN Management Board
Wojciech Jasiński	President of the Management Board Chief Executive Officer
Mirosław Kochalski	Vice President of the Management Board
Zbigniew Leszczyński	Member of the Management Board, Sales
Krystian Pater	Member of the Management Board, Production
Wiesław Protasewicz	Member of the Management Board, Finance
Maria Sosnowska	Member of the Management Board, Investments and Procurement

Changes on the Management Board during the previous financial year

The PKN ORLEN Supervisory Board at its meeting on February 5th 2018 removed the following Members from the Management Board:

- Wojciech Jasiński, President of the Management Board,
- Mirosław Kochalski – Vice President of the Management Board,
- Maria Sosnowska, Member of the Management Board, Investments and Procurement.

At the same meeting the Supervisory Board, acting pursuant to Art. 9.1.3 of the Company's Articles of Association on a motion from the Energy Minister of February 5th 2018, appointed Daniel Obajtek as President of the PKN ORLEN Management Board. The Supervisory Board also decided to delegate Józef Węgrecki to temporarily (for up to three months) perform the duties of a Management Board Member responsible for Investments and Procurement, with effect from February 5th 2018.

At its meeting on March 22nd 2018, the PKN ORLEN Supervisory Board removed Krystian Pater from the Management Board, with effect from March 22nd 2018.

At the same meeting, the Supervisory Board decided to delegate Jadwiga Lesisz, with effect from March 23rd 2018, to temporarily perform the duties of the Management Board Member responsible for Investments and Procurement, until the vacancy is filled but not for longer than three months.

In addition, the Supervisory Board appointed the following persons to the Management Board:

- Ryszard Lorek – as Member of the Management Board, Chief Sales Officer, with effect from April 10th 2018;
- Józef Węgrecki – as Member of the Management Board, Chief Operating Officer, with effect from March 23rd 2018.

On March 29th 2018, the Company received a letter of resignation from Mr Ryszard Lorek, whereby he resigned from the position of the PKN ORLEN Management Board Member responsible for Sales.

At its meeting on June 19th 2018, the Supervisory Board of PKN ORLEN appointed Patrycja Klarecka as Member of the Management Board, Chief Sales Officer, with effect from June 24th 2018.

At its meeting on August 10th 2018, the Supervisory Board of PKN ORLEN appointed the following persons to the Management Board:

- Michał Róg – as Member of the Management Board for Wholesale and International Trade,
- Armen Konrad Artwich – as Member of the Management Board for Corporate Affairs.

TABLE 51. Composition of PKN ORLEN Management Board as at December 31st 2018.

Name and surname	Position held on PKN ORLEN Management Board	Remit
Daniel Obajtek	CEO, President of the Management Board	strategy, human resources, marketing, corporate communication, management office, control and security, audit, legal and external relationships;
Armen Konrad Artwich	Member of the Management Board, Corporate Affairs	administration, environmental protection, the Capital Group, financial control, risk management and compliance management;
Patrycja Klarecka	Member of the Management Board, Retail Sales	IT, retail sales, innovation, efficiency and sales growth;
Zbigniew Leszczyński	Member of the Management Board, Development	procurement, realisation of property investments, development and technology, health and safety;
Wiesław Protasewicz	Member of the Management Board, Finance	planning and reporting, business controlling, financial management, taxes, investor relations, supervision over infrastructure and information security;
Michał Róg	Member of the Management Board, Wholesale and International Trade	wholesale of refining products, trade in petrochemical products, logistics, trade in crude oil and natural gas, supply chain management;
Józef Węgrecki	Member of the Management Board, Operations	refining production, petrochemical production, power generation, production efficiency and optimisation, technology, water and wastewater management;

TABLE 52. Composition of PKN ORLEN Management Board as at the date of authorisation of this report.

Name and surname	Position held on PKN ORLEN Management Board	Remit
Daniel Obajtek	CEO, President of the Management Board	strategy and investor relations, human resources, sports marketing, sponsorship and events, corporate communication, management office, control and security, audit, legal, external relations, trade in crude oil and natural gas;
Armen Konrad Artwich	Member of the Management Board, Corporate Affairs	administration, environmental protection, the Capital Group, financial control, risk management and compliance management;
Patrycja Klarecka	Member of the Management Board, Retail Sales	IT, retail sale, innovation, marketing;
Zbigniew Leszczyński	Member of the Management Board, Development	procurement, realisation of property, investments, development and technology, health and safety;
Wiesław Protasewicz	Member of the Management Board, Finance	financial management, planning and reporting, business controlling, taxes, supervision over infrastructure and information security;

Michał Róg	Member of the Management Board, Wholesale and International Trade	wholesale of refining products, trade in petrochemical products, logistics, supply chain management;
Józef Węgrecki	Member of the Management Board, Operations	refining production, petrochemical production, power generation, production efficiency and optimisation, technology, water and wastewater management;

The current division of remits between Members of the PKN ORLEN Management Board is also available on the Company's website http://www.orlen.pl/PL/OFirmie/ZarzadSpolki/ObszaryOdpowiedzialnosci/Strony/default.aspx.

Appointment and removal of the 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 removed by the Supervisory Board. One Member of the Management Board is appointed and removed by the Supervisory Board upon the motion of the State Treasury.

The term of office of the Management Board Members is a joint term, ending on the date of the Annual General Meeting approving the financial statements for the full second financial year of such term of office.

The Supervisory Board may suspend the President, Vice Presidents, individual Members of the Management Board and the Management Board as a whole from their duties for valid reasons. Should the Management Board President be removed or suspended from duties or should his/her mandate expire before the end of the term of office, all his/her powers, except for the casting vote referred to in Art. 9.5.2 of the Articles of Association, are to be exercised by the person appointed by a resolution of the Supervisory Board as acting President of the Management Board until a new Management Board President is appointed or the current one is restored to his/her position.

The current term of office of the Management Board began on June 30th 2017 and ends on the date of the General Meeting of PKN ORLEN approving the Company's financial statements for the financial year 2019.

Organisation of the Management Board activity

Detailed rules for the convening of Management Board meetings are set out in the Rules of Procedure for the Management Board, available on the Company's website (http://www.orlen.pl/PL/OFirmie/Strony/DokumentyKorporacyjne.aspx).

Meetings of the Management Board are held at least once every two weeks. For Management Board resolutions to be valid, a scheduled meeting has to be notified to all Members of the Management Board and at least half of the Management Board Members have to be present at the meeting. Management Board resolutions are passed by a simple majority of votes (in the event of a voting tie, the President of the Management Board has the casting vote) provided that for resolutions to grant a commercial power of proxy, unanimity of all Members of the Management Board is required. A Management Board Member who voted against a resolution that was carried may communicate his/her dissenting opinion, which, however, needs to be justified.

Resolutions are voted on by open ballot. 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 a given resolution was passed. A resolution is also signed by the Member of the Management Board who filed a dissenting opinion, with a note: "dissenting opinion" or "*votum separatum*".

Because the Company's Articles of Association were amended at the Annual General Meeting on June 26th 2018, the Rules of Procedure for the Management Board were changed to the effect that resolutions of the Management Board may be voted on using means of remote communication. Resolutions voted on under such procedure are only valid if all Management Board Members have been notified of the contents of the draft resolutions, with the proviso that such notification may also be made using means of remote communication.

According to the Rules of Procedure for the Management Board, the Management Board Members must notify the Supervisory Board of any actual or potential conflict of interest which has arisen or may arise in connection with the positions held by them. Should the Company's interest be in conflict with the personal interests of a Management Board Member, the Management Board Member in question should abstain from deciding on such matter and request that a relevant note be made in the minutes of the meeting. In the case of doubt as to whether a conflict of interest exists, the matter is resolved by the Management Board by way of a resolution. According to the Rules of Procedure for the Management Board, a conflict of interest is understood as a circumstance in which a decision made by a Member of the Management Board may be influenced by a personal interest of the Management Board Member or his/her close person, i.e. their spouse, children, persons related to them through blood or marriage in the first or second degree, or any persons to whom the Member is personally related.

Powers and responsibilities of the Management Board

All Members of the Management Board are obliged and authorised to manage PKN ORLEN's affairs.

All matters going beyond the ordinary course of business are subject to resolutions of the Management Board. Matters falling within the scope of ordinary business are those related to trading in fuels 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 matters not expressly specified in the Rules of Procedure for the Management Board. In addition, the Management Board's consent is not required to perform an action which is an integral part of any other action for which the Management Board already gave its consent, unless the Management Board's resolution states otherwise.

A resolution of the Management Board is required, among other things, to:

- adopt and amend the Rules of Procedure for the 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,
- convene the General Meetings and adopt their proposed agendas,
- adopt annual and long-term financial plans as well as the Company's development strategy,
- approve investment projects and corresponding liabilities if the resulting expenditures or charges exceed PLN 10 000 000,
- incur liabilities, dispose of property rights and encumber in any way the Company's assets with a value exceeding PLN 20 000 000 (subject to certain exceptions),
- sell and purchase real property, perpetual usufruct or an interest in real property, and create limited property rights,
- dispose of, purchase and encumber shares or other equity instruments of other entities, including shares admitted to public trading,
- issue the Company's securities,
- authorise the Company's and the ORLEN Group's financial statements,
- adopt and change the employee remuneration scheme, and make decisions regarding the introduction and design of incentive schemes,
- conclude, amend and terminate a collective bargaining agreement applicable at the Company, and other agreements with trade unions,
- establish the principles of granting and revoking powers of attorney,
- formulate the so-called donation policy of the Company,
- grant a commercial power of proxy,
- establish the internal division of remits between the Members of the Management Board,
- set up establishments/offices abroad,
- resolve other matters which at least one Member of the Management Board requests to be resolved by way of a resolution,
- take decisions on 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.

6.7.2. The Supervisory Board

TABLE 53. Composition of PKN ORLEN Supervisory Board as at January 1st 2018.

Name and surname	Position held on PKN ORLEN Supervisory Board
Angelina Sarota	Chairman of the Supervisory Board
Radosław L. Kwaśnicki	Vice – Chairman of the Supervisory Board
Mateusz Henryk Bochacik	Secretary of the Supervisory Board
Izabela Felczak-Poturnicka	Member of the Supervisory Board
Adrian Dworzyński	Member of the Supervisory Board (Independent Member of the Supervisory Board)
Agnieszka Krzętowska	Member of the Supervisory Board (Independent Member of the Supervisory Board)
Wojciech Kryński	Member of the Supervisory Board (Independent Member of the Supervisory Board)

On January 5th 2018, the Energy Minister, acting on behalf of the State Treasury and pursuant to Art. 8.2.1 of the Company's Articles of Association, appointed Małgorzata Niezgoda to the Supervisory Board. On February 1st 2018, Małgorzata Niezgoda tendered her resignation as Member of the PKN ORLEN Supervisory Board.
The PKN ORLEN Extraordinary General Meeting on February 2nd 2018 removed from the Supervisory Board Agnieszka Krzętowska, Angelina Sarota and Adrian Dworzyński and appointed Izabela Felczak-Poturnicka as Chairman of the Supervisory Board, Agnieszka Biernat-Wiatrak, Jadwiga Lesisz and Małgorzata Niezgoda as Members of the Supervisory Board. On February 5th 2018, the Energy Minister, acting on behalf of the State Treasury and pursuant to Art. 8.2.1 of the Company's Articles of Association, appointed Józef Węgrecki to the Supervisory Board of PKN ORLEN. On February 5th 2018, the Supervisory Board of PKN ORLEN delegated Józef Węgrecki to temporarily perform the duties of a Management Board Member responsible for Procurement and Investments. On March 1st 2018, Agnieszka Biernat-Wiatrak ceased to be an independent Member of the Supervisory Board. On March 14th 2018, Radosław Kwaśnicki, Vice Chairman of the Supervisory Board, submitted a representation to the effect that he met the independence criteria. On March 22nd 2018, Józef Węgrecki resigned as Member of the Supervisory Board. On March 22nd 2018, the Supervisory Board delegated Jadwiga Lesisz, Member of the Supervisory Board, to serve, with effect from March 23rd 2018, as a Management Board Member responsible for Investments and Procurement, for a period not longer than three months.
On June 26th 2018, the Annual General Meeting of PKN ORLEN appointed Andrzej Kapała to the Company's Supervisory Board. On the same day, i.e. June 26th 2018, the Head of the State Treasury Department at the Chancellery of the Prime Minister, acting on behalf of the State Treasury and pursuant to Art. 8.2.1 of the Company's Articles of Association, appointed Anna Wójcik to the PKN ORLEN Supervisory Board.

In 2018, the PKN ORLEN Supervisory Board held 21 minuted meetings and passed 175 resolutions. The attendance of PKN ORLEN Supervisory Board Members at Supervisory Board meetings was 99%. In the case of absence of a Supervisory Board Member from a meeting, the Supervisory Board passed a resolution to authorise the absence.

TABLE 54. Composition of PKN ORLEN Supervisory Board as at December 31st 2018.

Name and surname	Position held on PKN ORLEN Supervisory Board
Izabela Felczak-Poturnicka	Chairman of the Supervisory Board
Radosław L. Kwaśnicki	Vice – Chairman of the Supervisory Board (Independent Member of the Supervisory Board from March 14th 2018)
Mateusz Henryk Bochacik	Secretary of the Supervisory Board (Independent Member of the Supervisory Board from February 26th 2018)
Wojciech Kryński	Member of the Supervisory Board (Independent Member of the Supervisory Board)
Małgorzata Niezgoda	Member of the Supervisory Board
Jadwiga Lesisz	Member of the Supervisory Board (Independent Member of the Supervisory Board)
Agnieszka Biernat-Wiatrak	Member of the Supervisory Board
Andrzej Kapała	Member of the Supervisory Board (Independent Member of the Supervisory Board)
Anna Wójcik	Member of the Supervisory Board

On February 15th 2019, Mateusz Henryk Bochacik resigned as Member of the Supervisory Board of PKN ORLEN.

TABLE 55. Composition of PKN ORLEN Supervisory Board as at the date of authorisation of this report.

Name and surname	Position held on PKN ORLEN Supervisory Board
Izabela Felczak-Poturnicka	Chairman of the Supervisory Board
Radosław L. Kwaśnicki	Vice – Chairman of the Supervisory Board (Independent Member of the Supervisory Board from March 14th 2018)
Wojciech Kryński	Member of the Supervisory Board (Independent Member of the Supervisory Board)
Małgorzata Niezgoda	Member of the Supervisory Board
Jadwiga Lesisz	Member of the Supervisory Board (Independent Member of the Supervisory Board)
Agnieszka Biernat-Wiatrak	Member of the Supervisory Board
Andrzej Kapała	Member of the Supervisory Board (Independent Member of the Supervisory Board)
Anna Wójcik	Secretary of the Supervisory Board

Operating procedures of the Supervisory Board

PKN ORLEN's Supervisory Board is composed of six to nine Members. The State Treasury as a shareholder is authorised to appoint and remove one Member of the Supervisory Board, while other Members of the Supervisory Board are appointed and removed by the General Meeting. Members of PKN ORLEN's Supervisory Board are appointed for a joint term of office, ending on the date of the Annual General Meeting approving the financial statements for the full second financial year of such term of office. Individual Members of the Supervisory Board and the entire Supervisory Board may be removed at any time before the end of their 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 among the other Members of the Board.

At least two Supervisory Board Members must meet the independence criteria specified in PKN ORLEN's Articles of Association. In accordance with the Code of Best Practice, independent Supervisory Board Members are not employees of the Company, its subsidiary or associate, do not have a similar contractual relationship with any of these entities, and have no ties to a shareholder that would preclude their independence.
Before being appointed to the Supervisory Board, independent Members of the Supervisory Board should submit to the Company a written statement to the effect that they meet the criteria set out in the Articles of Association and in the Code of Best Practice. Moreover, candidates to the Supervisory Board should submit statements based on which it would be possible to determine whether they meet the requirements for members of the Audit Committee of the Supervisory Board, as set out in the Act on Statutory Auditors, Audit Firms, and Public Oversight of May 11th 2017, including the requirements concerning independence of the Audit Committee Members. Statements on meeting the

independence criteria are submitted to the other Supervisory Board Members and to the Management Board.
If the independence criteria are not met, a Member of the Supervisory Board is obliged to immediately notify the Company of the same. The Company then informs the shareholders of 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 and put an item concerning changes in the composition of the Supervisory Board on the agenda of the General Meeting. The Supervisory Board will continue to operate as then composed until changes in the composition of the Supervisory Board are made, i.e. the number of independent Members is adjusted to the requirements set forth in the Articles of Association, and the provisions of Art. 8.9 of the Articles of Association (containing a list of resolutions which must be passed with the consent of at least half of independent Supervisory Board Members) will not apply.
In accordance with the Rules of Procedure for the Supervisory Board, a Supervisory Board Member should not resign mid-term if this could prevent the Supervisory Board from performing its duties, and in particular from timely passing a resolution on any matter material to the Company. If a Supervisory Board Member has resigned or is unable to perform his/her duties, the Company should immediately take appropriate steps to fill the vacancy or change the composition of the Supervisory Board.
Organisation of the Supervisory Board, in accordance with the principles outlined in PKN ORLEN's Articles of Association and the Rules of Procedure for the Supervisory Board, is described on the corporat website:
http://www.orlen.pl/PL/OFirmie/Strony/DokumentyKorporacyjne.aspx
.
Meetings of the Supervisory Board are held when necessary, but at least once every two months.
The Supervisory Board may pass resolutions if at least half of its Members participate in the meeting. Subject to the provisions of the Commercial Companies Code, a resolution of the Supervisory Board may be passed in writing or with the use of direct means of remote communication. Resolutions of the Supervisory Board are passed by 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 resolutions to remove or suspend from duties any Members of the Management Board or the entire Management Board during the term of their office, in which case at least two-thirds of all the Supervisory Board Members must vote in favour of a given resolution.
Passing resolutions on the following matters:

- any benefits 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 their related entities,
- appointing a qualified auditor to audit the financial statements of the Company,

requires the consent of at least half of the independent Members of the Supervisory Board. The foregoing provisions do not exclude the application of Art.15.1 and Art. 15.2 of the Commercial Companies Code.

Powers and responsibilities of the Supervisory Board

The Supervisory Board of PKN ORLEN exercises ongoing supervision over the Company's operations, in all fields of its activity, specifically, the Supervisory Board is authorised to act as set out in the Commercial Companies Code and the Company's Articles of Association, in conformity with the Rules of Procedure for the Supervisory Board and – where generally applicable laws so stipulate – resolutions of the General Meeting and the Supervisory Board as well as internal organisational documents in place at the Company.
To ensure the highest standards of corporate governance and in order to enable shareholders to form a true and fair view of the Company, the Supervisory Board of PKN ORLEN has the additional obligation to submit to the General Meeting:

- assessment of PKN ORLEN's standing, including the internal control, risk management, compliance and internal audit function,
- an annual report on its work,
- assessment of how the Company's corporate governance disclosure obligations are fulfilled,
- assessment of the soundness of the Company's sponsorship, charity and similar activities,
- review and assessment of the operations of the Group companies in the assessment of the Group's consolidated financial statements,
- assessment of the use of non-current assets by the Company.

The Supervisory Board gives its opinions on reports concerning entertainment expenses, legal expenses, marketing costs, public relations and communication expenses, and management consultancy fees, prepared by the Management Board.
Except as provided for in generally applicable laws and the Articles of Association, the following require the consent of the Supervisory Board:

- entry into agreements for legal services, marketing services, public relations and communication services, and management consultancy services, if the total expected fees for providing such services exceed the amount of PLN 500 000 on a net basis per year or the maximum amount of fees is not specified, or any amendments to such agreements,
- a donation agreement or any other agreement having a similar effect, with a value exceeding PLN 20 000 or 0.1% of total assets within the meaning of the Accounting Act, as per the most recent approved financial statements,
- an agreement on release from debt or any other agreement having a similar effect, with a value exceeding PLN 50 000 or 0.1% of total assets within the meaning of the Accounting Act, as per the most recent approved financial statements.

The Supervisory Board approves detailed rules for disposal of non-current assets, within the meaning of the Accounting Act, with a value exceeding 0.1% of total assets as per the most recent approved financial statements.

The General Meeting of the Company appointed the Supervisory Board for a new term of office on June 3rd 2016. The current term of office of the Supervisory Board began on June 3rd 2016 and ends on the date of the General Meeting of PKN ORLEN approving the Company's financial statements for the financial year 2018.
The Supervisory Board of the current term is composed of Members with educational background in law, economics and finance and diverse professional experience, who completed specialist courses and training programmes and hold international certificates.

The qualifications of the Chairman and Members of the Supervisory Board are available on the corporate website at https://www.orlen.pl/PL/OFirmie/RadaNadzorcza/Strony/default.aspx.

In 2018, the number of Supervisory Board Members was as required under the Company's Articles of Association. As at January 1st 2018, the Supervisory Board included three independent Members, and as at December 31st 2018 it included five independent Members.

Pursuant to Sections 8.1 and 8.2 of the Rules of Procedure for the Supervisory Board, in order to discharge its duties, the Supervisory Board may inspect all the Company's documents, request the Management Board and employees to provide reports and clarifications, and review the Company's assets. To enable the Supervisory Board to perform its duties, the Management Board gives it access to information on matters concerning the Company. In order to guarantee the proper discharge of its duties, the Supervisory Board may request that the Management Board prepare, at the expense of the Company, expert and other opinions for the Supervisory Board, or employ an adviser.

Pursuant to Sections 27.1 and 27.2 of the Rules of Procedure for the PKN ORLEN Supervisory Board, a Supervisory Board Member should inform the other Members of the Supervisory Board of any conflicts of interest which have arisen or may arise, as well as abstain from taking the floor when the matter which has given rise to the conflict is being discussed, abstain from voting on the relevant resolution and request that the fact be recorded in the minutes. No breach of the provisions of the preceding sentence may render the Supervisory Board's resolution invalid. In the case of doubt as to whether a conflict of interest exists, the matter is resolved by the Supervisory Board by way of a resolution.

Committees of the Supervisory Board

The Supervisory Board of PKN ORLEN may appoint standing or ad hoc committees, which act as its collective advisory and opinion making bodies.

The following standing committees operate within the Supervisory Board of PKN ORLEN:

- Audit Committee,
- Strategy and Development Committee,
- Nomination and Remuneration Committee,
- Corporate Governance Committee,
- Corporate Social Responsibility Committee (CSR Committee).

Composition of PKN ORLEN Supervisory Board Committees in 2018

TABLE 56. Composition of PKN ORLEN Supervisory Board Committees as at January 1st 2018.

Name and surname	Position held on PKN ORLEN Supervisory Board Committee
Audit Committee	
Wojciech Kryński	Committee Chairman, Independent Member of the Supervisory Board
Radosław L. Kwaśnicki	Committee Member
Adrian Dworzyński	Committee Member, Independent Member of the Supervisory Board
Agnieszka Krzętowska	Committee Member, Independent Member of the Supervisory Board
Izabela Felczak-Poturnicka	Committee Member
Strategy and Development Committee	
Radosław L. Kwaśnicki	Committee Chairman
Angelina Sarota	Committee Member
Adrian Dworzyński	Committee Member, Independent Member of the Supervisory Board
Agnieszka Krzętowska	Committee Member, Independent Member of the Supervisory Board
Izabela Felczak-Poturnicka	Committee Member
Nomination and Remuneration Committee	
Angelina Sarota	Committee Chairman
Mateusz Bochacik	Committee Member
Adrian Dworzyński	Committee Member, Independent Member of the Supervisory Board
Agnieszka Krzętowska	Committee Member, Independent Member of the Supervisory Board
Corporate Governance Committee	
Adrian Dworzyński	Committee Chairman, Independent Member of the Supervisory Board
Angelina Sarota	Committee Member
Mateusz Bochacik	Committee Member

Radosław L. Kwaśnicki	Committee Member
Corporate Social Responsibility Committee	
Agnieszka Krzętowska	Committee Chairman, Independent Member of the Supervisory Board
Radosław L. Kwaśnicki	Committee Member
Izabela Felczak-Poturnicka	Committee Member

TABLE 57. Composition of PKN ORLEN Supervisory Board Committees as at December 31st 2018.

Name and surname	Position held on PKN ORLEN Supervisory Board Committee
Audit Committee	
Wojciech Kryński	Committee Chairman, Independent Member of the Supervisory Board
Radosław L. Kwaśnicki	Committee Member, Independent Member of the Supervisory Board from March 14th 2018
Izabela Felczak-Poturnicka	Committee Member
Jadwiga Lesisz	Committee Member, Independent Member of the Supervisory Board from February 26th 2018
Andrzej Kapała	Committee Member, Independent Member of the Supervisory Board from July 19th 2018
Strategy and Development Committee	
Radosław L. Kwaśnicki	Committee Chairman, Independent Member of the Supervisory Board from March 14th 2018
Izabela Felczak-Poturnicka	Committee Member
Małgorzata Niezgoda	Committee Member from January 30th 2018
Agnieszka Biernat-Wiatrak	Committee Member, Independent Member of the Supervisory Board from February 2nd to March 1st 2018
Andrzej Kapała	Committee Member, Independent Member of the Supervisory Board from July 19th 2018
Nomination and Remuneration Committee	
Małgorzata Niezgoda	Committee Chairman from February 26th 2018
Mateusz Bochacik	Committee Member, Independent Member of the Supervisory Board from February 26th 2018
Wojciech Kryński	Committee Member from February 5th 2018, Independent Member of the Supervisory Board
Jadwiga Lesisz	Committee Member from September 11th 2018, Independent Member of the Supervisory Board
Anna Wójcik	Committee Member from July 19th 2018
Corporate Governance Committee	
Agnieszka Biernat-Wiatrak	Committee Chairman from February 26th 2018, Independent Member of the Supervisory Board from February 2nd to March 1st 2018
Mateusz Bochacik	Committee Member, Independent Member of the Supervisory Board from February 26th 2018
Radosław L. Kwaśnicki	Committee Member, Independent Member of the Supervisory Board from March 14th 2018
Corporate Social Responsibility Committee	
Jadwiga Lesisz	Committee Chairman from February 26th 2018, Independent Member of the Supervisory Board
Radosław L. Kwaśnicki	Committee Member, Independent Member of the Supervisory Board from March 14th 2018
Izabela Felczak-Poturnicka	Committee Member
Anna Wójcik	Committee Member from July 19th 2018

TABLE 58. Composition of PKN ORLEN Supervisory Board Committees as at the date of authorisation of this report.

Name and surname	Position held on PKN ORLEN Supervisory Board Committee
Audit Committee	
Wojciech Kryński	Committee Chairman, Independent Member of the Supervisory Board
Radosław L. Kwaśnicki	Committee Member, Independent Member of the Supervisory Board from March 14th 2018
Izabela Felczak-Poturnicka	Committee Member
Jadwiga Lesisz	Committee Member, Independent Member of the Supervisory Board from February 26th 2018
Andrzej Kapała	Committee Member, Independent Member of the Supervisory Board from July 19th 2018
Strategy and Development Committee	
Radosław L. Kwaśnicki	Committee Chairman, Independent Member of the Supervisory Board from March 14th 2018
Izabela Felczak-Poturnicka	Committee Member
Małgorzata Niezgoda	Committee Member from January 30th 2018
Agnieszka Biernat-Wiatrak	Committee Member from February 26th 2018, Independent Member of the Supervisory Board from February 2nd to March 1st 2018
Andrzej Kapała	Committee Member, Independent Member of the Supervisory Board from July 19th 2018
Nomination and Remuneration Committee	
Małgorzata Niezgoda	Committee Chairman from February 26th 2018
Wojciech Kryński	Committee Member from February 5th 2018, Independent Member of the Supervisory Board
Radosław L. Kwaśnicki	Committee Member from March 20th 2019, Independent Member of the Supervisory Board
Jadwiga Lesisz	Committee Member from September 11th 2018, Independent Member of the Supervisory Board
Anna Wójcik	Committee Member from July 19th 2018
Corporate Governance Committee	
Agnieszka Biernat-Wiatrak	Committee Chairman from February 26th 2018, Independent Member of the Supervisory Board from February 2nd to March 1st 2018
Andrzej Kapała	Committee Member from March 20th 2019, Independent Member of the Supervisory Board
Radosław L. Kwaśnicki	Committee Member, Independent Member of the Supervisory Board from March 14th 2018
Izabela Felczak-Poturnicka	Committee Member from March 20th 2019
Corporate Social Responsibility Committee	
Jadwiga Lesisz	Committee Chairman from February 26th 2018, Independent Member of the Supervisory Board
Radosław L. Kwaśnicki	Committee Member, Independent Member of the Supervisory Board from March 14th 2018
Izabela Felczak-Poturnicka	Committee Member
Anna Wójcik	Committee Member from July 19th 2018

Audit Committee

Tasks of the Audit Committee are to advise the Supervisory Board of PKN ORLEN on matters 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 qualified auditors. The Audit Committee meetings are held at least once per quarter, prior to each publication of the Company's financial statements.

Pursuant to the Rules of Procedure for the PKN ORLEN Supervisory Board, the majority of the Audit Committee Members, including its Chairman, should satisfy the independence criteria defined in the Company's Articles of Association, the Code of Best Practice and the Act on Statutory Auditors, Audit Firms, and Public Oversight. At least one Member of the Audit Committee should have the expertise and competence in accounting or financial auditing. At least one Member of the Audit Committee or individual Members of the Committee should have the expertise and competence specific to the industry in which the Company operates. The qualifications of individual Members of the Audit Committee are described in the first section of the Directors' report on the operations of the ORLEN Group in 2018 and on the corporate website at: https://www.orlen.pl/PL/OFirmie/RadaNadzorcza/Strony/default.aspx

PKN ORLEN's Audit Committee performs all duties required under the Act on Statutory Auditors, Audit Firms, and Public Oversight of

May 11th 2017. Members of the Audit Committee also meet all conditions provided for in the Act.

In 2018, the Audit Committee held 17 minuted meetings.

In 2018, the Audit Committee formulated a recommendation with respect to the appointment of an auditing firm in accordance with the Supervisory Board-approved updated auditor selection and appointment policy and procedure, non-audit services policy, and auditor independence monitoring and oversight procedure. Key provisions of the document are as follows:

- the auditor is selected in advance in accordance with the auditor rotation rules, by way of requests for proposals issued by the Supervisory Board based on the Audit Committee's recommendation,
- the auditor is selected based on clear and non-discriminatory criteria, in a manner ensuring that the audit services provided to the Company are of the highest quality and that all criteria and standards of the auditor's and the auditing firm's independence and impartiality are met,
- the first audit engagement letter is signed with an auditing firm for at least two years, subject to the rules on rotation of the auditing firm and lead auditor stipulated under applicable laws,
- the principle of objectivity is met by analysing any non-audit services provided by the auditor that extend beyond the scope of the audit engagement letter in order to avoid any conflicts of interest.

The Audit Committee carried out the auditor selection procedure and prepared a relevant recommendation for the Supervisory Board. The Audit Committee's work related to auditor selection was led by Wojciech Kryński. The selection process was documented in meeting minutes and a report.

Also, permitted non-audit services were provided to PKN ORLEN and selected Group companies in 2018 that had been contracted in compliance with the applicable procedure, i.e. each non-audit service had been preceded by an independence assessment and approved by the Audit Committee, including:

- assurance services related to audit - review of interim separate and consolidated financial statements for Q1, Q3 and H1 2018;
- assurance service: confirming the calculation of the energy intensity indicator for PKN ORLEN;
- agreed-upon procedures for the Supervisory Board: analysis of selected indicators affecting the calculation of actual performance vs. volume targets for Management Board Members in PKN ORLEN;
- assurance service: verification of the correctness of information related to the 12th issue of the RESPECT Index;
- assurance service: independent verification of the PKN ORLEN Capital Group's Integrated Report ;
- assurance service: verification of capital expenditures ("derogation") in PKN ORLEN;
- assurance services related to audit - review of interim separate and consolidated financial statements of Unipetrol a.s. for Q1, Q3 and H1 2018;
- assurance service: confirming the calculation of the energy intensity indicator for Anwil S.A., IKS Solino S.A.;
- assurance service: verifying the calculation of the share of consumed electricity costs in the value of production sold in 2017 by Anwil S.A.;
- assurance service: verification of separate accounting records kept by ORLEN Aviation Sp. z o.o. with regard to ground handling operations pursuant to Article 178.1.1 of the Aviation Act of 3 July 2001;
- assurance service: verification of the report on the solvency and financial standing of ORLEN Insurance Limited.

Corporate Governance Committee

The Corporate Governance Committee is responsible for assessing the implementation of corporate governance standards, providing the Supervisory Board with recommendations on the adoption of corporate governance standards, giving opinions on corporate governance documents, assessing reports on compliance with corporate governance standards drafted for the Warsaw Stock Exchange, giving opinions on proposed amendments to the Company's corporate documents and drafting such amendments for the Supervisory Board's own documents, monitoring Company management procedures in terms of their compliance with legal and regulatory requirements, including disclosure requirements of the capital market as well as compliance with the Core Values and Standards of Conduct of PKN ORLEN and corporate governance principles.
In 2018, the Corporate Governance Committee held 5 minuted meetings.

Strategy and Development Committee

Tasks of the Strategy and Development Committee are to provide opinions and submit recommendations to the Supervisory Board on proposed investments and divestments which may have a material impact on the Company's assets.
In 2018, the Strategy and Development Committee held 7 minuted meetings.

Nomination and Remuneration Committee

Tasks of the Nomination and Remuneration Committee are to help attain the Company's strategic goals by providing the Supervisory Board with opinions and proposals on how to shape the management structure, with regard to organisational solutions, remuneration schemes and selection of staff with the skills required to ensure the Company's success.
The majority of the Nomination and Remuneration Committee Members should be independent. Where the Nomination and Remuneration Committee is not composed of the majority of independent Members of the Supervisory Board, the Committee is chaired by the Chairman of the Supervisory Board.
In 2018, the Nomination and Remuneration Committee held 15 minuted meetings.

Corporate Social Responsibility Committee

Tasks of the CSR Committee are to support the Company's strategic objectives by taking due account of social, ethical and environmental aspects in the Company's operations and its interaction with stakeholders (including employees, customers, shareholders, and local communities).
In 2018, the Corporate Social Responsibility Committee held 11 minuted meetings.

6.8. REMUNERATION POLICY

Remuneration for Members of the Management Board at PKN ORLEN is determined by the Supervisory Board taking into account the relevant resolution of the General Meeting, in connection with the Act on the Rules of Remunerating Persons Who Direct Certain Companies, and recommendations of its Nomination and Remuneration Committee. The main components of the Management Board Members remuneration include:

- fixed monthly base pay,
- annual bonus (variable pay) depending on their performance against certain quantitative and qualitative targets and achievement of identifiable separate objectives,
- severance pay for contract termination by the Company,
- non-compete compensation.

All components of the remuneration are governed by a contract between a Member of the Management Board and the Company.

Benefits for directors reporting to the Management Board at PKN ORLEN may include, in particular: a company car, variable universal life insurance, additional medical cover for the director and their closest family, including the right to preventive healthcare, sports programmes and rehabilitation, partial coverage of rented accommodation costs, coverage of relocation costs if the relocation takes place during the director's employment, benefits defined in the Rules of Participation in the Company Social Benefits Fund, and the right to participate in the Employee Pension Plan on the terms applicable at the Company.

The remuneration policy in place at PKN ORLEN supports the achievement of the Company's goals, including in particular a long-term increase of its shareholder value and stability of operations.

General terms and conditions of the variable of the remuneration

Members of PKN ORLEN's Management Board are entitled to an variable pay on the terms set out in their respective contracts, which include the Rules of the Incentive Scheme for the Management Board as an appendix. The level of variable paydepends on the performance against individual targets (both qualitative and quantitative), set by the Supervisory Board for individual Members of the Management Board. Based on the general set of Management Objectives established by the PKN ORLEN General Meeting, the Supervisory Board sets from four to ten individual bonus targets per year, which are recorded in a Member's MBO Sheet. The Supervisory Board may also set a separate objective or objectives for a particular year, which must be met as a precondition to variable remunerationpayment for that year.

Assessment of a Management Board Member's performance against individual bonus targets (both quantitative and qualitative) and achievement of separate objectives is made on an annual basis by the Supervisory Board, on the President of the Management Board's recommendation which contains an assessment of individually performed bonus targets for all Members of the Management Board, the Management Board's recommendation regarding achievement of the separate objective/objectives, reports on the performance against individual bonus targets by Members of the Management Board, PKN ORLEN's financial statements and other documents which the Supervisory Board considers appropriate to examine.

The Supervisory Board passes a resolution to grant a variable pay for a given financial year to a Management Board Member, specifying the bonus amount, or a resolution not to grant a variable pay. Such resolution is the basis for payment of the variable pay provided that the Company's consolidated financial statements for the financial year have been approved by the General Meeting.

The Supervisory Board set the following six quantitative targets for all Members of the Management Board for 2018:

- reported EBIT of the Group,
- LIFO-based EBITDA of the Group,
- maintenance CAPEX of the Group + general and personnel costs of the Group,
- growth CAPEX of the Group,
- stock performance ratio (TSR of PKN ORLEN relative to the market),
- accident rate: TRR of the Group and its external contractors

and attributed relevant bonus thresholds to these targets. The Supervisory Board additionally set two qualitative targets for each Member of the Management Board associated with the Group's key challenges for the year.

Additionally, in accordance with the resolutions of the PKN ORLEN General Meeting, the Supervisory Board set the following separate objectives, which must be met as a precondition to receipt of an variable payfor 2018:

- compliance with the principles of remuneration for members of management and supervisory bodies in line with the Act across all Group companies,
- discharge of the obligations referred to in Art. 17-20, Art. 22 and Art. 23 of the Act on State Property Management of December 16th 2016 within the Company's subsidiaries within the meaning of Art. 4.3 of the Act on Competition and Consumer Protection of February 16th 2007.

Rules for awarding bonuses to key management personnel (including Members of the Management Board)

The regulations on bonuses applicable to the PKN ORLEN Management Board, directors reporting directly to the Management Board, and other key positions within the Group have certain common features. Persons covered by these schemes are remunerated for their performance against individual targets set at the beginning of a bonus period by the Supervisory Board for the Management Board Members and by the Management Board for key executive personnel. The bonus systems are consistent with the Company's Values, promote cooperation between particular employees, and motivate them to achieve the best possible results for the ORLEN Group. The targets are both qualitative and quantitative, and their performance is assessed after the end of the year for which they were assigned.

Remuneration of Members of the Management Board and the Supervisory Board for serving on the Management or Supervisory Boards of subsidiaries, jointly controlled entities and associates

Members of the PKN ORLEN Management Board in 2018 who were acting as Management or Supervisory Board Member of subsidiaries, jointly controlled entities and associates of the ORLEN Group did not receive any remuneration for such service, with the exception of Unipetrol a.s., where such payments were donated to the ORLEN's Foundation Dar Serca. As at December 31st 2018, none of the Members of the PKN ORLEN Management Board sat on the Supervisory Board of Unipetrol a.s.

Provisions of contracts with Members of the Management Board regarding non-competition and termination

In the second half of 2018, pursuant to a resolution of the Annual General Meeting of PKN ORLEN passed on July 17th 2018, the contracts of the PKN ORLEN Management Board Members were amended with regard to the non-compete clause.
In accordance with the contracts, Members of PKN ORLEN's Management Board are required to refrain from any activities that are in competition with the Company's business for a period of six months after the contract termination. During that period, they are entitled to receive a compensation equal to six times their monthly base pay, payable in six equal monthly instalments. Provisions of the contracts regarding non-competition after termination as a Management Board Member come into force only after a Management Board Member has held their position for at least three months.

In addition, the contracts provide for a severance payment in the case of termination by the Company for reasons other than a breach of primary, essential obligations under the contract, provided that the position of Management Board Member is held for a period of at least 12 months. Such severance benefit amounts to three times the monthly base pay.

In accordance with the contracts, Members of the Management Boards of ORLEN Group companies are typically required to refrain from any activities that are in competition with the respective company's business for a period of six months after the contract termination. During that period, they are entitled to receive a compensation equal to three times or six times their monthly base pay, payable in six equal monthly instalments. Provisions of the contracts regarding non-competition after termination as a Management Board Member come into force only after a Management Board Member has held their position for at least six months. Severance payments for Members of the Management Boards of ORLEN Group companies are typically governed by the same rules as those applicable to Members of the PKN ORLEN Management Board.

Directors reporting directly to the PKN ORLEN Management Board are, as a general rule, bound by non-compete clauses for a period of six months after the contract termination. During this period they receive a salary equal to 50% of six-month base pay, payable in six equal monthly instalments. The severance pay for termination of contract by the Company is typically equal to six-fold monthly base pay.

Diversity policy

At PKN ORLEN, matters related to diversity management are governed by the following documents applicable at the Company:
- PKN ORLEN Work Rules;
- Core Values and Standards of Conduct of PKN ORLEN;
- Collective Bargaining Agreement of PKN ORLEN;
- ORLEN Group's Human Resources Management Policy;
- CSR Strategy for PKN ORLEN (where it pertains to development and diversity management);
- PKN ORLEN's Disability Employment Policy;
- PKN ORLEN's Policy for Supporting Employees in Difficult Personal Circumstances;
- Separate internal document governing the 'Family-Friendly Employer' programme.

Objectives of the diversity management include:
- equal treatment in employment and non-discrimination,
- respect for diversity,
- management of cultural differences,
- openness to recruitment of those socially excluded or marginalised in the labour market,
- supporting employee initiatives related to labour equality practices,
- remuneration and bonus policy,
- standards of employment and remuneration of seconded workers, i.e. expats and inpats,
- adapting the workplace to the needs of employees (e.g. people with disabilities, breastfeeding mothers),
- supporting employee groups in difficult circumstances,
- work-life balance programmes.

In addition, the diversity policy of PKN ORLEN is also implemented through:
- provision of training in diversity management,
- awareness raising campaign about disability in the workplace, including information and consultation meetings for employees of PKN ORLEN and other Group companies, and an expert consultation service,
- employee volunteering,
- considering diversity aspects in HR processes and tools (e.g. recruitment, training and development, remuneration) and in shaping the organisational culture,
- workshops for expats in cultural differences management,
- regularly surveying employees on job commitment and satisfaction,
- appointment of a team tasked with coordinating efforts to counteract workplace harassment and bullying (Anti-Harassment Committee appointed by the employer to consider grievances related to workplace harassment and bullying),
- appointment of the Ethics Officer for reporting breaches of the 'Core Values and Standards of Conduct of PKN ORLEN' (also regarding discrimination, harassment and bullying),
- appointment of the Human Capital Committee to give opinions, approve/submit for approval by the PKN ORLEN Management Board and monitor the observance of the 'Core Values and Standards of Conduct of PKN ORLEN', and in particular to examine material breaches, take corrective actions, issue guidelines and consider important ethics-related issues.

The Management Board and the Supervisory Board of PKN ORLEN include Members with educational background in law, economics and chemistry, and with diverse professional experience.
As at December 31st 2018, the Management Board consisted of one woman and six men, while the Supervisory Board consisted of five women and four men. The age structure of Management Board Members was as follows: 30–39 years: one person, 40–50 years: four persons, 60–70 years: two persons. The age structure of Supervisory Board Members was as follows: 30–39 years: three persons, 40–50: six persons.

7. REPORT ON NON-FINANCIAL INFORMATION

According to Article 49 b point 1 and Article 55 point 2b-e of the Accounting Act - the Parent Company - PKN ORLEN S.A. and the ORLEN Group is required to prepare **a Report on Non-financial Information for 2018**. This report will be published in a separate document (combining the report of the Company and the ORLEN Group) on the website www.orlen.pl on the day of publication of the Annual Report of the ORLEN Group for 2018.

Glossary of selected industry concepts

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 l.
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.
CODO / COCO	Fuel station owned by the Company, operated by agent (Company Owned Dealer Operated) / Fuel station owned and operated by the Company (Company Owned Company Operated)
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).
DOFO / DODO	Fuel station owned by agent and operated as franchise business (Dealer Owned Franchnisee Operated) / Fuel station owned and operated by agent (Dealer Owned Dealer Operated)
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.

The glossary of abbreviations and abbreviations can be also found on the Company's websitei: http://www.orlen.pl.

Glossary of selected financial concepts

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.
EBIT	Profit/(Loss) from operations.
EBITDA	Profit/(Loss) from operations increased by amortisation and depreciation.
Inventory valuation so called LIFO effect	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. 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. 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, to eliminate described above influence of crude oil prices changes on the ORLEN Group financial results. Result from operations under LIFO method of inventories valuation are calculated mainly in production companies, including: PKN ORLEN, Unipetrol Group, ORLEN Lietuva Group, ORLEN Południe and ORLEN Oil.
Capital expenditures / CAPEX	Increase of property, plant and equipment, intangible assets, investment property and perpetual usufruct of land together with the capitalisation of borrowing costs

Financial ratios	
ROA	net profit/ total assets x 100%
ROE	net profit / equity x 100%
ROACE	operating profit after tax and before write-down the value of assets / average capital employed (shareholders' equity + net debt)
ROACE LIFO	LIFO operating profit after tax and before write-down the value of assets / average capital employed (shareholders' equity + net debt)
GROSS MARGIN ON SALES	profit before tax / sales revenues x 100%
NET MARGIN ON SALES	net profit / sales revenues x 100%
CURRENT LIQUIDITY	current assets/short-term liabilities
QUICK LIQUIDITY	(current assets– inventories - prepayments) / short-term liabilities
NET WORKING CAPITAL	trade receivables + inventories – trade liabilities
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
ASSETS TURNOVER	sales from revenues / average amount of assets
NET DEBT	non-current loans, borrowings and bonds + short-term loans and borrowing – cash and cash equivalents
FINANCIAL GEARING	net debt / equity x 100%

8. STATEMENT OF THE MANAGEMENT BOARD AND APPROVAL OF MANAGEMENT BOARD REPORT ON THE OPERATIONS OF THE ORLEN GROUP AND PKN ORLEN

Management Board of PKN ORLEN herby declares that the foregoing Management Board Report on the operations of the ORLEN Group and PKN ORLEN gives a true view of the ORLEN Group and PKN ORLEN development, achievements and position, and includes a description of key threats and risks.

The Management Board Report on the Operations of the ORLEN Group and PKN ORLEN S.A. was approved by the Management Board of the Parent Company on 20 March 2019.

………………………
Daniel Obajtek
President of the Board

Signature Not Verified
Dokument podpisany przez Daniel Obajtek; PKN Orlen S.A.
Data: 2019.03.20 21:05:21 CET

…………………………
Armen Artwich
Member of the Board

Signature Not Verified
Dokument podpisany przez ARMEN KONRAD ARTWICH; POLSKI KONCERN NAFTOWY ORLEN S.A.
Data: 2019.03.20 21:12:20 CET

…………………………
Patrycja Klarecka
Member of the Board

Signature Not Verified
Dokument podpisany przez Patrycja Klarecka
Data: 2019.03.20 21:48:12 CET

……………………………
Zbigniew Leszczyński
Member of the Board

Signature Not Verified
Dokument podpisany przez ZBIGNIEW MARIUSZ LESZCZYŃSKI; POLSKI KONCERN NAFTOWY ORLEN S.A.
Data: 2019.03.20 20:50:03 CET

……………………………
Wiesław Protasewicz
Member of the Board

Signature Not Verified
Dokument podpisany przez Wiesław Protasewicz; PKN Orlen S.A.
Data: 2019.03.20 18:30:12 CET

……………………………
Michał Róg
Member of the Board

Signature Not Verified
Dokument podpisany przez MICHAŁ MAREK RÓG; POLSKI KONCERN NAFTOWY ORLEN S.A.
Data: 2019.03.20 19:01:44 CET

………………………
Józef Węgrecki
Member of the Board

Signature Not Verified
Dokument podpisany przez Józef Węgrecki
Data: 2019.03.20 21:35:12 CET