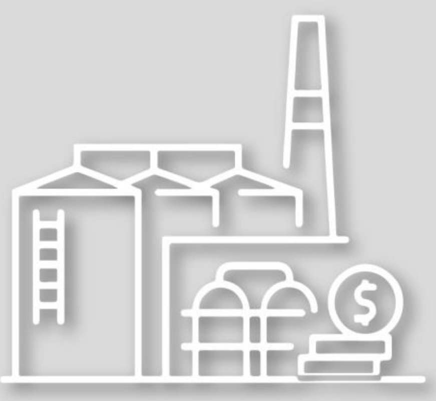
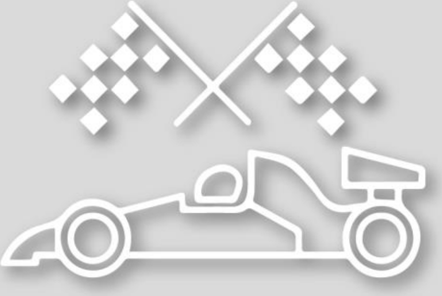
2019

MANAGEMENT BOARD REPORT ON THE OPERATIONS OF ORLEN GROUP AND PKN ORLEN S.A. FOR THE YEAR 2019





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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.

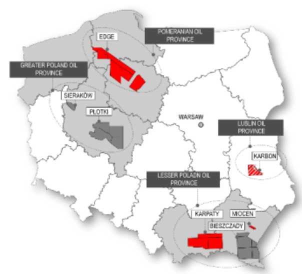
Key facts and figures 2019

9.2 PLN billion EBITDA LIFO[1]	**3.0 PLN billion** Record-high retail EBITDA[1]	**43.3 million tonnes** Record-high sales	**9.3 PLN billion** Cash flow from operations	**5.5 PLN billion** CAPEX[2]
33.9 million tonnes Record-high throughput **96%** Capacity utilization		**1.5 PLN billion (3.50 PLN/share)** Dividend payment	**6.3%** Financial gearing	**2.4 PLN billion** Net debt

UPSTREAM

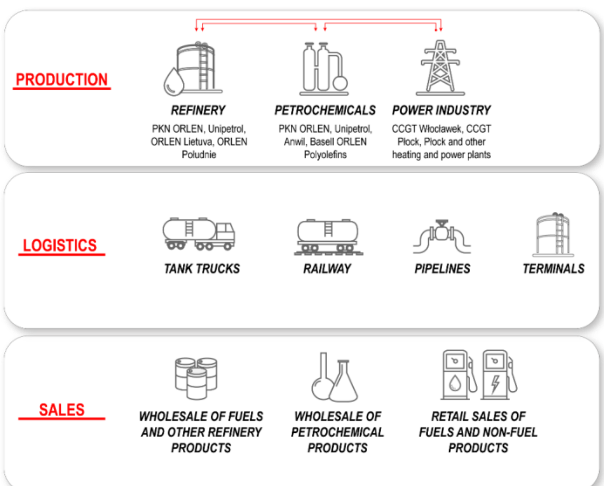
CANADA

POLAND



- Exploration and production projects in Poland and Canada
- **197.3 million boe**[3] of total 2P[4] crude oil and natural gas reserves
- **18.2 thousand boe/d** average extraction in 2019

DOWNSTREAM



- Over **35 million tonnes** of production capacities in 6 ORLEN Group rafineries[5] in Poland, the Czech Republic and Lithuania.
- **3.7 thousand kilometres** of pipeline network and **39** storage facilities
- Development projects:
  - Construction of the Polyethylene unit in the Czech Republic
  - Construction of the Metathesis unit in Płock
  - Construction of the PPF Spliter unit in Lithuania
  - Construction of a boiler house for the Steam Cracker unit in the Czech Republic
  - Construction of a unit for separation of paraffins from reforming feedstock MaxEne in PKN ORLEN

RETAIL

- Over **2.8** thousand of service station
- **16.5%** of total retail market share (Poland, Germany, the Czech Republic, Lithuania)
- **2.0 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 (0.2) billion. Definitions of presented financial indicators and described in "Glossary of selected financial and industry concepts"
2) Including the impact of MSSF 16 standard.
3) Barrel of oil equivalent.
4) Proven&probable reserves.
5) 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 the date of publication of the Management Board Report:

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.

Previously, from 2017 to February 2018, Daniel Obajtek served as president of the management board of Energa Group. In 2017, Energa Group's net profit soared fivefold, and the company was recognised as 'Company of the Year' among the names listed in the WIG20 index. Energa Group's stock price jumped by 38%. In 2016–2017, heading the Agency for Restructuring and Modernisation of Agriculture, Mr Obajtek streamlined the processes related to disbursement of billions of złotys worth of EU and national funds and optimised the cost of the Agency's operations. From July 2016 to February 2018, he was a member of the supervisory board of LOTOS Biopaliwa.

As President of the Management Board of PKN ORLEN, Mr Obajtek has determinedly pursued the mission of turning it into a multi-utility business. In February 2018, he embarked on a process to acquire control of LOTOS Group, Poland's second largest oil refiner. The transaction is to result in a single strong player, capable of competing on foreign markets. Around the middle of 2018, PKN ORLEN launched its largest ever capex projects under the Petrochemicals Development Programme. In parallel, growth capex projects were brought under way at other ORLEN Group companies, involving fertilizer capacity expansion at ANWIL of Włocławek and construction of an eco-friendly glycol unit at ORLEN Południe. In December 2019, PKN ORLEN under Mr Obajtek's stewardship initiated a process to acquire the Energa Group. The transaction will benefit both companies, while furthering PKN ORLEN's strategic plans to develop zero- and low-carbon energy sources.

Daniel Obajtek also set in motion a new policy of diversifying oil supplies for the ORLEN Group, by forging and strengthening relations with suppliers from outside Europe, including Africa and the Persian Gulf. These measures allow it to obtain a favourable mix of crudes for processing, optimising production with positive effects on the final quality and price of the Group's products and overall stability of the market.

The past two years witnessed rapid development of the ORLEN Group's retail chain, including some intensive upgrade work to raise the standard of service and enhance the non-fuel offering, through the construction of the Stop Cafe and Star Connect food & drink concepts and other measures. During that time, the ORLEN Group established a retail foothold in Slovakia and, after 12 years, opened a new retail location in Lithuania. In 2019, a co-branding project was implemented to make the ORLEN Group logo visible on Germany's star stations and on Benzina stations across the Czech Republic and Slovakia.

The Concern has been working consistently to improve its brand recognition in Poland and abroad, through sponsorship and other activities. For several years now, it can boast the position of Poland's most recognisable corporate sponsor of sports. In 2019, it gained sponsorship exposure to Formula 1, having since partnered with Robert Kubica. Since 2020, PKN ORLEN has been the title sponsor of the Alfa Romeo Racing ORLEN team, with Robert Kubica as their development driver.

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 a member of the Programme Council of the Economic Forum in Krynica and chairman of the Board of the Polish Olympic Committee.

He has won a range of prestigious awards, notably the Polish Compass 2018. He was also named President of the year 2018 in the 25th edition of the Bulls and Bears award of Gazeta Giełdy i Inwestorów Parkiet. In 2019, he was awarded the Lech Kaczyński Prometheus Award. From the Judging Panel of the Employers of Poland, he received the Vector 2019 award. In 2020, readers of the Parkiet daily voted him Star of the Year 2020. In the 'The Most Reliable in Polish Economy' ranking by the ISB News agency, he received a statuette of the Most Reliable CEO.

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 and 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 and member of the Board of the European Petroleum Refiners Association.

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

Ms Patrycja Klarecka has been a Member of the PKN ORLEN Management Board since June 24th 2018. She graduated from the Poznań University of Economics and Business in Economic Policy and Corporate Strategy.

As Member of the PKN ORLEN Management Board, she has been responsible, among others, for retail sales and retail chain development. Her remit also covers innovation and CSR, IT as well as infrastructure and information security.

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 18 years of working in managerial positions at various companies, including the Warsaw Stock Exchange (2014–2016), Bank Zachodni WBK (2010–2014), Telewizja Polska (2004–2010), and PZU (2002–2004). 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 chaired the supervisory board of ORLEN Deutschland GmbH (in 2018–2019), served on the supervisory boards of the WSE Foundation and IAB Polska, and was 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 has been a Member of the PKN ORLEN Management Board since September 1st 2018. Michał Róg is a graduate of the Cracow University of Economics, where he majored in management and marketing, and of the Canadian International Management Institute and Harvard Business School. He has completed the Executive MBA programme run jointly by the Cracow University of Technology and Central Connecticut State University.

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.

From March to August 2018, he was a management board member for trade at ORLEN OIL Sp. z o.o. of Kraków. From April to August 2018, he was additionally a management board member at Paramo a.s. based in Pardubice, the 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.

JAN SZEWCZAK
Member of the Management Board, Chief Financial Officer

Mr Jan Szewczak is a Member of Management Board of PKN ORLEN since February 3st 2020.

Jan Szewczak is a lawyer, business analyst and an expert in finance, financial law, banking and macroeconomy. He graduated from the Faculty of Law and Administration of the University of Warsaw and completed doctoral studies at the Department of Finance and Financial Law. He also completed academic internships in Amsterdam and Prague. For many years Mr Szewczak had been a faculty member and a lecturer at the Faculty of Law and Administration of the University of Warsaw and the Vistula University. He has gained extensive experience in the financial sector. He has sat on the Management Board of PZU Tower, served as Chief Economist of Kasa Krajowa SKOK (credit union), Member of the Sejm (lower chamber of the Polish Parliament) of the 8th term, Chairman of the Standing Subcommittee on Financial Institutions, and Deputy Chairman of the Public Finance Committee and member of the Digitisation Committee of the Sejm. He is an economic journalist and the author of numerous opinions and expert reports on business processes and ownership transformations. Its interests include economic history and privatisation processes in Poland and abroad.

ADAM BURAK
Member of the Management Board, Communication & Marketing

Mr Adam Burak holds a degree in international relations from the University of Wrocław as well as an MBA degree, and has completed a postgraduate course in journalism and public relations at the Tischner European University in Kraków.

At the ORLEN Group, Mr Burak is responsible for the implementation of a consolidated strategy in corporate and marketing communication, and also for the development of digital communication channels in Poland and abroad.

In February 2018, Mr Burak was appointed as Executive Director for Corporate Communication at PKN ORLEN, supervising the implementation of the ORLEN Group's external and internal communication strategy, as well as the development of the structures and business model of a media agency established in partnership with PZU S.A.

Prior to that, he had worked in the fuel and energy industry as well as the financial sector. His roles included that of Communication and Marketing Director at the largest Polish companies, such as Energa Group, LOTOS Group and PZU S.A., creating and implementing corporate, marketing and sponsorship communication strategies.

He also has extensive experience in sports marketing and journalism. In 2012–2016, he was Marketing and PR Director as well as press officer for the Wrocław Stadium, and from 2008 to 2012 he worked as a journalist for Telewizja Polsat. Mr Burak has sat on the supervisory boards of UNIPETROL A.S., ORLEN Południe S.A. and currently PZU Zdrowie S.A.

He is a jury member of an industry contest 'Golden Paperclips', a member of the judging panel of the '50 Most Creative People in Business' programme, organised by the BRIEF magazine, and a speaker at the Public Relations Professionals Congress..

Composition of the Management Board as at December 31st 2019:
- Daniel Obajtek - President of the Management Board, Chief Executive Officer,
- Zbigniew Leszczyński - Member of the Management Board, Development,
- Józef Węgrecki - Member of the Management Board responsible for Operations,
- Patrycja Klarecka - Member of the Management Board, Retail Sales,
- Michał Róg - Member of the Management Board for Wholesale and International Trade,
- Armen Konrad Artwich - Member of the Management Board for Corporate Affairs.

Changes in the composition of the PKN ORLEN Management Board

Date	Change
November 28th 2019	The PKN ORLEN Supervisory Board removed from the Management Board, with effect as of November 28th 2019 **Wiesław Protasewicz**.
January 30th 2020	The PKN ORLEN Supervisory Board appointed the following persons to the Management Board, with effect from February 3rd 2020: - **Jan Szewczak** as Member of the Management Board for Finance, - **Adam Burak** as Member of the Management Board for Communication and Marketing.

Supervisory Board of the Parent Company

Composition of the Supervisory Board as at the date of publication of the Management Board Report:

MR WOJCIECH JASIŃSKI

Chairman of the Supervisory Board

Mr Wojciech Jasiński graduated from the University of Warsaw, the Faculty of Law and Administration. In years 1972 – 1986 he worked in Płock in the National Bank of Poland (branch in Płock) and in the Town Hall, also as a legal counsel in the Tax Chamber. In years 1990 – 1991 he organised the local government in Płock Voivodship, being the Delegate of the Government's Plenipotentiary for Local Government Reform. From 1992 to 1997 he worked in the Supreme Audit Office (NIK) at the positions of Director of: NIK's Delegation Office in Warsaw, Finance and Budget Team and State Budget Department. In years 1997-2000 he was a Member and then a President of the Management Board of Srebrna company located in Warsaw. In years 1998 – 2000 he was a Member of the Supervisory Board of Bank Ochrony Środowiska S.A. From September 2000 to July 2001 he held the position of under-secretary of State in the Ministry of Justice. In years 2006 – 2007 he was a Minister of the State Treasury.

From 2001 he has been a Member of Polish Parliament (4th, 5th, 6th, 7th, and 8th terms of the Parliament), where he performed the following functions: Chairman of Standing Subcommittee for the Banking System and Monetary Policy, Chairman of the Economy Committee, Chairman of the Public Finance Committee. He was also a Member of the State Treasury Committee in the Parliament.

He held the position of the President of the Management Board of PKN ORLEN S.A. from 16 December 2015 till 5 February 2018. From June 2018 till July 2019 he held the position of a Proxy of the Management Board of Energa S.A. responsible for development of investments and energy markets.

Since 25 February 2016 he is a Member of the Supervisory Board of PKO Bank Polski S.A.

MR ANDRZEJ SZUMAŃSKI

Vice-Chairman of the Supervisory Board (Independent Member)

Attorney at law. Full professor at the Department of Private Commercial Law of the Jagiellonian University. One of the three authors of the Polish Commercial Companies Code of September 15th 2000. He participated in the preparation of The OECD Principles of Corporate Governance 1999. As an expert of the Association of Stock Exchange Issuers, he prepared a draft of the Rules of the Corporate Governance Commission, enabling implementation of the principles of Corporate Governance for Public Companies adopted by the Warsaw Stock Exchange.

Currently, he is the Chairman of the Concern Law Team within the Committee for the Reform of Owner Supervision at the Minister of State Assets.

Since 1995 he has been an arbitrator of the Arbitration Court at the Polish Chamber of Commerce in Warsaw, and since 2015 he has been a member of the Court's Arbitration Council. He has been President of the Exchange Court at the Warsaw Stock Exchange since 2007. From 2005 to 2011, he served two terms as President of the Arbitration Court at the Lewiatan Polish Confederation of Private Employers. He participated in numerous restructuring and privatisation projects. He sat on the Supervisory Boards of Południowy Koncern Energetyczny S.A. of Katowice, Małopolska Agencja Rozwoju Regionalnego S.A. of Kraków, and Polimex-Mostostal S.A. of Warsaw, among others.

He prepares legal expert reports in the fields of private commercial law, contract law and arbitration law. He is the author of textbooks and commentaries on corporate and securities law, as well as numerous articles, glosses and reviews in the field of commercial law. He is a member of the University Council of the Music Academy in Cracow.

MRS ANNA WÓJCIK

Secretary of the Supervisory Board

Anna Wójcik is a graduate of the Poznań School of Banking and Management and the University of Warsaw (Faculty of Law and Administration).

She also completed post-graduate studies at the WUT Business School (Faculty of Management), and was awarded the title of Master of Business Administration.

She is a manager with more than a decade's experience in the private sector (real estate, retail, business consulting) and government administration.

Her recent positions included COO at Exeq sp. z o.o., whose field of expertise is in fund raising for corporate research, development and innovation. As part of her remit, she coordinated the work of the management board office and accounted for projects implemented within programmes financed with OP IE and NCRD funds.

Since 2016, her career has been in the government administration. She worked as Head of the Minister's Office at the Ministry of Development and the Ministry of Finance, while currently she is employed at the Chancellery of the Prime Minister as Head of the Prime Minister's Office.

MRS BARBARA JARZEMBOWSKA

Independent Member of Supervisory Board

Graduate of the University of Warsaw. Holds an MBA certificate. She has experience in financial consulting, foreign aid coordination, and foreign investment promotion, among other fields.

Since 2000, she has been a director at Bank Pekao S.A. in charge of various areas including operational risk, transaction banking, FMCG key account management, sales monitoring, and budget planning and implementation.

MR ANDRZEJ KAPAŁA

Independent Member of Supervisory Board

Mr Andrzej Kapała is a Graduate of the School of Banking and Management in Poznań, with an MA in business management and post-graduate courses in human resources management and financial management at the Wrocław University of Economics. Mr Kapała has also completed MBA studies at General School of Management. 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 many years he carried out consulting projects for private and municipal companies in the area of investment and financial analyzes as well as project management, restructuring and standardization of business processes. Andrzej Kapała is an author of several dozen feasibility studies and business plans for infrastructure investments and consulting projects in the area of enterprise restructuring (projects regarding the development of technology and industrial parks, water and sewage management, and information society).

Since 2012, as Head of the Administration Office of PKO Bank Polski, he has been responsible for management of approximately 300 properties from the Bank's resources and several dozen investment projects annually. He also oversees the standardization of business processes in the areas of real estate and project management as well as technical security for the Bank's branches.

MR MICHAŁ KLIMASZEWSKI

Independent Member of Supervisory Board

Attorney-at-law, doctor of law, assistant professor at the Department of Administrative Science and Environmental Protection at the Faculty of Law and Administration of Cardinal Stefan Wyszyński University. Member of the Warsaw Seminar on Administration Axiology. Graduate of the Faculty of Law and Administration at the University of Warsaw.

Author and co-author of publications on law and administrative proceedings. Author of expert opinions and studies for public and private sector entities. Member of the supervisory boards of private companies.

Deputy Disciplinary Spokesperson at the Warsaw Bar Association.

MR ROMAN KUSZ

Independent Member of Supervisory Board

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 Mr Roman Kusz to the PKN ORLEN S.A. Supervisory Board.

Mr Roman Kusz in years 1987-1992 graduated the studies at the Faculty of Law and Administration at University of Silesia in Katowice. In years 1993-1997 he completed pupillage at the District Bar Council of Katowice. Since 1997 he conducts the legal practice.

In years 2007-2013 and since 2016 he holds the position of dean of the District Bar Council of Katowice.

Currently he holds the position of the Chairman of the Supervisory Board of Górnik Zabrze SSA in Zabrze and in term of office of 2018/2019 he held the position of secretary of Supervisory Board of Ekstraklasa S.A. in Warsaw.

Since 2017 he is a member of the Supervisory Board of the Voivodship Fund for Environment Protection in Katowice.

In February 2019 he was appointed as a member of the Council of University of Economics in Katowice.

Since 2014 he is an organizer and moderator of the legal discussion panel at the European Economic Congress in Katowice.

As a representative of the Supreme Bar Council and chairman of the Commission for External Image and Law Protection he was a co-organizer of the discussion panel „Advancing Law & Governance Contributions to Climate Action under the Paris Agreement" included in United Nations Climate Change conference that was held in 2018 in Katowice.

In 2018 he was honored with the Gold Cross of Merit of the Republic of Poland.

MRS JADWIGA LESISZ

Member of Supervisory Board

Jadwiga Lesisz has over 20 years of professional experience, including extensive practical experience in creating and organising business processes for the SME sector.

In 2012–2016, at PKO Bank Polski S.A. she was in charge of real estate operations, supervised negotiations and was a business controller of the branch network optimisation project.

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. Currently, she serves as Vice President of the Polish Agency for Enterprise Development, responsible for the supervision of business innovation and start-up support projects, public procurement processes and management of the Agency's assets and IT resources.

She graduated in Foreign Trade from the Faculty of International Relations of the Wrocław University of Economics. She also completed a postgraduate course in Real Estate Management at the Wrocław University of Technology and a Master of Business Administration programme run by the WSB University of Wrocław in partnership with Franklin University, USA.

	MR DOMINIK KACZMARSKI **Member of the Supervisory Board** Mr Dominik Kaczmarski has a Master Degree in Law at the Law and Administration Faculty at the Warsaw University. He holds the title of a Tax Advisor. He gained the professional experience by working at the largest international advisory companies (PwC 2012 – 2014 and Deloitte 2014 - 2016) as an expert of the financial sector taxation. From February 2016 till January 2020 he was employed in the Ministry of Finance as a Deputy Director of Sector, Local and Games Taxes Department, then as a Deputy Director and Director of Tax System Department. He participated in tightening of CIT and VAT tax system. He held the position of the Secretary of the Council of Tax Avoidance Counteraction, the Member of the Government Board of Examiners on Tax Advising and Member of Codification Commission on General Tax Law. Currently, he is a Member of Expertise Team of Holdings Law, which is a part of Commission of Ownership Supervision Reform. Mr Dominik Kaczmarski is an author of many publications on taxes. Since 2020 he is a member of the Supervisory Board of Aplikacje Krytyczne Sp. z o.o. Currently, he holds the position of the Deputy Director of Analysis and Reporting Department at the Ministry of Government Assets.
	**MRS. ANNA SAKOWICZ-KACZ** **Independent Member of Supervisory Board** Graduate of the Faculty of Law and Administration of Maria Curie-Skłodowska University in Lublin. Post-graduate studies in real estate appraisal. She holds the licence of a restructuring advisor from the Minister of Justice. She has experience in the roles of bankruptcy administrator, court supervisor and curator under the bankruptcy and restructuring law, as well as supervisory board experience.

Composition of the Supervisory Board as at December 31st 2019:
- Izabela Felczak-Poturnicka – Chairwoman of the Supervisory Board,
- Andrzej Szumański – Vice-Chairman of the Supervisory Board (Independent Member),
- Anna Wójcik – Secretary of the Supervisory Board,
- Barbara Jarzembowska – Independent Member of Supervisory Board,
- Andrzej Kapała – Independent Member of Supervisory Board,
- Michał Klimaszewski – Independent Member of Supervisory Board,
- Roman Kusz – Independent Member of Supervisory Board,
- Jadwiga Lesisz – Member of Supervisory Board,
- Małgorzata Niezgoda – Member of Supervisory Board,
- Anna Sakowicz-Kacz – Independent Member of Supervisory Board.

Changes in the composition of the PKN ORLEN Supervisory Board

Data	Change
February 15th 2019	On February 15th 2019, **Mr Mateusz Henryk Bochacik** resigned as member of the Supervisory Board of PKN ORLEN S.A. Mr Bochacik justified his resignation by personal reasons that prevent further effective carrying out of the Company's Supervisory Board member mandate.
June 14th 2019	**Mr Radosław Kwaśnicki** resigned with the effect from 14 June 2019 from the position of the PKN ORLEN Supervisory Board Member (and at the same time from the position of the Deputy Chairman of the PKN ORLEN Supervisory Board). Mr Radosław Kwaśnicki indicated that reasons of his resignation are issues not connected with the Company.
June 14th 2019	**The PKN ORLEN's Ordinary General Meeting of Shareholders** appointed Members of the PKN ORLEN Supervisory Board for a new term of office as follows: • **Izabela Felczak-Poturnicka** – Chairwoman of the Company's Supervisory Board • **Barbara Jarzembowska** – Member of the Company's Supervisory Board • **Andrzej Kapała** – Member of the Company's Supervisory Board • **Michał Klimaszewski** – Member of the Company's Supervisory Board • **Jadwiga Lesisz** – Member of the Company's Supervisory Board • **Małgorzata Niezgoda** – Member of the Company's Supervisory Board • **Anna Sakowicz-Kacz** – Member of the Company's Supervisory Board • **Andrzej Szumański** – Member of the Company's Supervisory Board • **Anna Wójcik** – Member of the Company's Supervisory Board.
October 29th 2019	**Mr Roman Kusz** was appointed to the Supervisory Board of PKN ORLEN S.A.
January 16th 2020	**Ms Izabela Felczak-Poturnicka** resigned with the effect from 16 January 2020 from the position of Chairwoman of the PKN ORLEN Supervisory Board which was entrusted to her in the Resolution no. 35 of the Annual General Meeting of PKN ORLEN dated 14 June 2019.
March 5th 2020	**Extraordinary General Meeting of Shareholders of PKN ORLEN S.A.** dismissed from the Supervisory Board **Ms Małgorzata Niezgoda** and appointed **Mr Wojciech Jasiński** as a Chairman of the Supervisory Board and **Mr Dominik Kaczmarski** as a member of the Supervisory Board.

1.3. ORGANISATION AND DEVELOPMENT POLICY

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

– production in refinery and petrochemical segments including crude oil processing and production of refining, petrochemical and chemical products and semi-products and in energy segment – production of electricity and utilities,
– trade: 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.

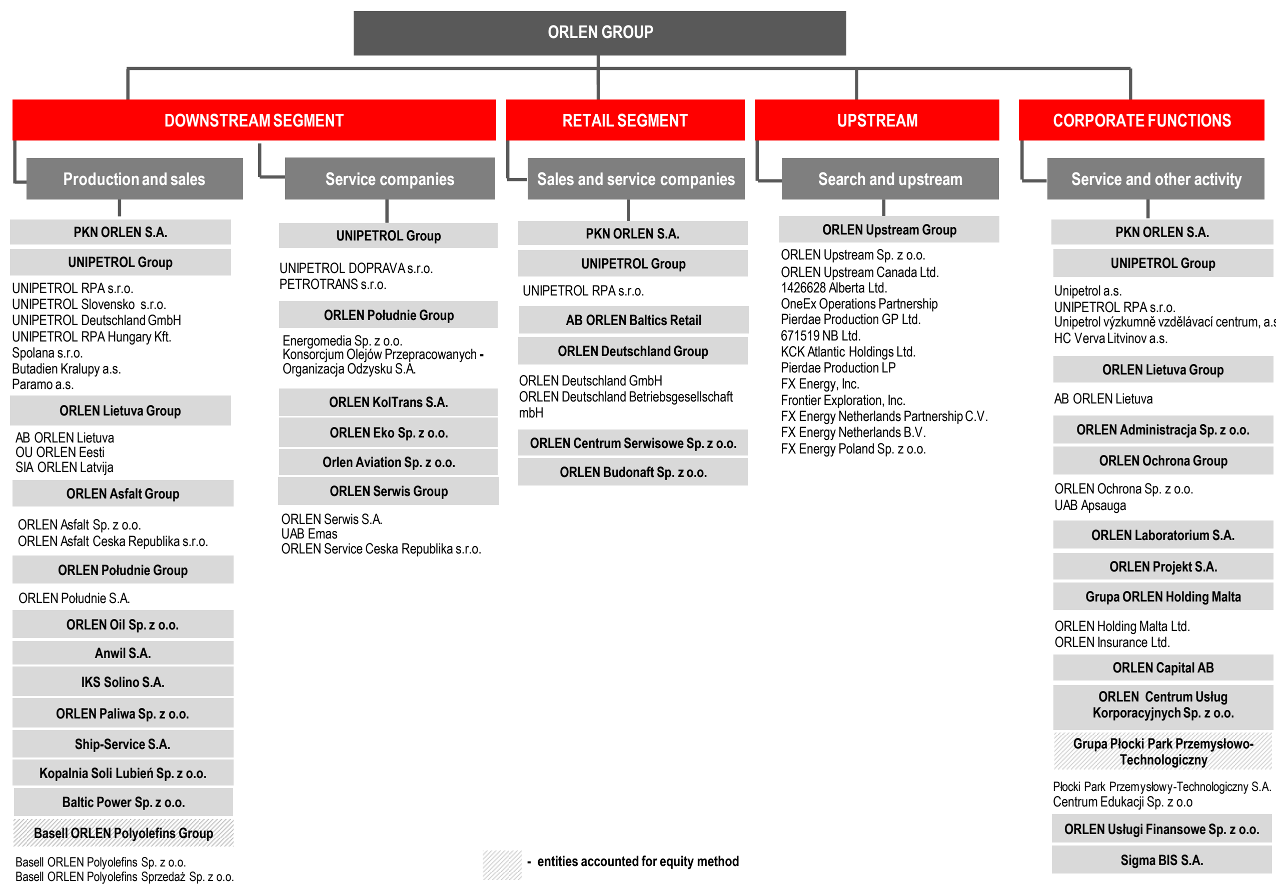
The ORLEN Group comprises PKN ORLEN, the Group's Parent and entities operating in Poland, Germany, the Czech Republic, Lithuania, Malta, Sweden, the Netherlands, Slovakia, Hungary, Estonia, Latvia, the US and Canada.

As at 31 December 2019 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 2019, the ORLEN Group consisted of 68 companies, including 58 subsidiaries.

For description of the organisational and cross-equity links between the Parent and the ORLEN Group companies, and the applied consolidation methods, see section 7.1 of the Consolidated Financial Statements for 2019.

SCHEME 1. Allocation of the Parent Company and the ORLEN Group companies to the operating segments and corporate functions as at 31 December 2019.



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 2019 included:

- inclusion of Planning and Reporting into the Finance Management area,
- inclusion of the Investor Relations Office into the Strategy area,
- allocation of responsibility for the supervised area's compliance with applicable laws, internal regulations, adopted standards of conduct and ethical standards in place at the Group to the Head of the Financial Control, Risk and Compliance Management Office and to other unit heads reporting directly to the Management Board Members,
- allocation of responsibility for the execution of property investment projects (excluding API projects) with a view to increasing their value and the Company's capital to the Executive Director for Investment,
- taking over by Mr Armen Artwich (Member of the Management Board, Corporate Affairs) of supervision over the Finance division, following removal of Mr Wiesław Protasewicz from the Management Board of PKN ORLEN S.A.,
- transfer of the Occupational Health and Safety Office from the Development division to the Operations division,
- transfer of the Infrastructure and Information Supervision Office to the Retail Sales division.

SCHEME 2 Responsibility areas of Members of the PKN ORLEN Management Board as at 31 December 2019.

PRESIDENT OF THE MANAGEMENT BOARD, CHIEF EXECUTIVE OFFICER DANIEL OBAJTEK	MEMBER OF THE MANAGEMENT BOARD, CORPORATE AFFAIRS ARMEN ARTWICH	FINANCE DIVISION SUPERVISION BY THE BOARD MEMBER FOR CORPORATE AFFAIRS ARMEN ARTWICH	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 and Investor Relations	Administration	Business Controlling	Procurement	Refinery Production	IT	Wholesale of Refinery Products
Human Resources	Environmental Protection	Finance Management, Planning and Reporting	Implementation of Investments	Petrochemical Production	Retail Sale	Sale of Petrochemical Products
Trade of Crude Oil and Gas	Capital Group	Taxes	Development and Technology	Power Engineering	Marketing	Logistics
Corporate Communication	Financial Controlling, Risk Management and Compliance*		Technics	Production Efficiency and Optimisation	Innovation	Supply Chain Management
Management Board Office				Health and Safety	Security of Infrastructure and Data Supervision Office, Critical Infrastructure Protection Officer	
Control and Security				Water and Wastewater Management		
Audit						
Legal Office						
External Relations						
Sports Marketing, Sponsorship and Events						

* Direct supervision over financial control is exercised by the President of the Management Board, General Director on the basis of the Management Board's resolution on establishing the internal division of powers and responsibilities among the Management Board members and substitution of Management Board Members

For a description of changes in the composition of the Management and Supervisory Boards in 2019 and by the issue date of this Report, see Section 1.2. of this Report.

There were no material changes in the organisation and management policies of the other **ORLEN Group companies** in 2019. For information on the existing organisational structure of the ORLEN Group companies and their governing bodies, go to https://www.orlen.pl/en/pages/default.aspx

1.3.2. Changes in cross-equity links

For a description of changes in cross-equity links in 2019, see section 7.2 of the Consolidated Financial Statements for 2019.

1.4. SELECTED OPERATING AND FINANCIAL DATA

TABLE 1. Selected operation and financial data for the years 2015-2019.

Item	unit	2019	2018	2017	2016	2015
I. MACROECONOMIC DATA (average value for the period)						
Brent oil	USD/bbl	64.2	71.3	54.2	43.7	52.4
Ural oil	USD/bbl	63.0	69.9	52.8	41.7	51.0
WTI oil	USD/bbl	57.0	65.0	50.8	43.5	48.8
Brent/URAL differential	USD/bbl	0.8	1.5	1.4	2.5	1.8
Model downstream margn[1]	USD/bbl	10.7	12.2	12.8	11.7	13.8
Model refinery margin[1]	USD/bbl	5.2	5.1	6.4	5.3	8.2
Model petrochemical margin[1]	EUR/t	859	885	933	960	968
Average exchange rate USD/PLN	PLN	3.8399	3.6117	3.7782	3.9435	3.7730
Average exchange rate EUR/PLN	PLN	4.2988	4.2617	4.2583	4.3637	4.1843
Average exchange rate EUR/USD	USD	1.1195	1.1800	1.1271	1.1066	1.1090
II. OPERATING ACTIVITY						
Sales of products and goods, including:	**'000 tonnes**	**43 293**	**42 892**	**42 382**	**39 453**	**38 676**
Downstream	'000 tonnes	32 740	32 716	32 925	30 708	30 380
Retail	'000 tonnes	9 817	9 448	8 819	8 187	7 986
Upstream	'000 tonnes	736	728	638	558	310
Crude oil throughput in the ORLEN Group, of which:	**'000 tonnes**	**33 879**	**33 380**	**33 228**	**30 147**	**30 909**
Crude oil throughput in PKN ORLEN	**'000 tonnes**	**16 207**	**15 855**	**15 220**	**15 130**	**15 674**
Crude oil throughput in the Unipetrol Group	'000 tonnes	7 854	7 555	7 894	5 422	6 495
Crude oil throughput in the ORLEN Lietuva Group	'000 tonnes	9 515	9 690	9 821	9 323	8 486
III. FINANCIAL ACTIVITY						
3.1. Consolidated statement of profit or loss and other comprehensive income						
Sales revenues	**PLN million**	**111 203**	**109 706**	**95 364**	**79 553**	**88 336**
Profit from operations under LIFO[2] increased by depreciation and amortization ("EBITDA LIFO[2]") before impairment allowances[3], including:	**PLN million**	**9 172**	**8 324**	**10 448**	**9 412**	**8 738**
Downstream	PLN million	6 667	6 031	8 720	8 107	7 776
Retail	PLN million	3 045	2 781	2 049	1 801	1 539
Upstream	PLN million	295	305	293	255	44
Corporate Functions	PLN million	(835)	(793)	(614)	(751)	(621)
Profit from operations under LIFO increased by depreciation and amortization, including:	**PLN million**	**8 993**	**9 028**	**10 279**	**9 557**	**7 745**
LIFO effect[2]	PLN million	(131)	860	799	85	(1 510)
Profit from operations increased by depreciation and amortization ("EBITDA[2]"), including:	**PLN million**	**8 862**	**9 888**	**11 078**	**9 642**	**6 235**
Depreciation and amortization	PLN million	3 497	2 673	2 421	2 110	1 895
Profit / (loss) from operations ("EBIT[2]")	**PLN million**	**5 365**	**7 215**	**8 657**	**7 532**	**4 340**
Net profit / (loss)	**PLN million**	**4 298**	**5 604**	**7 173**	**5 740**	**3 233**
Profit/(Loss) attributable to shareholders of the Parent Company per share (EPS[2])	PLN/share	10.05	12.99	15.56	12.30	6.63
3.2. Consolidated statement of financial position						
Total assets	PLN million	71 202	64 141	60 664	55 559	48 137
Equity	PLN million	38 607	35 739	35 211	29 285	24 244
3.3. Consolidated statement of cash flows						
Net cash from operating activities	PLN million	9 319	4 980	8 050	9 331	5 354
Net cash (used in) investing activities, including:	PLN million	(3 994)	(3 798)	(3 925)	(4 436)	(4 096)
Increase in non-current assets	PLN million	5 457	4 280	4 602	4 673	3 183
Free cash flow[4]	**PLN million**	**5 325**	**1 182**	**4 125**	**4 895**	**1 258**
Net cash (used in) financing activities	PLN million	(3 363)	(3 237)	(2 832)	(2 210)	(2 866)
Dividends paid	PLN million	(1 497)	(1 284)	(1 384)	(912)	(706)

Item	unit	2019	2018	2017	2016	2015
3.4. Basic ratios[2]						
Liquidity ratios, including:						
Current liquidity ratio		1.7	1.8	1.8	1.5	2
Quick liquidity ratio		0.9	0.9	1.0	0.8	0.7
Turnover ratios, including:						
Receivables turnover	days	29	30	30	29	23
Liabilities turnover	days	28	28	34	35	29
Inventory turnover	days	49	45	45	50	42
Profitability ratios, including:						
Return on assets (ROA)	%	6.2	7.9	11.7	10.1	8.2
Return on equity (ROE)	%	11.5	14.3	20.1	19.3	16
Return on capital employed (ROACE)	%	10.9	13.6	20.8	18.8	14.9
Return on capital employed under LIFO (ROACE LIFO)	%	11.2	11.8	19.0	18.6	19.1
Gross margin on sales	%	5.0	5.8	9.0	8.5	5.3
Net margin on sales	%	4.0	4.6	7.4	7.1	4.5
Debt ratios, including:						
Net debt	PLN million	2 448	5 599	761	3 363	6 810
Net financial gearing	%	6.3	15.7	2.2	11.5	28.1

1) The method of calculating the margin is placed at the end of this report, in "Glossary of selected financial and industry concepts".
2) 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".
3) The results from operations for the years 2015, 2016, 2017, 2018 and 2019 include impairment allowances of assets in the amount of: PLN (993) million, PLN 145 million, PLN (169) million, PLN 704 million and PLN (179) million.
4) 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 2019

QUARTER 1	
Changes in the composition of the Supervisory Board of PKN ORLEN	Mr Mateusz Henryk Bochacik resigned with effect from 15 February 2019 from the position of PKN ORLEN Supervisory Board Member. Mr Bochacik justified his resignation by personal reasons that prevent him from continuing to effectively carry out the Company's Supervisory Board member mandate. Regulatory announcement no. 4/2019.
Information on Metathesis Unit building investment	On 20 February 2019 PKN ORLEN announced that the currently under-construction metathesis unit in the Płock Production Plant is in the final stage of the commissioning phase. Following the completion of all steps within the commissioning procedures, loading up of the unit and the stabilization of the process parameters, process adjustment and a guarantee measurements will be conducted and the investment process will be completed. PKN ORLEN will announce the completion of the investment process in a separate regulatory announcement. Regulatory announcement no. 5/2019.

QUARTER 2	
PKN ORLEN submitted an offer to Ruch S.A.	PKN ORLEN announced that on 11 April of the current year it submitted an offer to provide financing in connection with the intention to acquire 100% of Ruch S.A. shares. The decision was preceded by a due diligence investigation of the company. The investor foresees the opportunity for restructuring and exploitation synergies between the Ruch's existing business model and the dynamically developing retail segment of PKN ORLEN. The finalization of the offer will depend, among others, on the decisions of Ruch's creditors and obtaining the consent of the Antitrust Authority to acquire the company's shares. Detailed information were presented on the website of PKN ORLEN in the press release at: link
Agreement regarding building of "Research and Development Centre in Płock"	PKN ORLEN announced that on 24 April 2019 the Company's Management Board decided to invest in a "Research and Development Centre in Płock" ("RDC") and the Company's Supervisory Board gave consent for PKN ORLEN to assume liabilities under the agreement on the building of the RDC, which was followed by the conclusion of an agreement with Budimex S.A. for its construction. The maximum value of the agreement will amount to approximately PLN 167 million and the total cost of the investment will amount to approximately PLN 184 million. The finalization of the investment is planned by the end of 2020. The RDC in Płock is a necessary part of the PKN ORLEN 2018 Program of the Petrochemical Segment Development ("Program") and completion of the research infrastructure of the ORLEN Group. It will function as a facility to carry out research and to support the other projects included in the Program as well as the further extension of the value chain of petrochemical production announced as part of the PKN ORLEN Strategy. It will also be a place to undertake research in the other areas of the ORLEN Group's activity. Regulatory announcement no. 8/2019.
Agreement for building a nitric acid and neutralization installation by ANWIL S.A.	PKN ORLEN announced that on 24 April 2019 ANWIL S.A. signed an agreement with Thyssenkrupp Industrial Solutions AG for the design, deliveries and building "in turn key" formula of a nitric acid and neutralization installation in ANWIL S.A. in Wloclawek. The building of a nitric acid and neutralization installation is a key stage in the realization of investment into the extension of the fertilizer production capacities of ANWIL S.A. The agreement signed with Thyssenkrupp Industrial Solutions AG is the first of three most important contracts to be concluded in relation to the extension of the fertilizer production capacities of ANWIL S.A. The project assumes an annual increase of fertilizers production capacities of 495 thousand tons, i.e. to the level of 1,461 thousand tons annually. The estimated total cost of the investment amounts to approximately PLN 1.3 billion. The finalization of the investment is planned by the close of the first half of 2022. After realization of the project it is estimated that the operating profit increased by depreciation and amortization (EBITDA) of ANWIL S.A. may increase by approximately EUR 57 million annually. Regulatory announcement no. 9/2019.
Temporary suspension of crude oil deliveries via the „Friendship" pipeline to the Production Unit in Płock	PKN ORLEN announced that on 24 April 2019 at 22:36 it received from PERN SA. information regarding the suspension of crude oil deliveries via the „Friendship" pipeline to the Production Unit in Płock. The reason of the suspension was the significant decline in the quality of crude oil supplied to the Adamowo Depot, where the crude oil is received from the East before being forwarded to Miszewko Strzałkowskie Depot, near Płock. The above situation neither beared influence on the level of crude oil throughput in the refinery in Płock. PKN ORLEN is prepared to receive alternative crude oil supplies. For the last two years PKN ORLEN has consistently realized a policy of crude oil supply diversification, thanks to which currently almost 50% of crude oil supplied to the Production Unit in Płock comes from supply directions other than Russian, i.e. from Norway, Angola, Nigeria and Saudi Arabia. Additionally, PKN ORLEN has sufficient crude oil inventories to allow for production to continue. As a result there is currently no risk of production limitation due to the suspension of feed stock supplies deliveries via the „Friendship" pipeline. Regulatory announcement no. 10/2019.
Temporary suspension of crude oil deliveries via the „Friendship" pipeline to the refinery in Litvinov	PKN ORLEN announced that on 26 April 2019 Unipetrol a.s. received from the local operator information regarding the suspension of crude oil deliveries via the „Friendship" pipeline to the refinery in Litvinov, belonging to the ORLEN Group. The reason of the suspension was the significant decline in the quality of crude oil supplied via the „Friendship" pipeline. The above situation has not influence the level of crude oil throughput in the Unipetrol a.s. refineries. As a result there is currently no risk of production limitation due to suspension of the raw material deliveries via the „Friendship" pipeline. The crude oil throughput at ORLEN Lietuva is not currently affected. Regulatory announcement no. 12/2019.
Metathesis Unit building investment completed	PKN ORLEN announced that on 30 April 2019 it signed a certificate with Elektrobudowa S.A. on the basis of which the realisation of the investment process of the Metathesis Unit building at the production plan in Płock has been completed. The total investment expenditures spent by the Company for the project of the Metathesis Unit building amounted to approximately PLN 400 million. Regulatory announcement no. 13/2019.
Resumption of crude oil deliveries via the „Friendship" pipeline to the refinery in Litvinov	PKN ORLEN announced that Unipetrol a.s. received from the local operator information regarding the resumption of good quality crude oil supplies via the „Friendship" pipeline to the refinery in Litvinov, belonging to the ORLEN Group. The suspension of crude oil deliveries via the „Friendship" pipeline, which lasted from 26 April 2019, did not influence the level of crude oil throughput in the Unipetrol a.s. refineries. Regulatory announcement no. 20/2019.

Resumption of crude oil deliveries via the „Friendship" pipeline to the Production Unit in Płock	PKN ORLEN announced that on 9 June 2019 it received from PERN S.A. an information about resumption of deliveries of crude oil with contractual quality, via the „Friendship" pipeline to the Production Unit in Płock. The suspension of crude oil deliveries via the „Friendship" pipeline, which lasted from 24 April 2019, did not influence the level of crude oil throughput in Płock refinery. Regulatory announcement no. 23/2019.
Changes in the composition of the Supervisory Board	PKN ORLEN announced that Mr Radosław Kwaśnicki resigned with the effect from 14 June 2019 from the position of the PKN ORLEN Supervisory Board Member (and at the same time from the position of the Deputy Chairman of the PKN ORLEN Supervisory Board). Mr Radosław Kwaśnicki indicated that reasons of his resignation are issues not connected with the Company. Regulatory announcement no. 25/2019.
The Ordinary General Meeting of Shareholders of PKN ORLEN S.A. appointed the Supervisory Board for a new term of office.	The Ordinary General Meeting of Shareholders on 14 June 2019 appointed Members of the PKN ORLEN Supervisory Board for a new term of office as follows: • Izabela Felczak-Poturnicka – Chairwoman of the Company's Supervisory Board, • Barbara Jarzembowska – Member of the Company's Supervisory Board, • Andrzej Kapała – Member of the Company's Supervisory Board, • Michał Klimaszewski – Member of the Company's Supervisory Board, • Jadwiga Lesisz – Member of the Company's Supervisory Board, • Małgorzata Niezgoda – Member of the Company's Supervisory Board, • Anna Sakowicz-Kacz – Member of the Company's Supervisory Board, • Andrzej Szumański – Member of the Company's Supervisory Board, • Anna Wójcik – Member of the Company's Supervisory Board. Regulatory announcement no. 28/2019.
Agreement for building a granulation unit by ANWIL S.A.	PKN ORLEN announced that on 28 June 2019 ANWIL S.A. signed an agreement with Tecnimont S.p.A. for design, deliveries and building "in turn key" formula a granulation unit in ANWIL S.A. in Wloclawek ("Agreement"). The agreement signed today with Tecnimont S.p.A. is the second of the three most important contracts to be concluded within the frames of the extension of fertilizers production capacities in ANWIL S.A. The project assumes increase of fertilizers production capacities by 495 thousand tons annually, ie. to the level of 1,461 thousand tons annually. Estimated total cost of the investment amounts to approximately PLN 1.3 billion. The finalization of the investment is planned by the half of 2022. After realization of the project it is estimated that the operating profit EBITDA of ANWIL S.A. may increase by approximately EUR 57 million annually. PKN ORLEN holds 100% of shares in the share capital in Anwil S.A. Regulatory announcement no. 30/2019.

QUARTER 3

Submission to the European Commission a notification for concentration regarding the planned taking capital control directly or indirectly over Grupa LOTOS S.A. by PKN ORLEN S.A.	PKN ORLEN announced that on 3 July 2019 it submitted to the European Commission a notification for concentration ("Notification") regarding the planned taking capital control directly or indirectly over Grupa LOTOS S.A. with headquarters in Gdansk ("Transaction"). Notification submitted by the Company, initiates the formal proceedings regarding control of concentration. Notification includes, apart from the description of the parties and Transaction assumptions, description of parties activity on the certain markets and presents arguments on the influence of the Transaction on the competition 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 presented arguments. Regulatory announcement no. 31/2019.
Dismissal of shareholder's appeal against the statement of claim for repealing of the resolutions of Ordinary General Meeting	PKN ORLEN announced that on 17 July 2019 the Appeal Court in Lodz I Civil Division has dismissed in whole a shareholder's appeal against verdict of court of first resort dismissing in whole the shareholder's statement of claim for repealing of the following resolutions of PKN ORLEN Ordinary General Meeting dated 26 June 2018: 1) to approve the Directors' Report on the activities of the ORLEN Group and PKN ORLEN S.A. for the year ended 31 December 2017, 2) to approve the financial statements of PKN ORLEN S.A. for the year ended 31 December 2017, 3) to grant discharge to the Management Board of PKN ORLEN S.A. members for performance of their duties for the year ended 31 December 2017, 4) to grant discharge to the Chairman of the Supervisory Board of PKN ORLEN S.A. for performance of her duties for the year ended 31 December 2017. Regulatory announcement no. 32/2019.
Agreement between PKN ORLEN S.A., the State Treasury and Grupa LOTOS S.A. in relation to a transaction for the purchase of shares in Grupa LOTOS S.A. by PKN ORLEN S.A. from the State Treasury	PKN ORLEN announced that on 26 August 2019 an agreement was signed between the State Treasury, the Company and Grupa LOTOS S.A. headquartered in Gdansk ("Grupa LOTOS") in relation to a transaction for the purchase of shares in Grupa LOTOS S.A. by the Company from the State Treasury (the "Agreement"), ("Transaction"), where the Transaction is aimed at taking capital control directly or indirectly over Grupa LOTOS by the Company. The Agreement is non-binding and does not create any obligations for the State Treasury, the Company or Grupa LOTOS with respect to the execution of the Transaction, but only defines their common understanding of the anticipated shape of the Transaction and further cooperation in its execution. Parties to the Agreement may detail or differently regulate the shape of the Transaction as well as its additional elements in separate contracts or other agreements. The Agreement is not an offer or preliminary contract under Polish civil code and it does not form any other type of legal act obligating the State Treasury to realise the Transaction. The Agreement confirms the Transaction structure specified in the letter of intent concluded on 27 February 2018 between the State Treasury and the Company, provided that the structure will be clarified at the further stage of cooperation, in particular on the basis of remedies resulting from the future decision of the European Commission regarding concentration approval. Additionally, it also indicates further direction of the consolidation project of the Company and Grupa LOTOS that is aimed at the full consolidation of the above mentioned companies and their enterprises in order to obtain the maximum effects of synergies. Moreover, the Agreement includes in particular provisions regarding: 1) the method of determining the price of the sale of Grupa LOTOS shares – with particular emphasis on the need to use at least two commonly used and recognised methods for valuation (in the case of Grupa LOTOS shares sales by different way than a tender offer) and the need to determine the price according to the general applicable law (in the case of Grupa LOTOS

	shares sales by the way of a tender offer); 2) preliminary conditions for realization of the first stage of the consolidation project that includes not only the European Commission approval for concentration but also removing or modifying the voting cap regulations at the general meeting included in the Grupa LOTOS Articles of Association as well as obtaining necessary administrative and corporate approvals; 3) exercising the voting right relating to Grupa LOTOS shares by the Company and the State Treasury after the Transaction; in case the tender offer results in a proportional reduction of the State Treasury subscriptions for Grupa LOTOS shares sales, it is the intention of the Company and the State Treasury, subject to potential different written agreements, that the voting right at the Grupa LOTOS general meeting will be exercised independently and no written or verbal agreement on Grupa LOTOS shares purchase, on compatible exercising of voting right at the Grupa LOTOS general meeting, neither on conducting the permanent policy towards Grupa LOTOS will bind them. Grupa LOTOS as a signatory of the Agreement confirmed its knowledge regarding the planned consolidation project as well as a declaration of will to duly cooperate with the State Treasury and the Company within the frames of general applicable law, including the cooperation in the process of obtaining the European Commission's approval for concentration and submission of the statement of the Grupa LOTOS Management Board on the planned tender offer for its shares. The Agreement terminates on the day when the State Treasury subscribes on the disposal of all Grupa LOTOS shares owned by the State Treasury as a reply for the tender offer announced by the Company, or on 30 June 2020 – depending which date will fall earlier. Regulatory announcement no. 34/2019.
ANWIL S.A. concluded an agreement for building an OSBL infrastructure within the frames of the extension of fertilizers production capacities	PKN ORLEN announced that on 12 September 2019 ANWIL S.A. signed an agreement with PROCHEM S.A. for building an OSBL infrastructure (Outside Battery Limits – supporting infrastructure) in ANWIL S.A. in Wloclawek ("Agreement"). The Agreement signed with PROCHEM S.A. is the last of three most important contracts concluded within the frames of the extension of fertilizers production capacities in ANWIL S.A. The project assumes increase of fertilizers production capacities by 495 thousand tons yearly, i.e. to the level of 1,461 thousand tons yearly. Estimated total cost of the investment amounts to approximately PLN 1.3 billion. The finalization of the investment is planned by the half of 2022. After realization of the project it is estimated that the operating profit EBITDA of ANWIL S.A. may increase by approximately EUR 57 million yearly. Regulatory announcement no. 36/2019.
QUARTER 4	
Changes in the composition of the Supervisory Board	On 29 October 2019 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 Mr Roman Kusz to the PKN ORLEN Supervisory Board. Regulatory announcement no. 39/2019.
Changes in the composition of the Management Board	The Supervisory Board of PKN ORLEN, following its meeting on 28 November 2019, has dismissed Mr Wiesław Protasewicz from the Company's Management Board with the effect from 28 November 2019. Regulatory announcement no. 40/2019.
PKN ORLEN Supervisory Board consent for realization of project of building Visbreaking Installation at production plant in Plock	PKN ORLEN announced that on 28 November 2019 the Company's Supervisory Board gave consent for realization of the EPC phase of investment project called: "Visbreaking Installation at production plant in Plock". The project's implementation aims to improve crude oil production efficiency by increasing the yield of high-margin products as a result of in-depth conversion of vacuum residue from the Crude Distillation Unit. The cost of investment will amount to approximately PLN 1 billion. Realization of the project was approved by the PKN ORLEN Management Board on 22 October 2019. Regulatory announcement no. 42/2019.
Announcement of a tender offer to subscribe for the sale of all shares of ENERGA S.A. with registered office in Gdansk	PKN ORLEN announced that on 5 December 2019 it has announced tender offer for all shares issued by ENERGA S.A. with its registered office in Gdansk ("ENERGA"), i.e. 414,067,114 shares ("Share" or "Shares" respectively), with par value of PLN 10.92 each, of which: a) 269,139,114 ordinary bearer "AA" class shares where 1 "AA" class share has 1 vote at the General Meeting of ENERGA ("GM") attached to it, 269,139,114 votes at the GM in aggregate for all ordinary bearer "AA" class shares, admitted and introduced to trading in a regulated market operated by Giełda Papierów Wartościowych w Warszawie S.A. uncertificated (paperless) and labelled by Krajowy Depozyt Papierów Wartościowych S.A. with the code PLENERG00022; b) 114,928,000 certificated registered "BB" class shares, where 1 "BB" class share has 2 votes at the GM attached to it, 289,856,000 votes at the GM in aggregate for all registered "BB" class shares, with 558,995,114 votes at the GM attached to them, corresponding to 100% of the aggregate number of votes at the GM and representing 100% of the share capital of the Company ("Tender Offer"). Tender Offer has been announced pursuant to Art. 74 item 1 of the Act of 29 July 2005 on public offering, on the conditions governing the introduction of financial instruments to organised trading and on public companies (OJ 2019.623, as amended) and the Regulation of the Minister of Development and Finance of 14 September 2017 on the forms of tender offers to subscribe for the sale or exchange of shares in a public company, detailed procedures of the announcement thereof and the conditions for acquiring shares pursuant to such tender offers (OJ 2017.1748). The Company is a sole entity purchasing the Shares in the Tender Offer. The price at which shares are to be purchased under the Tender Offer amounts to 7 PLN per one Share. The Tender Offer has been announced under the following conditions: a) the Company obtains an unconditional decision of the European Commission (or another competent anti-monopoly authority) approving the merger involving the takeover of control of the ENERGA, b) the GM has adopted a resolution amending the Articles of Association of ENERGA to waive the voting restrictions referred to in § 27(1)-(7) of the Articles of Association, c) the Supervisory Board of ENERGA has adopted a resolution adopting a consolidated text of the Articles of Association pursuant to § 17(1)(15) of the Articles of Association (inclusive of the amendments referred to above), d) the number of Shares subscribed for sale under the Tender Offer corresponds at least to 66% of the aggregate number of votes at the GM, e) the Company and ENERGA have entered into an agreement concerning a due diligence audit of ENERGA. Unless the subscription period for the sale of Shares under the Tender Offer is extended the subscription period will start on 31 January 2020 and will end on 9 April 2020. Regulatory announcement no. 44/2019.

Year 2020 until publication of the Management Board Report

QUARTER 1	
Changes in the composition of the Supervisory Board	PKN ORLEN announced that Ms Izabela Felczak-Poturnicka resigned with the effect from 16 January 2020 from the position of Chairwoman of the PKN ORLEN Supervisory Board which was entrusted to her in the Resolution no. 35 of the Annual General Meeting of PKN ORLEN dated 14 June 2019. Regulatory announcement no. 1/2020.
Changes in the composition of the Management Board	PKN ORLEN S.A. announced that the Supervisory Board of PKN ORLEN S.A., following its meeting on 30 January 2020 appointed Mr Jan Szewczak to hold the position of the Member of the Company's Management Board, responsible for finance, with the effect from 3 February 2020 and Mr Adam Burak to hold the position of the Member of the Company's Management Board, responsible for communication and marketing, with the effect from 3 February 2020. Regulatory announcement no. 3/2020.
Changes in the composition of the Supervisory Board	Extraordinary General Meeting of Shareholders of PKN ORLEN S.A. on 5 March 2020 dismissed from the Supervisory Board Ms Małgorzata Niezgoda and appointed Mr Wojciech Jasiński as a Chairman of the Supervisory Board and Mr Dominik Kaczmarski as a member of the Supervisory Board. Regulatory announcement no. 11/2020.

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 eighth 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 sixth 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 year 2019	MOP Michałowice located along the route Łódź – Wrocław owned by PKN ORLEN, was awarded as Service Station of year 2019 in competition organised by BROG B2B, an editor of, among others, magazine Stacja Benzynowa & Convenience Store.
QUARTER 2	
200 Largest Polish Companies Ranking	PKN ORLEN took first place in the prestigious ranking of 200 Largest Polish Companies.
Responsible Companies Ranking	PKN ORLEN took the highest position ever in the general classification of the thirteenth edition of „Responsible Companies Ranking" and was seventh among 70 companies classified for the experts' assessment. The Company was also at the podium and placed on the third position in category "Fuels, energy, upstream".
Rzeczpospolita 500 List	PKN ORLEN became a leader of Rzeczpospolita list of 500 largest Polish companies.
QUARTER 3	
The Best Annual Report	In the fourteenth 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, for the fifth time in a row, received also second special awards for the "Integrated Report".
New Impulse	PKN ORLEN received a "New Impulse" award, given by the editorial board of Magazyn Gospodarczy Nowy Przemysł and WNP.PL web portal for actions for security and energy independence. PKN ORLEN's investments in large, advanced and efficient installations for electricity and heat production were appreciated.
Polish Brand 2019	PKN ORLEN was chosen Polish Brand 2019. The purpose of the competition "Like, because Polish" is promotion of native goods and services as well as supporting native entrepreneurs contributing to the development of Polish economy.
Leader of Safe Workplace	PKN ORLEN was distinguished with the Gold Card of the Leader of Safe Workplace by the Leaders of Safe Workplace Forum. It's the highest national award for members of the Leaders of Safe Workplace Forum given for particularly active and effective actions for safety at work.
"Employer – safe workplace organizer"	PKN ORLEN took the second place in the competition organized by the Labour Inspection Authority, "Employer – organizer of safe workplace" on the regional level in category of establishments with over 250 employees, whereas ORLEN Upstream took the first place in the category of establishments with between 51 and 250 employees in Masovian Voivodeship.
Healthcare Employer	PKN ORLEN received a certificate „PracoDawca Zdrowia" ("Healthcare Employer"). The programme "PracoDawca Zdrowia" is a part of „Planuję długie życie" („I've planned to live a long life") campaign led by the Ministry of Health for health and cancer prevention.

2. STRATEGY

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

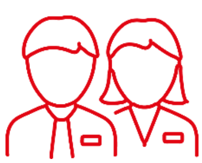
"Our consistent pursuit of strategic objectives and coherent image of the ORLEN Group across all operating markets strengthen our position domestically and abroad, allowing us to fully leverage our potential. The Group's financial performance, as well as its investment and acquisition projects, including acquisition of the LOTOS Group and of Energa shares, are set to enhance the Group's competitive position in the long term. Moreover, the Group's projects and initiatives must be aligned with volatile macroeconomic trends and our growing environmental awareness. 2020 will be a pivotal time for us, full of challenges and growth opportunities we want to harness to build the Group's value for our shareholders and the entire Polish economy."

2.1. STRATEGIC ASSUMPTIONS

2019 was the first full year of implementing the Strategy for 2019−2022, announced on December 20th 2018. 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 aims to focus on solidifying its market position, becoming more customer-oriented, exploiting the integrated value chain, with a growing role of the petrochemical business and prudent continuation of projects in the Upstream segment.
The focus on value-creating innovations is an important element of the strategy, which will be implemented through:

– promoting internal and external innovation within the organisation,
– creating an optimum environment for innovation at the ORLEN Group,
– developing the PKN ORLEN Strategic Research Agenda,
– deploying innovation acquisition tools: accelerator and CVC fund,
– fostering collaboration with start-ups,
– building the Research and Development Centre as a platform for collaboration between PKN ORLEN and the scientific and business communities,
– in-house research and testing to improve processes, products and inputs,
– developing proprietary technologies.

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

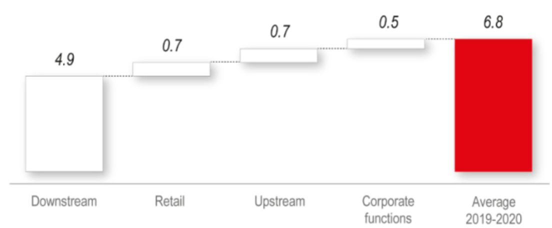
 **Value creation**	**Downstream**: intensification of petrochemical production, further integration of refinery assets and expanding low – emission energy generation	• Feedstock security • Strengthening market position • Operational excellence
	Retail: expanding the retail network and strengthening customer 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 dynamics of the market environment force the Group to adjust its planning perspective. Therefore, the manner of presentation of the Group's goals and aspirations in the new strategy follows the previously established pattern. The strategic directions have been set for the next four years, while the specific financial and operational goals were presented for the years 2019–2020, due to the significant volatility of 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]



2.2. IMPLEMENTATION OF THE STARTEGIC OBJECTIVES IN YEAR 2019

In 2019 PKN ORLEN continued to pursue its strategic objectives.

The main ORLEN Group's strategic objectives from December 2018 were based on different market assumptions concerning expected effects of IMO regulation.
The regulation mentioned above, reducing sulfur content in bunker fuel to the level below 0.5% was supposed to influence, among others, on:
- increasing price spread between low-sulfur and high-sulfur crudes and in a result widening Ural/Brent differential,
- increasing margins on middle distillates driven by a surge in demand for diesel oil as bunker fuel,
- decreasing margins on heavy heating oil following a dramatic drop in demand for this kind of fuel used in bunker fuel blending.

Generally expected, that after implementation of IMO regulation ships will be consuming low-sulfur fuels, what will lead to increasing demend on a fuel similar to diesel oil regarding quality and, as a consequence, will cause an increase of its margins (cracks). Meeting a high demand on diesel oil, with favourable margins' level, will induce refineries to invest in in-depth conversion of crude oil, increasing the level of crude oil processing and high-margin fuels (gasolines and diesel oil) yield. As a result of demand shifted towards light and middle distillates, the marked expected changes in demand for light and heavy crude oils and an increase in differential.
In fact there were no expected changes in macro parameters in 2019. Furthermore in 2019 there has been distinctive slowdown in the global economy. Many factors has contributed to this including decline in global demand for crude oil and liquid fuels, customs wars interfering in international trade, US – Iran conflict as well as visible weakening of the outlook for emerging economies and eurozone.
Deviations between the macroeconomic assumptions included in the ORLEN Group Strategy for 2019-20 and those occurring in 2019 are presented in the table below:

Item	Actual 2019	MTP 2019-20	Variation
Model Downstream Margin [USD/bbl]	10.7	13.5	(2.8)
Model Refining Magin [USD/bbl]	5.2	5.5	(0.3)
Ural/Brent Differential [USD/bbl]	0.8	3.1	(2.3)
Model Petrochemical Margin [EUR/t]	859	808	51

Impact of change of macroeconomic parameters mentioned above on operational results has been presented in the section 4.1. Accordingly, the estimated impact of model downstream margin decline by (2.8) USD/bbl caused the drop of EBITDA LIFO by almost PLN (2.7) billion.

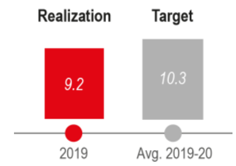
The Concern, once again was awarded with the title of The World's Most Ethical Company 2019 and Top Employer Polska 2019.

PILLARS	OBJECTIVES	ACTUAL

Value creation

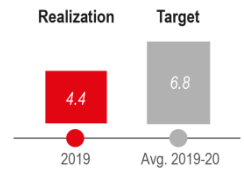
Generated profit

EBITDA LIFO before imapairments[1] [PLN billion]



Implemented development program

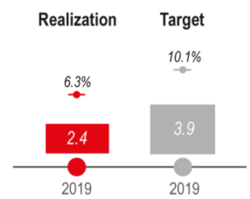
CAPEX [PLN billion]



Financial strength

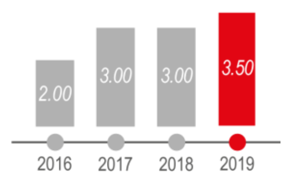
Further strengthening of financial fundamentals

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 PLN (0.2) billion in 2019.

3. OPERATING ACTIVITY

3.1. RESEARCH AND TECHNOLOGICAL DEVELOPMENT

Zbigniew Leszczyński, Member of the Management Board, Development:

"PKN ORLEN is pursuing the objectives outlined in its strategy, with a particular focus on maximising its integrated margin by increasing the refining conversion rates, improving the efficiency of asset management and the production capacities, and extending the petrochemical value chain. Support for R&D projects will soon be strengthened, following completion of the state-of-the-art Research and Development Centre, on which we are making strong progress.

In 2019, new capacities, including the Metathesis Unit, were launched. They will be a major driver of our integrated margin, but also a tool to increase the production plant's operational flexibility. Moreover, the launching of the PPF Splitter at ORLEN Lietuva will position our Lithuanian subsidiary as a significant player on the European petrochemical market.

PKN ORLEN is continuing intensive work on projects outlined in its Petrochemicals Development Programme. In 2019, it resulted in the execution of a technical consultancy and PMC+ contract for the Olefins project. When implementing projects, we seek optimum business solutions at each stage with a view to maximising returns for our Shareholders. In addition, major milestones have been reached in our strategically important bio projects, including the purchase of a Licence and Front-End Engineering Design for a HVO unit.

Numerous growth projects are also being carried out at other ORLEN Group companies. In particular, I would like to highlight the one aimed at intensifying fertilizer production at Anwil, which will deliver a capacity addition and plant upgrade, while allowing the company to leverage the economies of scale and synergies with the Group's other operations. At the ORLEN Południe Group, we intend to pursue further ambitious projects, including the construction of one of Europe's most advanced Propylene Glycol units and a 2nd generation Bioethanol unit. At the Unipetrol Group, we are at the final stage of works on a new Polyethylene unit with an annual capacity of 270,000 tonnes. A project to increase distillate yields is under way at the ORLEN Lietuva Group, aimed at maximising margins.

In the pursuit of continuous efficiency improvements, we also work on optimising the internal procurement and investment processes at the ORLEN Group level, which is a source of significant synergies, contributing to the effective and timely delivery of investment projects like the ones I have mentioned.

PKN ORLEN keeps track of megatrends in the industry and their impact on its operations. We also watch closely and draw conclusions from what our competitors are doing. These activities are reflected in the ORLEN Group's development programme."

Key objectives pursued by the ORLEN Group are aimed at improving the efficiency of crude oil processing at its production plants, ensuring environmental compliance and intensifying petrochemical production, with concurrent process and energy efficiency gains, through the implementation of the Petrochemicals Development Programme.

PKN ORLEN continued its efforts aimed at constructing three petrochemical facilities under the Petrochemicals Development Programme, namely the Olefins, Phenol, and Aromatic Derivatives plants. As part of the first project, work was under way in 2019 on its business optimisation with a view to maximising the rate of return on the investment. Also, a technical consultancy and PMC+ (Project Management Contractor) contract was executed, which will help the Company to optimally prepare the project and deliver it within the planned budget and schedule. A Licence agreement and Front-End Engineering Design contract for the Phenol plant were concluded with UOP Limited under the Phenol II project. As regards Aromatic Derivatives, work is ongoing to maximise the rate of return on the investment and to effectively integrate the new plant with other assets of the ORLEN Group.

As part of the BIO development, a number of other economically viable projects are being carried out, primarily at the refinery, including the construction of a separate unit for the production of biofuel components through the HVO process. In 2019, the Licence and Front-End Engineering Design were purchased under the project. Another significant project is the construction of a Visbreaking unit, which will increase the crude conversion rate into high-margin distillates. Advanced negotiations are currently in progress over the project contract.

As part of the Research and Development Centre project, a building permit was obtained, preparatory work on the construction site was completed, and a contract with the project's general contractor, Budimex S.A., was executed on April 24th 2019. The following works were completed by the end of 2019: design work for the main facilities, construction work on the office building, and major works related to external networks and utilities.

In 2019, R&D projects were carried out jointly with Polish universities and scientific institutes. Such cooperation also involved foreign research centres, participating in joint initiatives under Horizon 2020. More than 50 R&D projects were in the pre-implementation or implementation phase in 2019, of which five were co-financed out of national public funds (the INNOCHEM sectoral programme) and under EU programmes (Horizon 2020). An example worth mentioning is the completion of the essential part of research on the 'Development of a process technology for hydrotreatment of diesel oil fractions with vegetable oils as a potential source of bio-components for diesel oil'. Following industrial tests carried out in 2018, in 2019 approval tests were carried out concerning the use of diesel oil blended with a co-processed component. The work outcomes served to define the quality guidelines for diesel oil products. In addition, work on the KORMON project was continued in 2019, with a view to developing and installing dual corrosion sensors at the refinery units.

In 2019, PKN ORLEN was also engaged in studies into the use of the innovative MaxEne technology from Honeywell UOP, which should contribute to achieving higher margins on fuels and petrochemicals at the Płock Production Plant. Should a decision on its implementation be made, the Płock Production Plant would be the first plant in Europe and the second one in the world to implement the MaxEne technology increasing the yields of high-margin products, such as gasoline, ethylene and paraxylene.

The Unipetrol Group's R&D projects are carried out through the Unipetrol Research and Education Centre (UniCRE) and Polymer Institute Brno (PIB). In 2019, its continued projects were related to the production of biofuels and alternative fuels, as well as raw materials for their production and quality evaluation. Long-term research into the utilisation of vegetable oils and used cooking oils as feedstock for biofuel production delivered positive results. These topics were addressed in the conclusions prepared jointly with PKN ORLEN's R&D unit for the Horizon 2020 programme. Efforts to obtain financial grants will be continued in the next year. Presently, another rapidly growing research area is the pyrolysis of plastic waste. In the petrochemical segment, work was continued to develop the portfolio of polypropylene and polyethylene products. 2019 witnessed significant development of the company's research infrastructure, related to the testing of a new Polyethylene (PE3) unit. Unipetrol continued to focus on monitoring the quality of monomers, obtaining the necessary certificates, and on catalyst testing and development. Furthermore, the company was engaged in projects to reduce greenhouse gas emissions and improve energy efficiency, utilise waste heat, optimise technologies, and upgrade energy generation sources. In an effort to adapt its product range to current regulatory changes, the company also focused on research into hydrogen technologies, alternative sources for fuel and polymer production, and other projects aligned with the circular economy concept. Unipetrol was strongly engaged in cooperation with universities of Prague, Brno, Liberec, Usti, and with foreign research institutions. Major R&D activities in 2020 will involve the production of biofuels, purchase and launch of a pilot plastic waste pyrolysis unit, stabilisation of the PE3 unit, and development of the polypropylene and polyethylene products portfolio.

In 2019, the **ORLEN Lietuva Group** continued its project to constructs a new Hydrocracking unit. Implementation of this technology will increase the rates of crude oil conversion, reducing the output of heavy refining fractions and maximising margins. The project will also help meet the new, more stringent quality requirements applicable to the production of heavy oil fractions imposed by the IMO regulations.
Other work going on in 2019 was aimed at improving the plant's processes and increasing their efficiency. To this end, the PPF Splitter unit was launched to produce polymer grade propylene from sub-standard gas feedstock. In addition, in order to comply with the more stringent SO^2 emission requirements, the company began using natural gas in the plant's processes.

ANWIL made further progress on its development work to increase fertilizer production by 0.5 million tonnes annually, to approximately 1.5 million tonnes. 2019 saw the launch of construction work on three key units of the complex, i.e. the nitric acid, neutralisation, and granulation units. Expansion of the fertilizers segment was prompted by growing demand for these products.
ANWIL also continued its joint research projects with the Institute of Soil Science and Plant Cultivation (agricultural engineering) and with the New Chemical Syntheses Institute (possible use of gypsum from the desulfurisation unit). Research into the possible application potassium sulfate from biofuel production as an additive to nitrate fertilizers was run in collaboration with the Wrocław University of Technology.
In the course of reviewing the existing raw materials base, CAN production tests were carried out for new anti-caking agents. Seeking to forge stronger ties with the ORLEN Group research centres, the company signed cooperation agreements with the Polymer Institute Brno with respect to quality testing of PVC, fertilizers, and plastic colorants.

An assessment of the economic rationale for a change in the Continuous Initiator Dosing (CID) method was also continued. As part of the work on the polymerisation unit, an ammonia water injection system was designed and implemented.

The **ORLEN Południe Group** has signed a contract for the construction of Poland's first unit to produce eco-friendly propylene glycol. The new unit with an annual capacity of 30,000 tonnes will be of strategic importance to the ORLEN Group. Its construction will be possible thanks to full integration of the refining and chemical operations, as the unit will rely on glycerine from the production of biofuel components. Work was also continued on advanced biofuels. A agreement was signed for the purchase of a front-end-engineering design and licence for a 2nd generation bioethanol unit with an annual capacity of 25,000 tonnes. The project will support the ORLEN Group in meeting the indicative targets. Moreover, in 2019 a decision was made to upgrade the Trzebinia CHP plant with a view to alleviating its emission intensity and improving its economic performance. Work involving market research on methanol and available production technologies was continued under the 'Analysis of the methanol production potential of ORLEN Południe S.A.' project. Under a contract with Fluor S.A., a feasibility study for the unit's construction was completed. Work also continued under the 'Biodegradable anti-caking agents for the fertilizer industry' and 'Development of biotechnology-based conversion of organic raw materials into lactic acid using microorganisms' projects, co-financed under the INNOCHEM Programme.

ORLEN Oil conducted research work to implement new and modify existing products and to define new directions for the development of lubricant technologies. A number of measures were taken with a view to continuously improving the quality of oils in response to current demand reported by the sales division. Key research expenditure was incurred within the company's strategic segments, particularly the segment of motor oils for trucks and passenger cars, and of universal and speciality industrial oils. In 2019, technologies for 66 new products were developed and implemented, including speciality and universal industrial oils, service fluids, lubricants and other oils. 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.

As part of its research and development work, **ORLEN Asfalt** began work on new applications of HiMA bitumens in trunk road building. Delivered in association with the Warsaw University of Technology, the Gdańsk University of Technology and the Road and Bridge Research Institute, the project will help meet increased demand for modified and highly modified bitumens. In addition, the company was cooperating with the R&D and production departments at Paramo to launch the production of ORBITON HiMA in Pardubice and its sales on the Polish and Czech markets. A test production run was performed in November 2019.

3.2. OPERATING SEGMENTS

3.2.1. Downstream

2019

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	%	96	99	90	93
White product yields	**%**	**80**	**83**	**81**	**74**
Utilization of Olefin installation capacity	%	79	78	80	-
Utilization of PTA installation capacity	%	95	95	-	-

SALES

	units	ORLEN Group	Poland	Czech Republic	Lithuania
TOTAL	**thousand t**	**32 740**	**17 620**	**6 608**	**8 512**
Refinery, including:	**thousand t**	**27 584**	**14 243**	**4 847**	**8 494**
fuels	thousand t	19 205	8 932	3 925	6 348
heavy fractions	thousand t	4 784	2 228	675	1 881
other refinery products	thousand t	3 595	3 083	247	265
Petrochemicals, including:	**thousand t**	**5 156**	**3 377**	**1 761**	**18**
olefins	thousand t	1 022	836	168	18
polyolefins	thousand t	519	0	519	-
benzene	thousand t	424	210	214	-
plastics	thousand t	343	252	91	-
fertilizers	thousand t	1 030	863	167	-
PTA	thousand t	647	647	-	-
other petrochemical products	thousand t	1 171	569	602	-

LOGISTICS

	units	ORLEN Group	Poland	Czech Republic	Lithuania
Total length of used pipelines, including:	**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

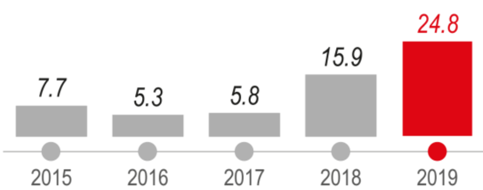
	units	Poland[1]	Czech Republic[2]	Lithuania
Electric power installed	MWe	1 542	106	160
Heating power installed	MWt	3 742	1 399	1 040
Boiler's efficiency	%	93.0	90.3	91.7
Boiler's availability	%	84.8	70.4	72.3

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 in the Downstream segment

The ORLEN Group's operations include the production of crude oil, production and sale of refinery, petrochemical and chemical products, production of heat and electricity in a cogeneration process, and sale of electricity. Given the location of the ORLEN Group's leading assets in the commodity sector (comprising fungible products made by many companies in Poland, in the region, and globally), the Company is a 'price-taker' and so its financial performance is susceptible to price fluctuations on global markets. Over a year, prices on global markets change as a consequence of both one-off, unexpected factors, such as geopolitical events triggering price fluctuations around long-term trends, as well as recurring long-term factors affecting price relationships between, and demand for, primary energy sources. Long-term factors include global megatrends, demographic, social and technological ones, and the resultant regulations which, together, **drive decarbonisation and sustainable development processes**. One indicator reflecting the intensity of these processes in the European Union is **the market price of emission allowances (EUETS)**, which between January 2017 and December 2019 increased by 340% (from EUR 5.4 /tonne in January 2017 to EUR 23.8/tonne in December 2019).

DIAGRAM 1. EUETS market price.



A clear global megatrend, accelerated by the ongoing decarbonisation of transport, is the falling demand for crude oil and liquid fuels in OECD countries observed since 2005. Initially, it had been a structural trend (caused by the ageing population and the economy's saturation with vehicles), but was then compounded by an increase in oil prices in 2000–2016. A slump in crude oil prices around the middle of 2016 halted the drop in demand for a short time. However, gradual improvement in the energy efficiency of internal combustion engines, introduction of alternative liquid fuels containing bio-components, and increasing uptake of hybrid and electric drives and new mobility models (Car as a Service, car-sharing, autonomous vehicles) have dampened demand for oil and liquid fuels in other parts of the world. Currently, **the peak in global demand for crude oil and liquid fuels** is estimated to occur **between 2030 and 2040**.

DIAGRAM 2. Demand on crude oil and other hydrocarbons in selected regions of the world.

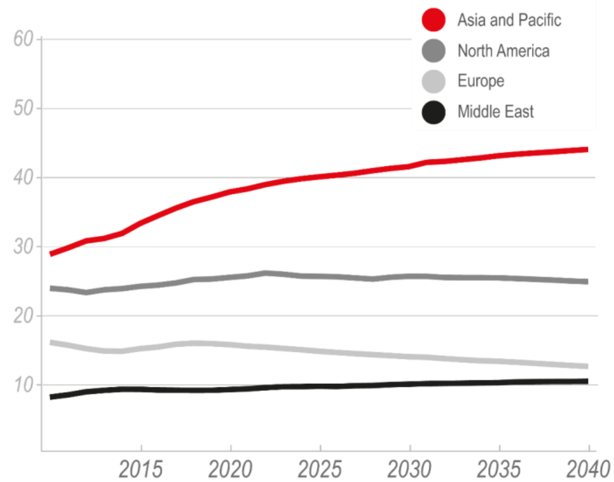
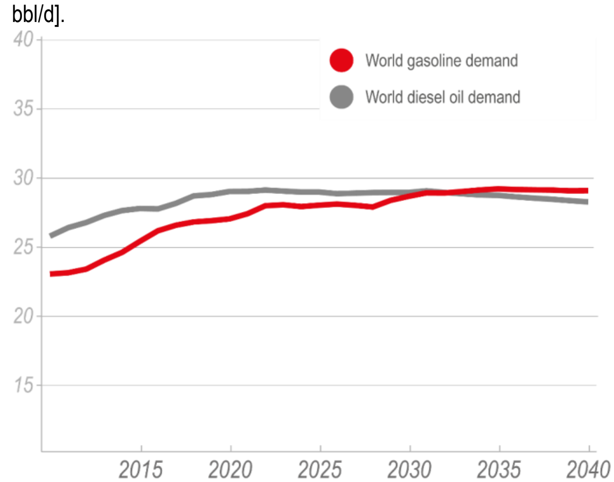


DIAGRAM 3. Global demand on gasoline and diesel oil [million bbl/d].



The ORLEN Group addresses these challenges by preparing a **comprehensive decarbonisation strategy**. The strategy objectives are being pursued by installing EV chargers in motorway service areas, adapting motorway service areas to new e-mobility needs, investing in bio-refineries, testing innovative biofuel production technologies, and using hydrogen in transport and power production.

A significant strategic challenge for the Company is posed by its petrochemical and chemical production which, due to the **accumulation of plastic waste in the environment**, raises social concerns and spurs regulators to take specific measures restricting the use of many petrochemical products.

DIAGRAM 4. Searching terms regarding plastic waste in Google.

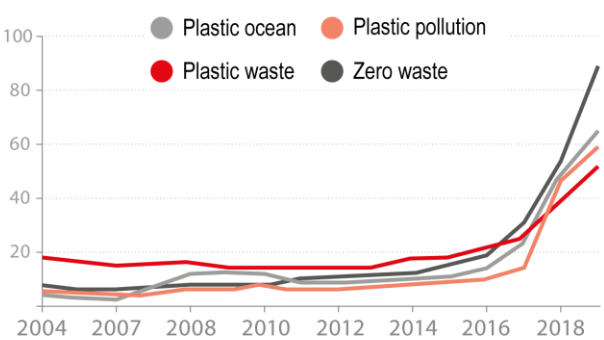
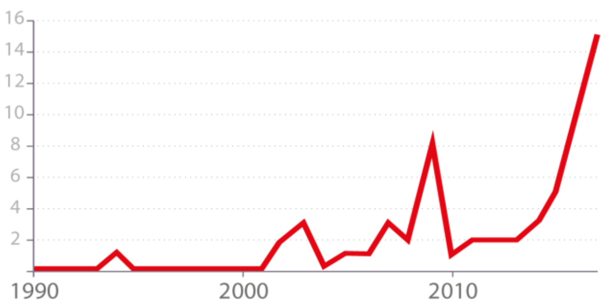


DIAGRAM 5. Number of national regulations regarding single use plastics.

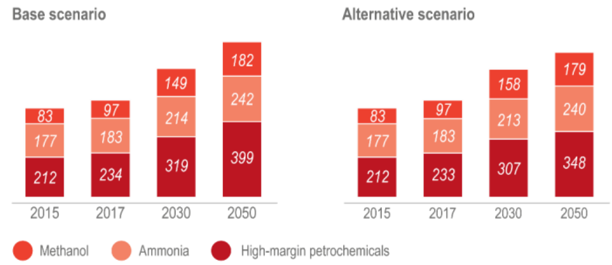


Although research on the climate and environmental footprint of various materials throughout their life cycle shows that petrochemical materials are more benign, cheaper and more durable than their alternatives. The ORLEN Group gives due weight to public opinion. For the most part, the Group's petrochemical and chemical products are not finished goods, which **limits the negative impact of its production on the environment and climate**. It also upgrades its production processes and gradually increases the use of bio-component inputs.

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 Company.

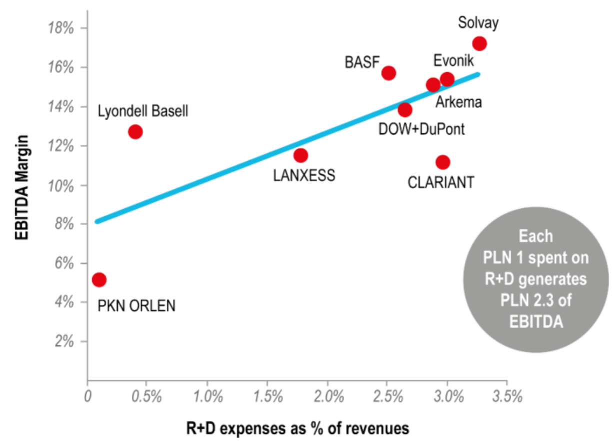
Such products, particularly speciality products tailored to the needs of particular customers, offer a high growth rate. The role of plastics in manufacturing processes is expected to grow considering their new applications in advanced insulation systems, the automotive industry and 3D printers, to name a few. Manufacturers are able to compete with one another based on the technologies they use, specialist units they operate or speciality products they sell rather than by offering the lowest price.

DIAGRAM 6. Chemicals production [milion tonnes].



In Europe, there is room not only for conventional petrochemicals, but also for their bio-based counterparts. Leading petrochemical producers invest in research and development into both petroleum derivatives and bio-based chemicals. The amount of their R&D expenditure is correlated with financial performance, as each Polish zloty spent on R&D activities translates into a PLN 2.3 increase in EBITDA. Some companies within the sector boast an even higher return on their R&D investments.

DIAGRAM 7. Influence of R&D expenditure on financial results of petrochemical producers.



As refining and petrochemical production are energy-intensive, **decarbonisation of electricity and heat consumed is** an important measure in reducing carbon dioxide emissions. The ORLEN Group already uses electricity and heat generated by two CCGT units, and the one in Włocławek was the first commercial power unit in Poland fuelled by natural gas. **Cogeneration is among the most efficient forms of energy production**. The widening price scissors between the price of coal-based energy and the cost of energy generation (from natural gas, cogenerated with heat) support the profitability of the Company's operations in this segment. There are also plans to construct **offshore wind farms** in the Baltic Sea (where environmental and wind surveys are currently in progress) and to further expand the ORLEN Group's presence in the green energy sector. **An increasing share of green energy in the overall mix is not only conducive to the achievement of NIT, but, most importantly, offers a number of decarbonisation opportunities with respect to fuels and petrochemical products.** It includes both green hydrogen produced by hydrolysis and its use as an alternative transport fuel, and synthetic gasoline enabling industrial use of captured carbon dioxide. The fully depreciated CCGT units will be an efficient power base for renewable energy support.

Further information on steps taken to decarbonise its production and products, and to reduce its negative environmental footprint (through the implementation of circular economy models) will be provided by the Company's long-term development strategy, which is now being prepared.

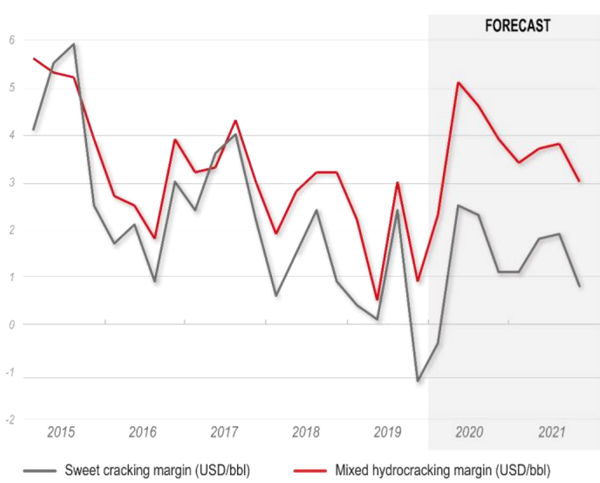
MACROECONOMIC FACTORS AFFECTING FINANCIAL PERFORMANCE IN 2019

The model downstream margin as well as the refining and petrochemical margins are synthetic indicators of the impact of changing macroeconomic factors on financial performance – sensitivity analysis.

Model margins are a market category, their levels depending on the market prices of leading products and their respective shares in the production and sales mix. Given its limited ability to change the structure of products within a yearly cycle, the model margins are virtually beyond the ORLEN Group's control.

Changes in the prices of crude oil, fuels and petrochemical products are of the global nature. Due to arbitrage opportunities, a positive or negative impulse emerging on one market (whether regional or product market) spill over to affect all other markets. In the case of crude oil, an example of a regional impulse affecting the prices of various types of crude oil worldwide is a production cut in the Persian Gulf region, after the OPEC's intervention. In the case of fuels produced simultaneously in certain proportions that are not substitutable, a demand impulse on the market for one fuel triggers an increase of the crack spread on that fuel and spurs refineries to increase processing. This leads to an oversupply of remaining fuels and lower crack spreads. The decline in gasoline prices relative to oil prices at the beginning of 2019 sparked by an increase in demand for diesel oil and its production in the wake of the IMO regulations is a case in point.

DIAGRAM 8. Refinining margins in Europe [USD/bbl].



Sales volumes of the Company's products largely depend on demand on home markets, which grow faster than other EU markets – fuel consumption. They are also dependent on other measures designed to improve competitiveness and build customer loyalty towards the ORLEN brand, such as environmentally and socially responsible investments, methods of management and communication with stakeholders (building the ORLEN brand in the region and globally, educating investors, developing non-financial reporting, and publishing expert reports).

CRUDE OIL PRICE

Crude oil is only seemingly a homogeneous product. More than 300 oil grades are traded on global markets, varying in densities and sulfur contents. Their prices are set relative to the prices of several benchmark oils quoted on regional commodity exchanges (Brent on ICE, WTI on NYMEX, or Dubai on DME). Due to arbitrage between markets and oil supply diversification strategies applied by refineries, the prices of various types of crude oil respond quite similarly to economic fluctuations and one-off geopolitical factors, provided that the structure of global demand for liquid fuels is not distorted. How the prices of different types of crude oil react to regulatory events, especially ones triggering a change in the structure of demand, depends on the properties of the crude grade concerned. An expected effect of the IMO regulations, which will cause nearly 4% of global demand for liquid fuels to shift from heavy fuel oil (HSFO) to low-sulfur fuels (with a sulfur content below 0.5%), is a structural change in demand for crude oil. Light sweet crude oils are preferred, while demand for heavy, high-sulfur types is on a downward trend. Consequently, as in the case of fuels, the prices of light sweet crudes, which can yield more middle distillates, are growing in relation to heavy, high-sulfur varieties.

In the area of the ORLEN Group's operations, prices of refining and petrochemical products are set by reference to Brent crude prices, with Urals being the leading alternative; however, due to its high sulfur content, its value is likely to fall relative to the Brent benchmark.

DIAGRAM 9. Changes in crude oil prices [USD/bbl].

In 2019, the daily price of Brent crude varied within a range of USD 50-75/bbl. The average price was USD 64.2/bbl. The lowest price in 2019, recorded at the beginning of the year, was USD 53.2/bbl. On December 31st 2019, the price was USD 66.8/bb (up 24%). The highest daily prices were recorded on April 25th (USD 74.3/bbl) and again on May 16th (USD 74.7/bbl).

Key factors triggering the oil price changes in 2019 included:

- economic sanctions imposed by the US on Venezuela and Iran, reducing the oversupply of oil,
- OPEC+ production cuts,
- geopolitical events in the Persian Gulf region (terrorist attacks on oil facilities and tankers),
- US-China customs war, causing a decline in global trade flows
- higher demand for light low-sulfur crude oils, due to the IMO regulations,
- decline in demand for crude oil, due to deteriorated outlook for global economic growth,
- steadily growing oil production in the US.

In the first quarter 2019, oversupply continued on the oil market, but the overall market situation changed relative to the fourth quarter 2018. As a result of production cuts in Saudi Arabia, the US sanctions on Venezuela and Iran and the approaching effective date of the revised IMO specifications for bunker fuels, the oversupply of crude oil declined by nearly 1 million bbl/d, causing a virtually uninterrupted wave of price increases. The daily price of Brent crude increased by 34% (more than USD 17/bbl) during the first quarter 2019. In the second quarter 2019, the situation on the oil market took an unexpected turn. After a spell of continuous growth from the beginning of the year, in the middle of the second quarter the oil price was suddenly on a downward slide, despite a continued decline in production volumes and heightened geopolitical risk.

The upward trend was reversed on May 16th, with the daily Brent crude price at USD 75/bbl. Within the next 20 days, the price dropped by USD 13. The bulk of the slump happened in the space of three trading days. Between Thursday May 30th and Monday June 3rd, the current Brent crude price plummeted by as much as 12%. It should be stressed that the price drop occurred at the time when Iranian oil production was at its lowest since 1981, production in Venezuela was lower than in 1945, and Saudi Arabia's output was 1.4 million bbl/d lower than in October 2018. According to IHS Markit's estimates, the overall global oil production at the end of the second quarter 2019 was 2.6 million bbl/d lower than at the end of 2018.

Geopolitical risk also remained elevated, as six tanker ships were attacked in the Strait of Hormuz, the world's major oil shipping route (with daily flows accounting for 20% of oil traded worldwide). Yet, geopolitical developments were not the main factor behind the oil price drop. The most plausible explanation is that global demand is growing at a rate much slower than expected. In the third quarter 2019, the situation on the oil market continued to be affected by geopolitical factors. On the one hand, the prolonged US-China customs war fuelled concerns over the condition of the global economy, and a series of downward revisions of the oil demand forecast dragged the prices down.

On the other hand, armed conflicts in the Gulf region involving Iran, the US and Saudi Arabia, aggravated the risk of oil supply disruptions, creating an upward pressure on the prices. On September 14th 2019, the Saudi Aramco oil facilities were attacked by drones, which immediately sent up the prices of oil futures. On September 16th 2019, the daily prices of crude oil surged by 12%, the steepest increase since Iraq's attack on Kuwait in 1991. The attack took place when global oil production was reduced, due both to political factors and the producers' deal. At the beginning of July 2019, the OPEC and other oil producers, including Russia, signed a 'long-term cooperation' charter within the OPEC+ framework, which Saudi Arabia named a historical agreement. Thus, the ten non-OPEC oil producing countries, led by Russia, and OPEC formalised their alliance started in 2016 with the aim of preventing dramatic price declines. OPEC+ also announced that their agreement of December 2018 to reduce oil production by 1.2 million bbl/d would be extended for another nine months (resulting in an aggregate reduction of 2.5 million bbl/d vs the fourth quarter 2018).

The negotiated output cuts were implemented amid an expected slowdown in the global economy, to which the customs wars between the US and China had vastly contributed. For a third time in the year, the main analytical centres revised lower their oil demand projections, to less than 1 million bbl/d in 2019, compared with 1.6 million bbl/d in 2018.

Such downward revisions were made by EIA, IHS Markit, Morgan Stanley, Barclays and Goldman Sachs. The expectations were further dampened by poor PMI readings, especially for the eurozone, but also for the US industry, which, after ten years of expansion, began to falter. In the fourth quarter 2019, it was already clear that geopolitical factors, mainly the US-China trade wars, drove up global trade costs, while markedly reducing global exports and increasing production costs. This brought about a stronger-than-expected slowdown in global economic growth (from 3.2% in 2018 to 2.6% in 2019). The economic downturn, which probably could have been avoided, affected the largest consumers of petroleum products, i.e. China, Asian countries, as well as the US and the EU. According to estimates, the increase in demand for crude oil was only 0.8 million bbl/d in 2019, a half of the level expected at the year's beginning. The increase in demand for crude oil and liquid fuels is partly driven by the need to comply with the IMO regulations, although that effect has proved significantly weaker than expected. As shown by numerous analyses, the global oil industry has been adjusting at a cost lower than originally assumed.

LIGHT AND HEAVY CRACK SPREADS AND DIFFERENTIALS

Anticipated adjustments by the global oil industry and maritime transport to the new IMO regulations were expected to improve model refining margins in 2019. Due to a cap (below 0.5%) on the sulfur content in bunker fuels, it was widely expected that demand would shift to fuels of a quality similar to that of diesel oil, used in land transport. A resulting excess of heavy fractions (HSFO) was expected to lead to a decrease in their price relative to the price of crude oil, i.e. in the crack spread. On the other hand, the emergence of a new consumer on the diesel market should lead to an increase in the price of that fuel relative to crude oil. As maritime transport generates approximately 4% of global demand for crude oil and liquid fuels, the higher demand for diesel oil would require refineries to increase crude processing volumes, as it would not be sufficient to merely increase the conversion rates. It was the prospect of higher refining margins that was expected to prompt global refineries to invest in increasing crude processing volumes and conversion rates, with a view to increasing the share of high-margin fuels (mainly diesel oil and gasoline) in their product mix. The shift in demand towards light products was expected to bring about a corresponding shift in the structure of demand for light and heavy crude types and widening of the Brent/Urals differential.

These expectations proved wrong as in December 2019 refining margins shrank to their lowest in seven years, owing to extremely tight margins on diesel oil, which fell short of any expectations. On the other hand, HSFO outperformed the expectations.

Why has the impact of the IMO regulations proved so different from what was predicted?

- The global economy has slowed down, partly on account of the customs wars, which have had a strong impact on international trade flows. Consequently, demand for crude oil and liquid fuels has been growing at a pace significantly slower than expected. In 2019, it increased by 0.8 million bbl/d, while in the summer of 2019 it was expected to grow by 1.6 million bbl/d.
- At the end of 2019, increased refining capacities were placed in service with a view to increasing the output of diesel oil (thanks to both increased throughput volumes and conversion rates) to accommodate the demand growth of 1.6 million bbl/d.
- The additional volumes of HSFO and gasolines, resulting from increased crude processing, have been marketed as a new bunker fuel – a very low-sulfur fuel oil (VLSFO), a blend of HSFO and naphtha (VGO).
- Ships have been successfully testing the new, cheaper bunker fuel, which has been gradually denting demand for diesel from maritime transport.
- As a result, the effects on the light sweet and heavy sour crude differentials are weaker than expected.

The effects of the IMO regulations differ from expectations owing to the combination of the following factors: the increase in refining output to accommodate the expected strong demand and the currently weak demand, as well as the emergence of a new bunker fuel (VLSFO) ousting diesel oil.

Petrochemical margins are driven by the prices of petrochemical products and crude oil. The prices of petrochemical products are strongly correlated with the level of economic activity, which in 2019 fell globally and on the ORLEN Group's core markets.

OUTLOOK FOR MARGINS

In terms of margins, short-term factors are expected to reverse, i.e. the diesel crack spreads are expected to improve and the differential is to widen between the first and second quarters of 2020.

VLSFO is a product (blend of fuels) of a quality lower than that of distilled fuels and is not sufficient to fully satisfy bunker fuel demand (approximately 4.3 million bbl/d, accounting for more than 4% of global demand). Its better varieties cause poorer engine performance compared with diesel oil, while worse ones may even destroy engines. There have been reports and warnings of an increased volume of sludge and wax precipitation, as well as an excessive sulfur content in VLSFO, which means that technical and economic considerations will eventually limit its use in marine vessels.

The diesel crack spreads are likely to improve in the second quarter 2020 driven by a seasonal increase in fuel demand and the switch from winter to summer fuel specifications. The market is expected to react as it did in the case of gasolines. In the first quarter 2019, the gasoline crack spreads were still suppressed by an oversupply of the fuel, but in the second quarter 2019 they rapidly recovered.

There is also nothing to support high demand for Urals, which is a heavy crude with a high sulfur content. Regional phenomena (such as increased demand for crude oil from Russian refineries and higher diesel oil exports) will be wearing off, and the Brent/Urals differential will increase in line with increased demand for diesel oil.

OUTLOOK FOR OIL PRICES

The weaker-than-expected demand for crude oil in 2019 was attributable mainly to economic conditions, but an additional factor was the fact that demand generated by the new IMO regulations in 2019 proved weaker than expected.

Before the coronavirus outbreak, stronger growth in demand for crude oil in 2020 was expected, along with the halting of the global economic slowdown and the demand-side effects of the IMO regulations.

However, stronger demand will not boost prices, as oil from new fields in Brazil, Mexico and Guyana will enter the market. An increase in the US production will be slower, but following abolition of the internal oil production embargo in Canada, there will be nearly 500,000 barrels of Canadian oil on the market.

The prices of crude oil in 2020 will probably stay below the 2019 levels, as further production cuts in OPEC will be more difficult to enforce, and Saudi Arabia will not take the burden of further cuts.

Going forward, the lower oil prices will, on the one hand, stimulate demand and, on the other, further reduce the US output, with both these factors ultimately driving prices up.

In the long term, the prices of crude oil will be determined by the cost of the marginal barrel, i.e. the cost of producing approximately 2–3 million bbl/d of the most expensive oil for which there is still demand. Since demand for crude oil is set to decline in the long term, more expensive deposits will be eliminated from the market. It is estimated that in the long run the price of crude oil, excluding the US inflation, should be close to the current range of USD 55–70/bbl.

CORONAVIRUS

The aftermath of the coronavirus outbreak remains a great unknown. Assuming that the spread of the coronavirus pandemic is brought under control and does not continue after the first quarter of 2020, it is currently estimated that China's GDP will decline as a result by 1 percentage point and global economic growth will slow down by 0.20-0.25 percentage points.

The most dramatic drop in oil demand in history has been observed in China in February 2020, when the unprecedented shutdown of the transport network and the economy reduced the demand for refinery products by 5.6 mbd compared to February 2019 (a decrease of over 40%).

The impact of the Chinese pandemic will be wider and cover all global markets, including European. Currently, coronavirus has spread to more than a hundred countries. The global demand for oil and liquid fuels is expected to decrease by over 3.9 mbd in the first quarter of 2020. The aviation industry was one of the hardest hit by COVID-19, and airlines around the world are limiting the number of connections. The estimated decrease in global demand for aviation fuels in 2020 will drop by 0.5 mbd and in the first quarter of 2020 even by 0.8 mbd (y / y). European countries will also feel the effects of disruptions in Chinese supplies. Possible scenarios for the further development of the situation also include a drastic loss of enterprise revenues, supply problems, logistics, staff shortages and, as a consequence, loss of liquidity by enterprises with a limited product portfolio.

When the effects of reduced economic activity in China begin to subside slowly, other markets, including European, will continue to feel the negative effects of the crisis and the restoration of global trade and supply chain will be prolonged, which is a risk of a longer reduction in demand for motor fuels and bunker fuel.

The effects of the price war on oil producers observed in the first decade of March 2020 and the related drop in oil prices to just above USD 30/bbl may stimulate an increase in demand for oil and products. There is a concern, however, that until the virus is controlled and the fear factor subsides, many consumers will not want to take advantage of lower product ratings.

The ORLEN Group does not operate in China. Therefore, the decrease in demand on the Chinese market due to coronavirus has no direct impact on the level of revenues of the ORLEN Group. Gasoline consumption in Poland is fully balanced by domestic production of this fuel. In turn, the production of diesel fuel is insufficient to cover the total consumption of this fuel. Therefore, reduced demand in Europe will not have a significant impact on the sales revenues of the ORLEN Group. The reduced demand for aviation fuel on the domestic market is visible due to delayed flights to China and Italy. There is currently no lower demand for petrochemical products (till the date of publication of this report). However, in the following months, there may be disturbances in sales on the Italian and German market.

The ORLEN Group is currently assessing the qualitative and quantitative impact of a pandemic on the financial position and future financial results.

3.2.1.2. The ORLEN Group's market position and competitive environment

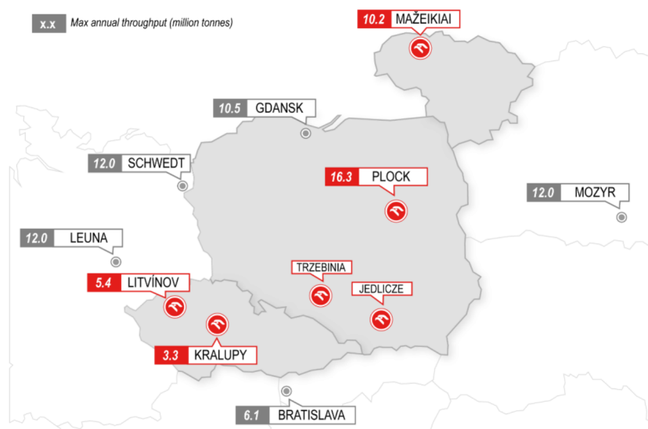
Józef Węgrecki – Member of the PKN ORLEN Management Board, Operations:

"The world's top fuel producers are increasingly investing in the energy business. Among our competitors, the focus is mainly on renewable energy sources (RES) and electric mobility as the key areas for growth. Development of the power generation segment is a major element of our growth strategy, and with the acquisition of Energa we will make another step towards building a multi-energy business.

Last year, our record-high crude oil throughput of 2018 was again exceeded by nearly 500 thousand tonnes. We also maintained a high capacity utilisation rate of 96% and reported a significant improvement in fuel yields, and we strove to fully integrate and utilise our production assets across the ORLEN Group. The launch of the Metathesis Unit at PKN ORLEN and the Propylene Splitter in Lithuania significantly enhanced our propylene output, and the Unipetrol Group's flagship Polyethylene III project, scheduled to be brought on stream in 2020, is now nearing completion".

MAIN PRODUCTION ASSETS (REFINERY AND PETROCHEMICAL) 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 PKN ORLEN 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, heating oils and hydrotreated paraffins as well as 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 petrochemical assets with combined production capacities of approximately 600 thousand tonnes/year of polymers, 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 10. Crude oil throughput and fuel yields.

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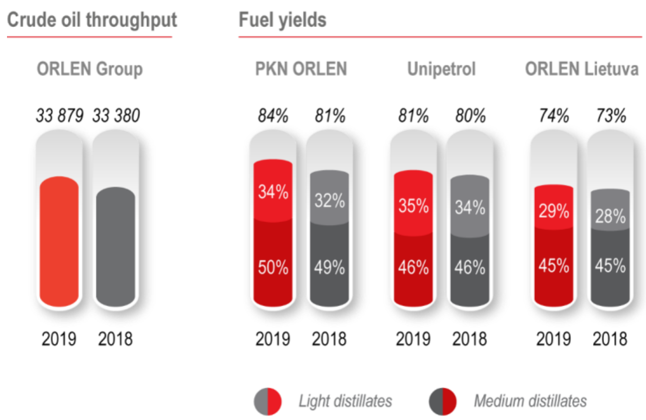


Source: Own preparation.

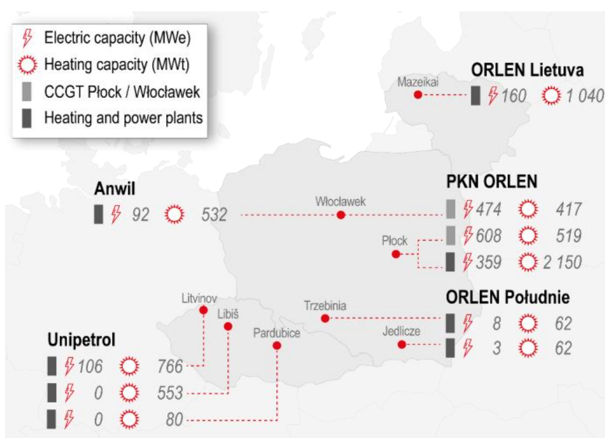
- **Volume of crude processed by** the ORLEN Group in 2019 of **33.9 million tonnes**, an increase of **1.5% (y/y)**, including:
  - **Poland, an increase of 2.2% (y/y)** as a result of lower range of maintenance shutdowns (y/y) of HOG and PX/PTA units as well as lack of maintenance shoutdown of Olefins unit from year 2018.
  - **the Czech Republic, an increase of 4.0% (y/y)** due to higher availability of the production installations in comparison with year 2018 (cyclical maintenance shutdowns at the Kralupy refinery and petrochemical units in Litvínov).
  - **Lithuania, a decrease of (1.8)%** mainly due to a spring maintenance shutdown of the refinery and FCC unit.

KEY ENERGY ASSETS

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 4. Energy assets and their technical parameters in the ORLEN Group.



Source: Own preparation.

CHP PLANTS

- In terms of thermal capacity, **PKN ORLEN's high-efficiency combined heat and power plant in Płock** is the largest industrial plant of this kind in Poland and one of the largest in Europe. It is the main supplier of steam heat, heating water and electricity to the Group's production units in Płock and to external customers, including the city of Płock. Following the launch of a new TG7 turbine generator set and shutdown of the TG1 unit (which is to be upgraded) in 2019, the total installed power generation capacity of the CHP plant stands currently at 358.9 MW. The upgraded TG1 turbine generator set is to be put into operation in September 2021, bringing the plant's total power generation capacity to 428 MW. 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 satisfies the Trzebinia plant's demand for steam heat and heating water, and partly its demand for electricity. The CHP plant is fuelled with natural gas and fine coal, a new gas-fired heat generation unit, covering around 50% of heat demand, having been brought on stream in 2019.
- The **ORLEN Południe Group's CHP plant in Jedlicze**, fired mainly with fine coal, is the Jedlicze plant's main supplier of

heat in the form of process steam. Other fuels used at Jedlicze include natural gas, fuel oil and C4 fraction.

- The **Anwil CHP Plant** is the primary source of heat in the form of medium pressure process steam and, at the same time, the peak-load and reserve source of heat for the Włocławek chemical complex. For process purposes, Anwil relies mostly on low pressure process steam from the Włocławek CCGT unit owned by PKN ORLEN.
- The **Unipetrol Group's CHP plant in Litvínov** uses mainly lignite, fully meeting the Litvínov plant's heat demand and partially satisfying its electricity demand. Design work is now under way for a new CHP Plant project based on high-efficiency gas-fired cogeneration, which will ultimately replace the existing CHP plant. The new unit is to be launched in the second half of this decade.
- The **CHP plant in Spolana** is currently being upgraded in order to replace its existing coal-fired boiler house with a new heat source. In 2019, a start-up procedure for the new heat generation units (gas-fired boilers) was commenced, and final work is now under way to put the new heat source into operation.
- **The Paramo CHP plant** comprises two production plants, in Kolin and in Pardubice, both fuelled with natural gas.
- The **ORLEN Lietuva CHP plant** is a source of process steam used in production processes, while ensuring stability of the power system. The plant is fired with natural gas, refinery gases, C4 fraction, and heavy fuel oil.

CCGT plants

- **CCGT Włocławek** – since April 2019, after the gas turbine failure was removed, the unit has operated normally, supplying electricity and process steam to the Anwil complex.

  In the three quarters of 2019, the CCGT plant was an active participant of the electricity market, cooperating closely with PSE. Its relatively high installed capacity and significant flexibility made it possible for the plant to provide ancillary services to PSE, contributing to the power system's stability. In 2019, the CCGT plant produced over 2.6 TWh of electricity and supplied 1.1 PJ of heat in the form of process steam to Anwil.
- **CCGT Płock –** operated normally with warranty support and service agreements in place. Under the main service agreement (LTSA), the gas turbine was subject to the first planned overhaul in September, involving replacement of burners, modifications of the compressor blade fastening according to the supplier's recommendations, and general inspections as per the agreement. As a producer of heat and power in cogeneration, the CCGT plant covered the shortage of these utilities at the Płock Production Plant, while remaining an active participant of the electricity market and providing ancillary power reserve services to the transmission system operator PSE.

In 2019, the unit generated 3.9 TWh of electricity and 3.2 PJ of steam supplied to the Płock Production Plant network.

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

Capacity market

In 2019 the Main Capacity Market Auction for 2024 was held, with PKN ORLEN securing a 357 MW capacity agreement for the CCGT unit in Włocławek. PKN ORLEN had also signed capacity agreements for the delivery period 2021–2023 under Main Auctions held in 2018. The CCGT plant in Płock, as a new facility, was awarded a five-year 389 MW capacity agreement (for 2021–2025), while the CCGT plant in Włocławek, as an existing unit, was awarded three one-year 351 MW capacity agreements for 2021–2023.

ORLEN Group's Photovoltaics (PV) Programme

Development of renewable energy sources (RES) is an element of PKN ORLEN's energy strategy. The end of 2019 saw the launch of the Group's Photovoltaics Programme, which will involve the set-up and coordination of PV projects across the ORLEN Group. In stage one of the PV Programme, the Group selected locations satisfying the relevant technical criteria for potential installation of photovoltaic units. Complete documentation necessary to secure a building permit and sign an agreement with a contractor of PV farms will subsequently be prepared for these locations. In the second stage of the Programme, the ORLEN Group will examine other properties and land where photovoltaic farms could potentially be located.

Electric mobility

In accordance with the ORLEN Group's updated Strategy for 2019–2022, electricity as an alternative vehicle fuel will be one of the key game-changing trends in the fuel market until 2025 and beyond. To meet that challenge, 39 charging stations had been launched at PKN ORLEN's urban, motorway and trunk road service stations by 2019, with further ones undergoing commissioning procedures. They can charge up to two vehicles at a time through 50 kW or 100 kW DC points, and one vehicle with up to 43 kW through the AC point. This essentially means that our charging stations are equipped with connectors supporting all electric vehicles now available on the European market. By 2021, PKN ORLEN intends to have 150 fast EV chargers deployed within its service station chain. In addition to developing its charging infrastructure, PKN ORLEN also decided to partially electrify its vehicle fleet. In 2019, nine new Nissan Leaf electric cars were made available to the Company's employees and have been in regular use ever since.

An IT system is now being implemented to support the management of PKN ORLEN's charging station network, including an operator portal, as well as a website and mobile app for users. All the existing charging stations are being connected to the online system, which is being tested prior to market launch. Ultimately, its full implementation will enable motorists to make payments through the mobile application.

In 2019, PKN ORLEN also implemented, in partnership with a business accelerator operating under the Electro Scale UP programme, the first innovative project proposed by the Enelion start-up. The project, which involved three AC charging stations with an innovative system of dynamically alternating current voltages, was successfully implemented in the underground car park of a Warsaw office building.

Offshore Wind Power project

Through its special purpose vehicle Baltic Power, PKN ORLEN holds a licence (i.e. a permit to construct and use artificial islands,

structures and equipment within Polish sea areas) to build offshore wind farms in the Baltic Sea with a capacity up to 1,200 MW, complete with technical equipment, measurement instrumentation and maintenance infrastructure. The Offshore Wind Power project is consistent with PKN ORLEN's strategy and is in line with long-term plans for development of Poland's energy sector. It will support generation of zero-emission energy which can be used for the Company's own consumption, processed, stored, or sold.
In 2019, deliverables of the technical consultancy contract, which consisted in a preliminary technical concept for the construction of an offshore wind farm, were handed over to the Company. It will provide the basis for subsequent work under the project, including the signing of an engineering design contract, which will cover, among other tasks, the preparation of a preliminary engineering design and building permit submission for the Offshore Wind Power project.
In terms of preliminary geotechnical work, a plan of geological operations for seabed drilling within the licence area was approved by the Polish Ministry of Environment, and a contract for preliminary geotechnical surveys for the offshore wind farm was signed. In 2019, the first stage of work at sea was finished, and analysis of the collected data is currently in progress.

In January 2019, Baltic Power secured grid connection conditions for the offshore wind farm. Having thoroughly reviewed these conditions and the draft grid connection agreement, the company began to negotiate their individual provisions with PSE. Work currently under way within Baltic Power's licence area involves environmental surveys, wind measurements and hydrometeorological studies. They are all progressing in line with the schedule, as necessary to duly prepare the Environmental Impact Assessment Report.

PKN ORLEN is also engaged in dialogue with potential business partners within the sector to secure infrastructure facilities for the construction and operation of the Offshore Wind Power project.
In 2019, a procedure was launched to contract an experienced business partner for the Offshore Wind Power project. Agreements were signed with legal and transaction advisors, and negotiations with a number of potential partners having relevant experience and know-how were commenced.

THE ORLEN GROUP'S LOGISTIC 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 2019, pipelines were the primary mode of transport of feedstock and products used by the ORLEN 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).

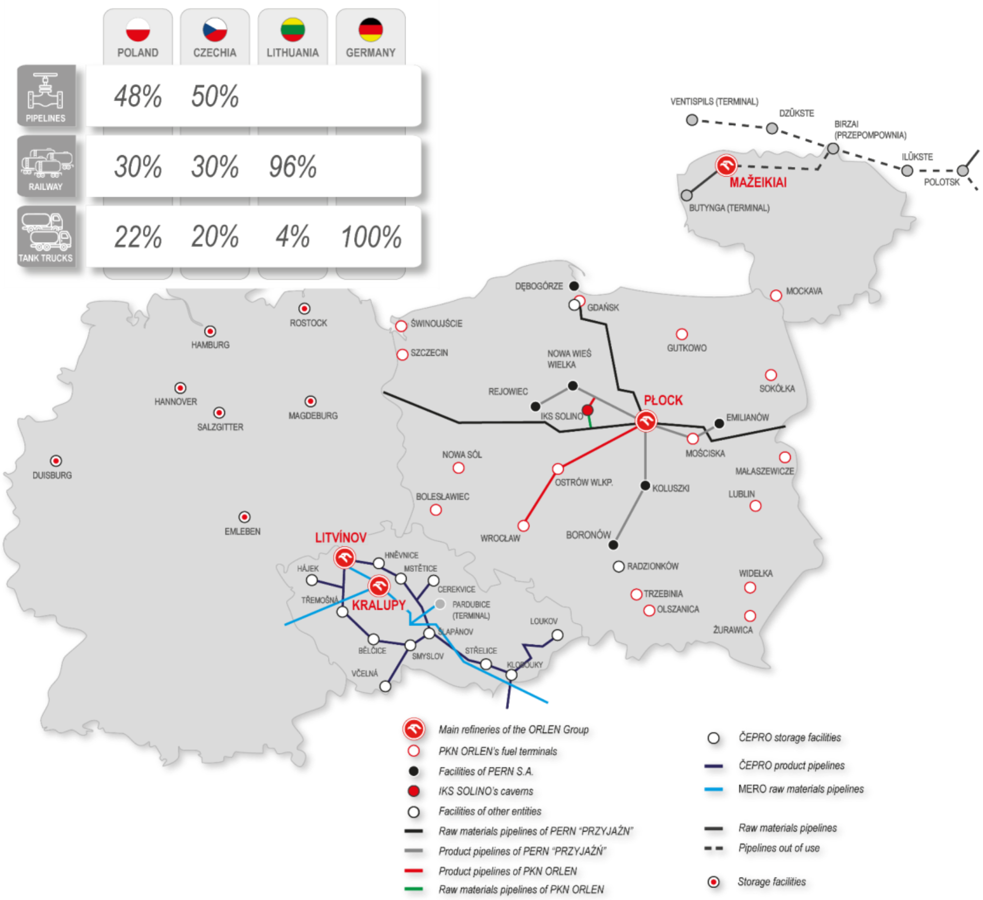
In **Poland**, PKN ORLEN uses 958 km of pipelines for fuel product transport: 620 km of pipelines owned by Przedsiębiorstwo Eksploatacji Rurociągów Naftowych S.A., as well as its own transport infrastructure with a total length of 338 km, comprising two sections: Płock – Ostrów Wielkopolski – Wrocław (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 2019, the ORLEN Group used a total of 27 facilities in Poland to receive, store, dispatch and handle fuels (Group- and third party-owned fuel terminals). As at the end of 2019, 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 2019, 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), 7 storage and distribution depots owned by state-owned operator ČEPRO, 3 terminals owned by the Group and 7 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 5. Transport structure and logistic infrastructure used by the ORLEN Group in Europe in 2019.



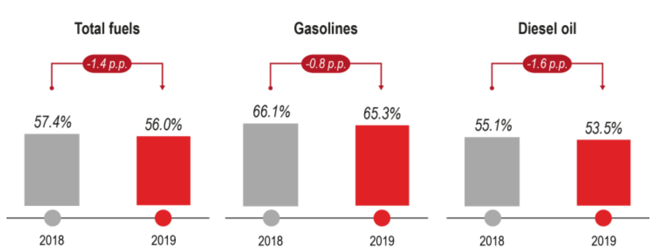
Source: Own preparation.

ORLEN GROUP'S MARKET SHARES IN THE DOWNSTREAM SEGMENT

Wholesale of refining products

In 2019, 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.

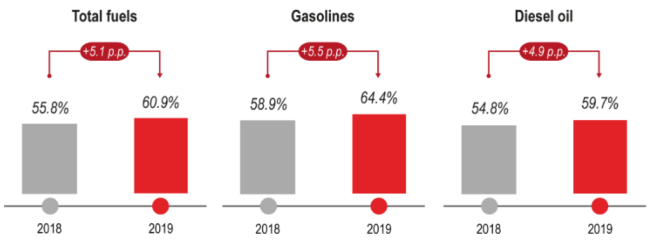
DIAGRAM 11. Market share in Poland



Source: Own preparation.

- Strong sales allowed the ORLEN Group to maintain the leading position in the Polish fuel sales market.
- Slight decrease in market share as a result of optimization of sources of supply and maximization of own production share in the sales structure.

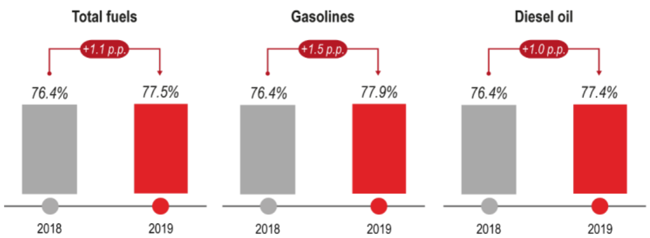
DIAGRAM 12. Market share in the Czech Republic.



Source: Own preparation.

- The ORLEN Group is the leader in fuel sales in the Czech Republic.
- Further increase in total market share of 5.1 p.p. (y/y) in the range of gasoline and diesel oil.

DIAGRAM 13. Market share in the Baltic states.



Source: Own preparation.

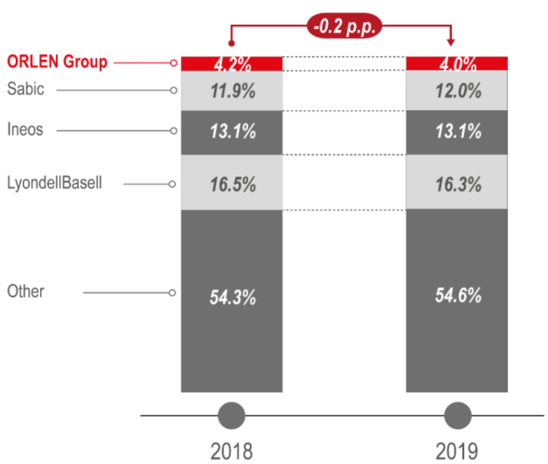
- The ORLEN Lietuva Group strengthened the leader position in the Baltic States markets despites strong price pressure from Finnish, Belarusian and Russian suppliers.
- Increase in the total shares on the Baltic States markets of 1.1 p.p. to the level of 77.5% attributable to increase in market share in Lithuania of 2.2 p.p. to 76.6%.

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 the 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.

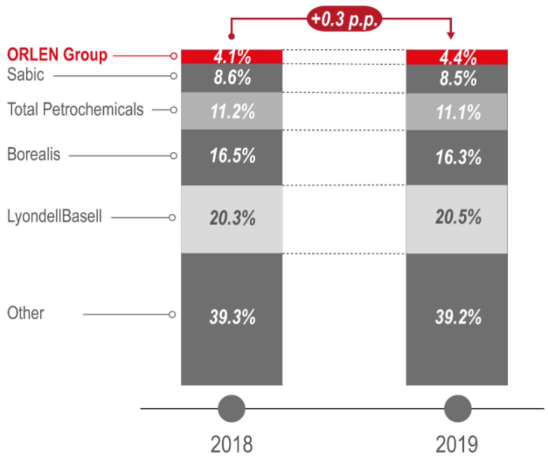
DIAGRAM 14. Polyethylene producers in Europe.



Source: Own preparation based on POLYGLOBE.

- Europe's production capacities for high-density and low-density polyethylene are currently at around 13,287 thousand tonnes per year.
- Lyondell Basell Industries − the largest polyethylene manufacturer, with an annual production capacity of approximately 2,170 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 530 thousand tonnes per year.
- The ORLEN Group is building a new Polyethylene III unit in the Czech Republic with an annual production capacity of approximately 270 thousand tonnes.

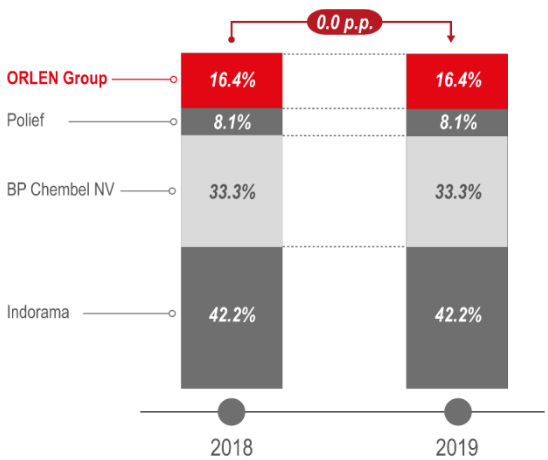
DIAGRAM 15. Polypropylene producers in Europe.



Source: Own preparation based on POLYGLOBE.

- Europe's annual production capacities for polypropylene are at around 11,749 thousand tonnes.
- Lyondell Basell Industries has an annual production capacity of around 2,405 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 520 thousand tonnes per year.

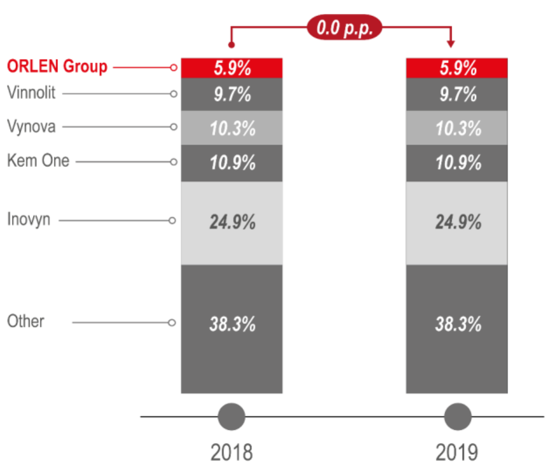
DIAGRAM 16. PTA producers in Europe.



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 17. PVC producers in Europe.



Source: Own preparation based on Market Analytics – Vinyls – 2019 (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.
- Other, including The Karpatneftekhim plant, with nominal production capacities of ca. 300 thousand tonnes annually.
- 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.

3.2.1.3. Sales volume of the Downstream segment

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

"2019 was another consecutive year with record-high Downstream sales figures, with nearly 33 million tonnes of refining and petrochemical products sold across our home markets. Through excellent cooperation between our production, logistics and sales units, we managed to seamlessly deliver on out trade commitments. Our robust sales performance was underpinned by strong economic growth in Poland and favourable climate on the labour market.

In 2019, we continued our efforts to acquire Grupa LOTOS. The combined entity's potential will allow us to entrench our market position in Eastern Europe and strengthen Poland's energy security, while opening new opportunities for synergies, cost optimisation and further development".

In 2019, the ORLEN Group's total Downstream sales reached 32,740 thousand tonnes, having gone up on 2018.

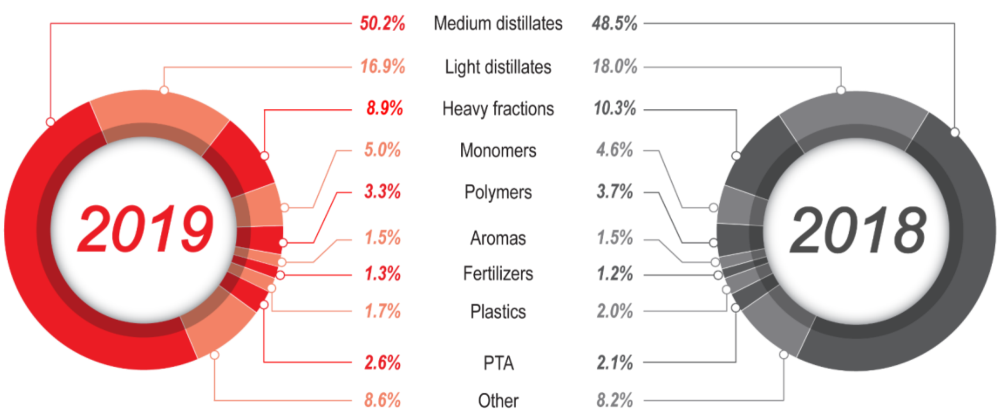
Lower sales of refining products in Poland combined with growing sales on foreign markets were offset by rising sales of petrochemical products driven by higher availability of the Group's production assets.

TABLE 2. The ORLEN Group sales in the Downstream segment [PLN million/thousand tonnes].

Sales	2019		2018		2017		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)]	12 098	5 231	12 925	5 450	12 071	5 818	(6.4%)	(4.0%)
Medium distillates[2)]	35 916	13 974	34 787	13 653	28 325	13 343	3.2%	2.4%
Heavy fractions[3)]	6 369	4 784	7 339	5 032	5 691	4 879	(13.2%)	(4.9%)
Monomers[4)]	3 585	1 022	3 260	849	2 994	868	10.0%	20.4%
Polymers[5)]	2 390	519	2 643	540	2 557	550	(9.6%)	(3.9%)
Aromas[6)]	1 080	424	1 096	367	1 100	360	(1.5%)	15.5%
Fertilizers[7)]	903	1 030	825	1 067	805	1 081	9.5%	(3.5%)
Plastics[8)]	1 218	343	1 409	371	1 466	391	(13.6%)	(7.5%)
PTA	1 893	647	1 528	508	1 399	523	23.9%	27.4%
Other[9)]	6 152	4 766	5 851	4 879	5 017	5 112	5.1%	(2.3%)
Total	**71 604**	**32 740**	**71 663**	**32 716**	**61 425**	**32 925**	**(0.1%)**	**0.1%**

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 18. Sales revenue structure of the ORLEN Group Downstream segment.



In 2019, 2018 and 2017 none of the ORLEN Group's leading customers accounted for more than 10% of the Group's total revenue.

3.2.1.4. Sales markets and market shares

TABLE 3. Sales volume of the ORLEN Group in the Downstream segment on domestic markets[1)] (in thousands of tonnes).

Sales	2019	2018	2017	change	change %
	2	3	4	5=(2-3)	6=(2-3)/3
Poland	17 620	17 777	17 159	(157)	(0.9%)
Baltics states	8 512	8 441	8 654	71	0.8%
Czech Republic	6 608	6 498	7 112	110	1.7%
Total	**32 740**	**32 716**	**32 925**	**24**	**0.1%**

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

Polish market

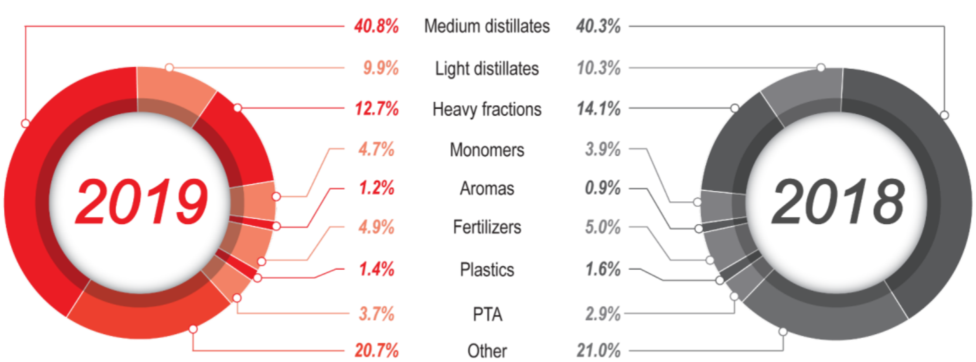
In 2019, Poland was among the fastest growing EU economies. Household consumption was on the rise, driven by an anticipated increase in public spending, labour market challenges and rising wages. Positive economic growth prospects were further supported by a low interest rate environment and realization of financial invetments including EU funded. For GDP and fuel consumption data, see Section 4.1 Macroeconomic environment.

The ORLEN Group was a main supplier to major foreign fuel companies, while further expanding its operations in the SME sector though ORLEN Paliwa.

TABLE 4. Sales volume of the ORLEN Group in the Downstream segment on the Polish market [thousands tonnes].

Sales	2019	2018	2017	change	change %
	2	3	4	5=(2-3)	6=(2-3)/3
Light distillates	1 736	1 837	1 773	(101)	(5.5%)
Medium distillates	7 196	7 164	6 434	32	0.4%
Heavy fractions	2 228	2 503	2 369	(275)	(11.0%)
Monomers	836	693	716	143	20.6%
Aromas	210	164	178	46	28.0%
Fertilizers	863	881	897	(18)	(2.0%)
Plastics	252	276	300	(24)	(8.7%)
PTA	647	508	523	139	27.4%
Other	3 652	3 751	3 969	(99)	(2.6%)
Total	**17 620**	**17 777**	**17 159**	**(157)**	**(0.9%)**

DIAGRAM 19. Structure of sales volume of the ORLEN Group in the Downstream segment on the Polish market.



In 2019, the ORLEN Group's sales in Poland reached 17,620 thousand tonnes, down (157) thousand tonnes year on year. The slight decline of the overall sales volume was attributable to lower sales of low-margin heavy refining fractions, down (275) thousand tonnes year on year, which was driven, among other factors, by a significant improvement in fuel yields at PKN ORLEN.

In 2019, PKN ORLEN continued to prepare for the upcoming IMO 2020 regulations with respect to production and sale of heavy fuel oil with a reduced sulfur content, which included the market launch of LSFO (low sulfur fuel oil). As of January 2020, the sulfur content cap for bunker fuels (also outside the Emission Control Areas) has been reduced from 3.5% to 0.5%.

Sales of light distillates in the Downstream segment alone dropped by (5.5)% year on year. As the Downstream segment delivers fuels also to the Retail segment, in 2019 the aggregate sales figure for light distillates sold by both segments increased 0.7% year on year.

A 0.4% year-on-year increase in sales of middle distillates was driven by higher sales of Jet A-1 aviation fuel. Sales of this fuel have been on the rise for several years now, propelled by strong growth of Poland's aviation services market. The ORLEN Group's share of aviation fuel sales on the Polish market remained at approximately 82.5%. The Group was also expanding into-plane fuel sales and continued its supplies to strategic customers, including the Polish Army. 2019 saw the launch of production and sales of the JP-8 aviation fuel to meet the needs of the US army units deployed in Poland. PKN ORLEN is also a Strategic Partner to IATA (the International Air Transport Association).

Sales of diesel oil remained more or less flat year on year, while sales of light fuel oil declined due to mild weather and consumers switching to more cost-effective energy carriers, mainly natural gas.

In the petrochemical segment in Poland, sales of monomers, aromatics and PTA went up year on year (by 20.6%, 28.0% and 27.4%, respectively), driven by higher availability of the Group's production facilities (with no scheduled maintenance shutdown of the Olefins unit in 2018). PVC sales were down by (8.7)% as a combined effect of unit shutdowns, falling demand, and more intensive competition from Russian, Ukrainian and US PVC producers. Sales of artificial fertilizers were down (2.0)% reflecting limited demand from retail customers caused by unfavourable weather conditions (high temperatures).

The Baltic States and Ukraine

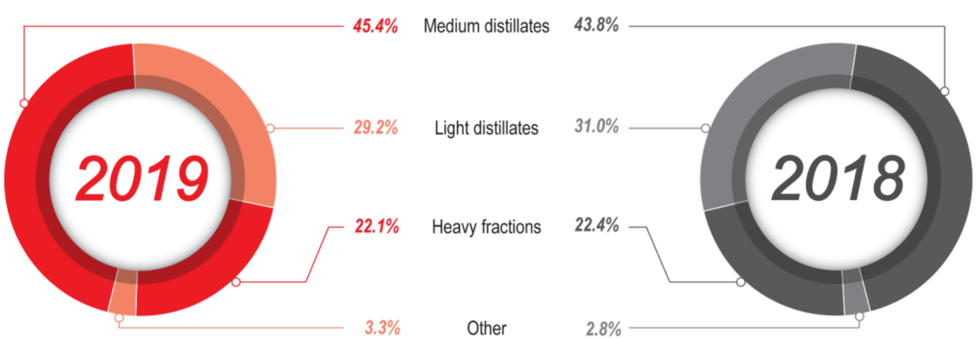
Despite weaker growth year-on-year, the Baltic States still reported positive GDP figures. For Lithuanian GDP and fuel consumption data, see Section 4.1 Macroeconomic environment. According to preliminary data released by the International Monetary Fund (IMF), the 2019 GDP growth figures for Estonia and Latvia reached 3.2% and 2.8% (year on year), respectively.

The Baltic States are attractive markets for Scandinavian, Russian and Belarusian fuel 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.

TABLE 5. Sales volume of the ORLEN Group in the Downstream segment on the markets serviced by the ORLEN Lietuva Group [thousand tonnes].

Sales	2019	2018	2017	change	change %
	2	3	4	5=(2-3)	6=(2-3)/3
Light distillates	2 486	2 614	2 880	(128)	(4.9%)
Medium distillates	3 862	3 700	3 715	162	4.4%
Heavy fractions	1 881	1 888	1 859	(7)	(0.4%)
Monomers	18	0	0	18	-
Other	265	239	200	26	10.9%
Total	**8 512**	**8 441**	**8 654**	**71**	**0.8%**

DIAGRAM 20. Structure of sales volume of the ORLEN Group in the Downstream segment on the markets serviced by the ORLEN Lietuva Group.



Despite a challenging operating environment due to aggressive competitive policies of importers, the ORLEN Lietuva Group's sales volumes in 2019 rose 0.8% year on year, to 8,512 thousand tonnes. The best figures were reported for middle distillates, with sales going up 4.4%. Sales volumes of the Jet A-1 aviation fuel also rose considerably, up 24.9% year on year. Sales of diesel oil grew 2.1% year on year.

On the other hand, sales of light distillates declined by (4.9)% year on year.
ORLEN Lietuva actively participated in balancing the ORLEN Group's deficits on the Polish market. In 2019 significant product volume were supplied to Poland both by road and sea.

For several years now, Ukraine's economy has been growing at a satisfactory pace. According to the IMF, in 2019 the country's GDP

grew 3.0% amid high inflation, of 8.7%. Ukraine continues to be perceived as an unstable, risk-laden market, which does not encourage new investment with a potential to drive growth in transport needs.
In 2019, the downward trend in gasoline consumption, which had continued for a number of years, finally reversed. The gasoline market rose by as much as 13.3%, while diesel oil consumption went up 5.3% year on year. The second half of 2019 saw a significant drop in the supply of diesel oil following imposition of a 4% duty on the Russian product supplied via pipeline. This put an end to diesel oil supplies via this route and meant that imports from Belarus, Lithuania and by sea needed to be significantly increased. In 2019, Jet A-1 consumption returned to 2018 levels, down (35)% on 2018, mainly as a result of closure of the legal loophole that permitted blending the Jet A-1 fuel with diesel oil.

In 2019, as in previous years, the Ukrainian fuel market faced strong pressures from Russian and Belarusian exporters offering competitively-priced products. Despite this, the ORLEN Lietuva Group's fuel sales hit a record high of nearly 1m tonnes. The largest contributors were sales of gasoline and the Jet A-1 fuel. Among factors that helped achieve such excellent results were supply constraints and its reputation of a reliable and trustworthy supplier.
The source of the ORLEN Lietuva Group's greatest competitive advantage is the precision and timeliness of supplies, regardless of any geopolitical developments in the region. The ORLEN Group has been building its position as a stable and reliable partner for years. It is the only Western oil group operating in Ukraine, whose condition is least affected by the unstable political landscape in Ukraine, not to mention the country's fraught relations with Russia.

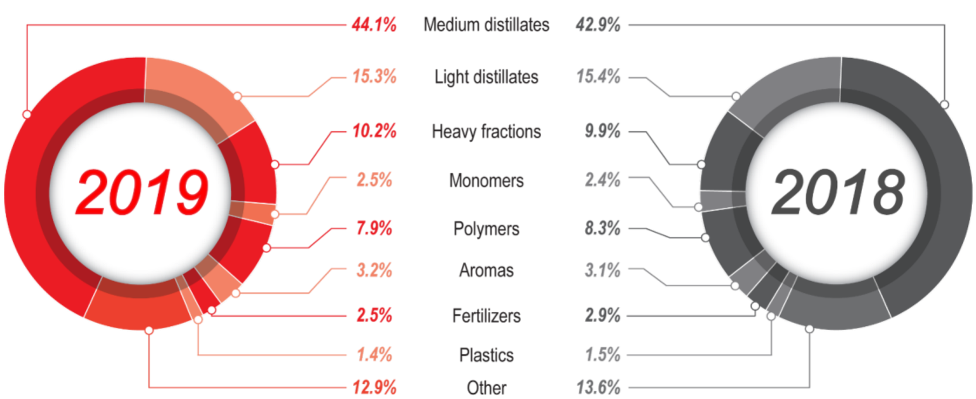
Czech market

The favourable macroeconomic climate and market conditions (GDP and consumption levels) have had a material effect on the ORLEN Group's sales performance in the Czech Republic. For details, see Section 4.1 Macroeconomic environment.

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

Sales	2019	2018	2017	change	change %
	2	3	4	5=(2-3)	6=(2-3)/3
Light distillates	1 009	999	1 165	10	1.0%
Medium distillates	2 916	2 789	3 194	127	4.6%
Heavy fractions	675	641	651	34	5.3%
Monomers	168	156	152	12	7.7%
Polymers	519	540	550	(21)	(3.9%)
Aromas	214	203	182	11	5.4%
Fertilizers	167	186	184	(19)	(10.2%)
Plastics	91	95	91	(4)	(4.2%)
Other	849	889	943	(40)	(4.5%)
Total	**6 608**	**6 498**	**7 112**	**110**	**1.7%**

DIAGRAM 21. Structure of sales volume of the ORLEN Group in the Downstream segment on the Czech market.



Year 2019 was a period of recouping the Group's market shares and sales volumes lost following maintenance shutdowns of its production units in 2018, and of pursuing an ambitious strategic objective to introduce the UIC price index. The index was accepted by all market participants, including public institutions, having become part of the market practice. All contracts for 2020 were concluded based on UIC.

In 2019, the Unipetrol Group's sales volumes rose 1.7% year on year, to 6,608 thousand tonnes. Strong results were recorded on middle distillate (up 4.6% year on year), driven mainly by a 38.2% year-on-year increase in the sales of the Jet A-1 aviation fuel. Diesel oil sales grew 3.7% year on year, while a 1.0% year-on-year increase in light distillate sales was attributable to higher sales of gasoline (up 1.9% year on year).

In 2019, the Unipetrol Group continued selling its products to a broad customer base, including large fuel companies and hypermarket chains. Unipetrol sold its products on foreign markets, including Slovakia, Hungary, Germany, Austria and Poland, as part of the strategy to optimise product flow management within the ORLEN Group.

3.2.1.5. Supply sources

Crude oil

PKN ORLEN supplies crude oil to the Płock refinery and to three other ORLEN Group refineries, in Litvínov and Kralupy in the Czech Republic, and in Lithuania's Mažeikiai.

In late April and early May 2019, due to contamination of Russian crude oil with organic chlorides and temporary suspension of deliveries via the Druzhba pipeline, there was a significant reduction in pipeline deliveries, as reflected by a change in the monthly structure of oil supplied under long-term contracts to Poland and the Czech Republic. The share of more expensive low-sulfur crudes imported by sea was increased to ensure the continuity of supplies and processing.

In 2019, two long-term contracts for oil deliveries via pipeline to the Płock refinery (with Rosneft Oil Company and Tatneft Europe AG), a long-term contract (with Saudi Arabian Oil Company) and a six-month contract (with Saudi Aramco Products Trading Company ("ATC"), a subsidiary of Aramco) for oil deliveries by sea were in force.

The feedstock for all refineries of the ORLEN Group was procured from oil producers and other companies operating on the international oil market. The crude oil supplied to Płock came primarily from Russia and Saudi Arabia, but was also imported from Angola, Kazakhstan, Nigeria, Norway, Poland, the United States and the United Kingdom. The refineries in the Czech Republic received the feedstock from Russia, Saudi Arabia, Azerbaijan, Kazakhstan, Libya, Nigeria and the United States. The Mažeikiai refinery was primarily supplied with Russian oil, with additional deliveries from Saudi Arabia, Kazakhstan, the United States and the United Kingdom.

In 2019, the share of Rosneft Oil Company in the crude supplies exceeded 10% of the ORLEN Group's total revenue.

Natural gas

The ORLEN Group is potentially the largest gas consumer in Poland and one of the largest in the Czech Republic and Lithuania. Natural gas is used by the Group in the production of heat, electricity, fuels and fertilizers. In Poland the ORLEN Group's combined potential for natural gas consumption exceeds 3bn Nm^3 per year, accounting for approximately 20% of total consumption. Natural gas is used by the Group mainly at the following locations:

- PKN ORLEN's Production Plant in Płock: for refinery, petrochemical, electricity and heat production.
- Anwil's Production Plant in Włocławek: for fertilizer production.
- CCGT unit in Płock: for electricity and heat production.
- CCGT unit in Włocławek: for electricity and heat production.
- Production Plants in Kralupy, Litvínov, Kolín and Pardubice (Unipetrol), and the Production Plant in Neratovice (Spolana): for refinery, petrochemical, electricity, heat and fertilizer production.
- Production Plant in Mažeikiai: for electricity and heat production.

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.

PKN ORLEN has also been developing natural gas sales on both retail and wholesale markets,

while the ORLEN Group is engaged in a number of exploration and production projects to secure its own sources of natural gas.

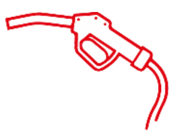
In 2019, the value of deliveries by none of the suppliers of natural gas to the ORLEN Group accounted for more than 10% of the Group's total revenue.

3.2.2. Retail

Daniel Obajtek, CEO and President of the PKN ORLEN Management Board:
"We keep expanding our fuel and non-fuel portfolio, also by offering premium quality products made in Poland. In addition, we are improving the standards of service offered to motorists. The roll-out of mobile payments represents another stepping stone towards enhancing customer experience and reducing the time required to refuel a vehicle. We have recently opened ORLEN Drive, Europe's most advanced service station, and have also launched the 'mobile cashier' service. All these efforts have consolidated our position, as our service station chain is setting trends on both the Polish and European markets."

Patrycja Klarecka, Member of the Management Board, Retail Sales:
"The Retail segment has again delivered record-high financial and operating results. In 2019, the ORLEN Group's EBITDA came in at PLN 3.0 billion, with fuel sales of 10 million tonnes across all operating markets. We also boast extensive competence in building a modern and competitive chain of service stations, which we are successfully employing to expand into the Slovak market, where we have already built a solid base for further development. At our retail sites we sell not only fuels produced by PKN ORLEN but also non-fuel products from Polish manufacturers, reinforcing the Company's position and fostering the perception of our country abroad."

2019



RETAIL STATIONS

	units	ORLEN Group	Poland	Germany	Czech Republic	Slovakia	Lithuania
Total sales	thousand t	**9 817**	5 883	2 961	895	-	78
Market share	%	**16.5**	34.3	6.6	24.5	-	4.7
Number of stations, including:	**number**	**2 836**	**1 800**	**585**	**416**	**10**	**25**
Premium	number	1 930	1 737	-	160	10	23
Economical	number	851	38	568	245	-	-
Other	number	55	25	17	11	-	2
CODO/COCO[1]	number	2 294	1 361	497	401	10	25
DOFO/DODO[1]	number	542	439	88	15	-	-

CATERING OUTLETS

	units	ORLEN Group	Poland	Germany	Czech Republic	Slovakia	Lithuania
Total, including:	**number**	**2 421**	**1 699**	**385**	**306**	**8**	**23**
Stop Cafe	number	967	820	-	125	7	15
Stop Cafe Bistro	number	342	321	-	21	-	-
Stop Cafe 2.0.	number	727	558	-	160	1	8
star connect	number	117	-	117	-	-	-
star cafe	number	268	-	268	-	-	-

1) Abbreviations used for types of fuel stations are described in "Glossary of selected financial and industry concepts".

3.2.2.1. Market trends in the Retail segment

2019 saw a year-on-year increase in unit margins on fuel sales in both Poland and the Czech Republic. By contrast, unit margins on fuel sales in Lithuania declined on account of fuel prices kept low by the market. In Germany, margins fell mainly as a result of a very high 2018 base effect reflecting difficulties in fuel logistics. Operating expenses rose across all markets, driven mainly by growing labour costs as a result of an increase in minimum wage rates coupled with competitive and market pressures on pay rises. The higher labour costs and low unemployment rates also had an effect of pushing up other operating expenses, in particular the prices of utilities and services, as well as the costs of plant maintenance.

In 2019, most fuel retail chains upgraded their facilities and expanded their food and beverage offerings. As all the 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.

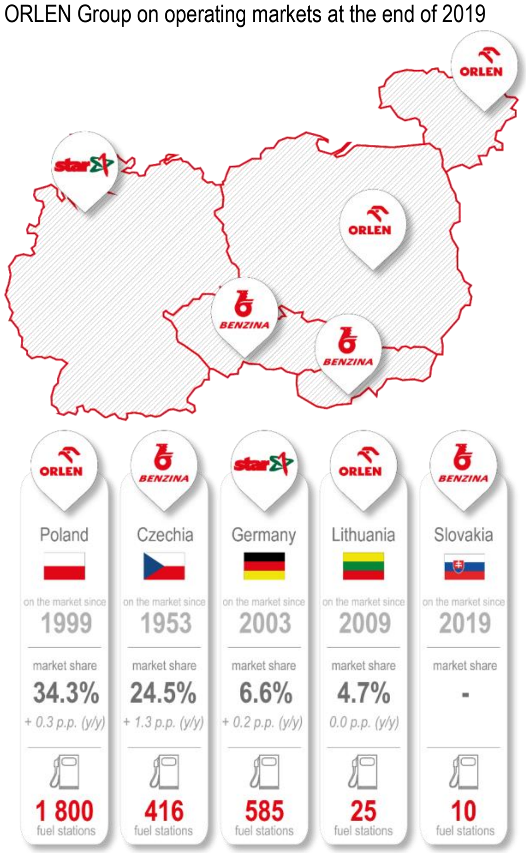
As there were no acquisitions or ownership changes involving the main players on the retail fuel market, the leading chains retained their respective market positions in the ORLEN Group's operating markets. In 2019, the ORLEN Group established a foothold on the Slovak market, by opening its first ten service stations. Slovakia has thus become the fifth country after Poland, the Czech Republic, Germany and Lithuania where the Group has established retail operations.

In 2019, PKN ORLEN commenced a project to co-brand its foreign service stations by combining the logotypes of the local Benzina and Star brands with the ORLEN Group's logotype. The Lithuanian subsidiary responsible for the retail market was rebranded from Ventus-Nafta to ORLEN Baltics Retail.

3.2.2.2. Market position and environment

The ORLEN Group is the undisputed leader in retail fuel sales in Central Europe. At the end of 2019, it operated a total of 2,836 service stations, including 10 sites in Slovakia, the Group's new home market.

SCHEME 6. The number of stations and market share of the ORLEN Group on operating markets at the end of 2019



Source: Own preparation.

Retail chains operated by Polish and foreign fuel companies (PKN ORLEN, LOTOS, BP, Shell, Circle-K) on the **Polish market** did not undergo any major changes. In 2019, Amic Energy Management completed the Lukoil chain's rebranding to Amic.

In the **Czech Republic**, the structure of the market evolved, as the number of small non-public stations (e.g. serving a single company only) fell slightly.

On the **German market**, there were no major structural changes. In second quarter 2019, the German market experienced problems with the quality of crude oil imported via the Druzhba pipeline, which adversely affected two refineries located in Leuna and Schwedt (north-eastern Germany). This, coupled with the inability of the Vohburg refinery (in Bavaria) to restart production at full capacity after an accident it suffered in 2018, had a significant impact on the prices and volumes across Germany. Acute supply shortages were also recorded. The Vohburg refinery was not able to operate at full capacity until September 2019.

No major transactions were made on the **Lithuanian market,** its structure remaining practically unchanged relative to 2018.

In **Slovakia**, local independent service stations account for a significant part (i.e. approximately 51%) of the market, as their discount-based market strategies help them grow and solidify their positions.

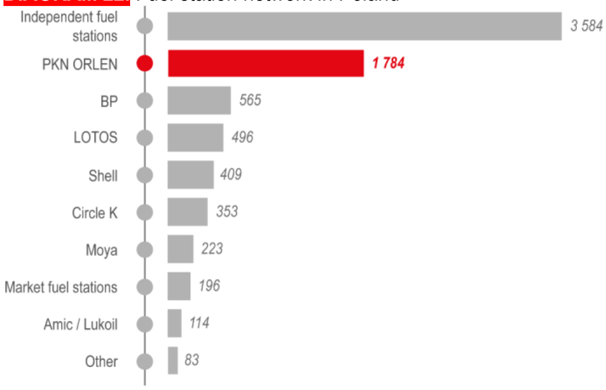
In Poland, our service stations operate under the ORLEN brand in the premium segment and under the Bliska brand (2% of the total number of stations within the chain, that share having declined year on year) in the economy segment. In the Czech Republic and Slovakia, they are branded as Benzina and Benzina Plus, and in Lithuania − as ORLEN. On the German market, ORLEN Deutschland operates economy stations under the Star brand and the network is complemented by more than a dozen Familia supermarket stations.

Polish market

According to the Polish Organisation of Oil Industry and Trade (POPiHN), there were more than 7,800 service stations in Poland at the end of September 2019, an increase of 40 or so compared with the end of 2018. In 2019, the POPiHN was joined by Anwim (as an associate member), the operator of 223 MOYA service stations.

As at the end of 2019, the ORLEN Group had a network of 1,800 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, Amic, and Total) represented approximately 20% of the total. Independent operator stations (including smaller chains operating under a single brand) accounted for about 50% of all service stations in Poland. Among the chains of independently-operated stations, MOYA continued to grow at a vigorous pace. The number of supermarket service stations remained roughly unchanged (196 locations, representing around 2.5% of the total). The number of AS 24 and IDS self-service stations, also managed by foreign operators, was 46.

DIAGRAM 22. Fuel station network in Poland



Source: Own preparation on the basis of POPiHN data as at 30 September 2019.

With the completion of certain growth projects and successful adaptation to the changing competitive landscape in Poland, PKN ORLEN was able to maintain its share in the Polish market at 34.3%.

In 2019, as in previous years, one driver of the service stations market was the road network extension programme pursued in Poland. Following the opening of new expressway and motorway sections, more tenders to lease Motorway Service Areas (MSA) were called and new large service stations were opened at these locations. As at the end of 2019, there were 85 MSA service stations at Polish expressways or motorways, of which 33 (38.8%) were owned by PKN ORLEN. Currently, the Company is engaged in work on a further 11 projects to build MSA facilities.

Czech market

The ORLEN Group maintained its leading position on the market, both in terms of the volume of sales and the size of the service station chain. In 2019, the Benzina chain comprised 416 sites, its market share having gone up to 24.5%.

In terms of the number of service stations, Hungary's MOL is the second largest chain in the Czech Republic (with 304 locations). In terms of the market share, Tank Ono, a privately-owned discount chain, is the runner-up, with 41 stations and an approximately 15% share in the market. Other major players on the Czech market are the premium stations run by the two multinationals Shell and OMV, with a combined market share of just under 23%.

German market

The number of service stations on the German market was about 14.5 thousand, with ORLEN Deutschland's main competitors including international networks such as: Aral (BP Group), Shell, ESSO, Total (accounting for a nearly 60% share in the market and 44% of all stations) and the economy chains JET and HEM (almost 9% of all stations). In 2019, the number of service stations within each chain changed only slightly year on year. 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).

The ORLEN Group has been present on the German market, the largest fuel consumer in Europe, since 2003. At the end of 2019, ORLEN Deutschland's service station chain comprised 585 sites and, despite stiff competition, managed to grow its market share by 0.2pp, to 6.6%.

Lithuanian market

Viada, with 126 locations and a 22% market share, is the leader in terms of the size of the service station chain on the Lithuanian market. Together with Baltic Petroleum, Lithuania's third largest chain, with which it has equity links, Viada controls 203 service stations and more than 32% of the market. Another retail chain is Circle K, the operator of 89 service stations (including 12 automated, self-service locations) with an almost 20% market share. Neste, operating 72 service stations, is another major player present on that market. At the end of 2019, the ORLEN Group's retail chain in Lithuania, operated by the subsidiary ORLEN Baltics Retail, comprised 25 sites, which gave the Group an unchanged 4.7% share in the Lithuanian retail market.

Slovak market

As at the end of 2019, the number of service stations in Slovakia totalled 910. The main player and leader on the Slovak market is MOL, enjoying a 28% market share and operating 253 service stations under the Slovnaft brand. The source of supplies for the Slovnaft chain is MOL's own refinery in Bratislava. Other multinationals (Shell, OMV, Lukoil) are also present in Slovakia, where they hold a combined market share of 21%, whereas local independent service stations account for the remaining 51% of the market. In 2019, the ORLEN Group also established a foothold on the Slovak retail market through its subsidiary Unipetrol a.s., and at the year's end it already operated there 10 CODO service stations under the Benzina brand.

3.2.2.3. Sales volume of the Retail segment

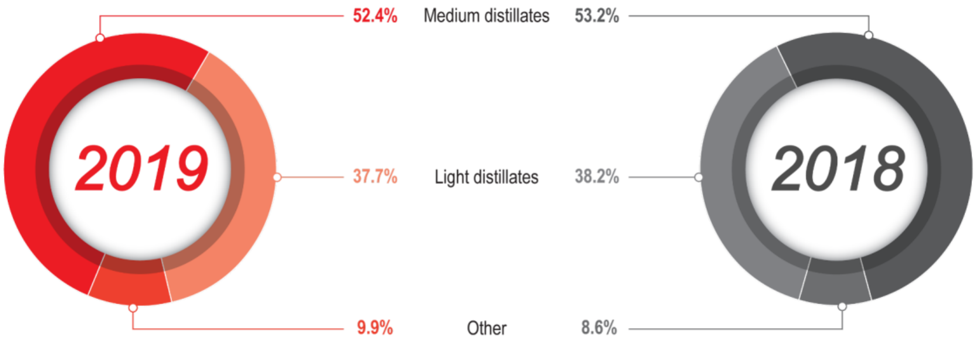
In 2019, the volume of sales of the ORLEN Group's Retail segment increased by 3.9% year on year, to 9,815 thousand tonnes, as a result of improved sales of all fuels across all operating markets (with the exception of LPG in Germany and Lithuania).

TABLE 7. The ORLEN Group sales in the retail segment [PLN million/thousand tonnes].

Sales	2019		2018		2017		change %	
	Value	Volume	Value	Volume	Value	Volume		
1	2	3	2	3	4	5	8=(2-4)/4	9=(3-5)/5
Light distillates[1]	14 659.0	3 775.4	14 266.0	3 546.3	13 086.0	3 339.0	2.8%	6.5%
Medium distillates[2]	20 405.0	6 039.1	19 879.0	5 900.2	16 471.0	5 480.0	2.6%	2.4%
Other[3]	3 846.0	0.0	3 194.0	0.0	3 793.0	0.0	20.4%	-
Total	**38 910.0**	**9 814.6**	**37 339.0**	**9 446.5**	**33 350.0**	**8 819.0**	**4.2%**	**3.9%**

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 23. Structure of sales revenue of the ORLEN Group in the retail segment.



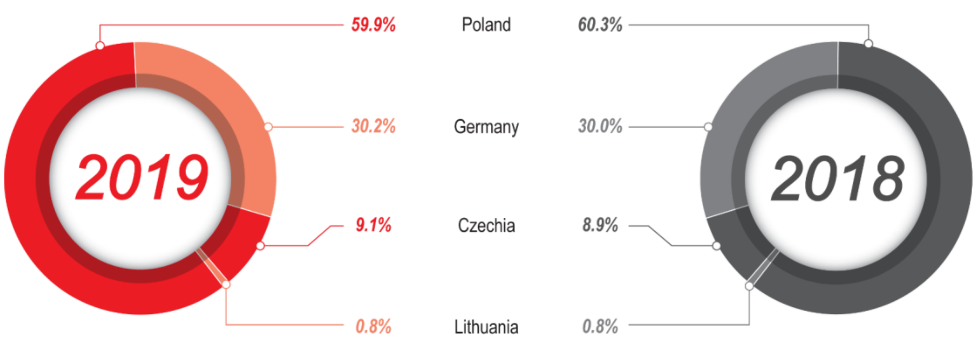
3.2.2.4. Markets

The ORLEN Group's retail home markets include Poland (where the retail business is managed by PKN ORLEN), Germany (with a retail chain operated by ORLEN Deutschland), the Czech Republic and Slovakia (service stations under the Benzina brand, a member of the Unipetrol Group – a subsidiary of the ORLEN Group), and Lithuania (a service station chain managed by AB ORLEN Baltics Retail, a subsidiary).

TABLE 8. Sales volume of the ORLEN Group in the retail segment on domestic markets [thousands tonnes].

Sales	2019	2018	2017	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Poland	5 883.0	5 695.7	5 407.1	187.3	3.3%
Germany	2 960.7	2 837.5	2 593.6	123.2	4.3%
Czech Republic	893.0	837.4	749.3	55.6	6.6%
Lithuania	77.9	75.9	69.4	1.9	2.5%
Total	**9 814.6**	**9 446.5**	**8 819.5**	**368.0**	**3.9%**

DIAGRAM 24. Structure of sales volume of the ORLEN Group in the retail segment on domestic markets.



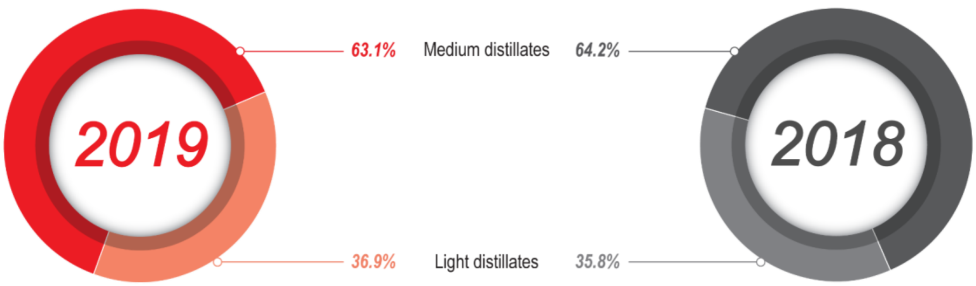
Polish market

In 2019, the volume of fuel sales in the Retail segment grew by 3.3% year on year. A technical upgrade of our stations, expansion of the retail chain to include new outlets with strong sales volume capabilities and a higher number of service stations in which our new store and food & drink service format was deployed translated into an improved average annual flow per CODO station, to 4.8 million litres.

TABLE 9. Sales volume of the ORLEN Group in the retail segment on the Polish market [thousands tonnes].

Sales	2019	2018	2017	change	change %
	2	3	4	5=(2-3)	6=(2-3)/3
Light distillates	2 168.3	2 038.6	1 931.1	129.7	6.4%
Medium distillates	3 714.7	3 657.1	3 476.0	57.6	1.6%
Total	**5 883.0**	**5 695.7**	**5 407.1**	**187.3**	**3.3%**

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



In 2019, the total number of PKN ORLEN stations increased by 13, to 1,800 at the year's end

The number of CODO stations was 1,361 and during 2019 year increased by 19 locations. As a result of an investment programme, 24 new CODO stations were added to our retail chain (including one MSA facility at the S5 expressway). At the same time, five CODO stations were closed down in 2019.

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, including seven in Motorway Service Areas.

During 2019, more than 120 stations underwent technical upgrades. The rebranding of the Bliska chain to ORLEN is nearing completion. In 2019, the number of both CODO and DOFO Bliska stations was reduced from 54 to 38.

As at the end of 2019, PKN ORLEN had 439 DOFO stations, a decrease by six locations year on year. In 2019, 19 new sites were added to PKN ORLEN's DOFO chain, and more than 180 annexes (both short- and long-term ones) were signed to extend the existing agreements. The efficiency of the ORLEN Group's DOFO service stations was also steadily on the rise.

In 2019, PKN ORLEN's fleet sales volume rose 2.4% year on year, reaching their highest level on record (of almost 2.4 billion litres). CRT sales (to transport companies) remained broadly unchanged from the previous year, while other segments recorded higher sales year on year.

Year 2019 also saw strong non-fuel sales, with combined store and food & drink service sales going up by 10% year on year. PKN ORLEN continued its product development projects for proprietary brands (VERVA, Stop.Cafe, „O!"), with eight new items added to the proprietary brand product mix. The 'Loteria z Kubicą' advertising campaign encouraged many customers to buy products sold under our proprietary brands (Verva, O! and Stop.Cafe), appreciating their quality and reasonable prices.

The Stop Cafe 2.0 food & drink service concept was rolled out at a further 186 locations, which brought the number of PKN ORLEN stations featuring this format to 558 (including 63 DOFO stations) at the end of 2019. In total, PKN ORLEN had 1,699 stations offering food services across all formats (Stop Cafe, Stop Cafe Bistro and Stop Cafe 2.0).

In 2019, nine new car wash facilities were built. In a survey carried out by Polski Instytut Badań Jakości, the car wash service offered at ORLEN stations was recognised as the best one on the Polish market.

In 2019, the largest Retail Sales project was to change the existing distribution model, i.e. to replace distributors by a logistics operator and establish direct business relationships with suppliers of store and food & drink service products.

PKN ORLEN also took a range of measures to improve its customer service. Further stations made available the 'Mobile Cashier' service, enabling payments in the driveway when traffic is at its heaviest. Some service stations (including those at MSAs) rolled out the 'Fast Lane' service, which consists in directing fuel customers to selected pumps supported by 'Mobile Cashier'. Most of the stations were covered by the filling queue system, whereby another filling can be made before the previous one is paid for, which reduces customer waiting times. More than 460 service stations offer the possibility of refuelling a car on both sides, regardless of the fuel tank flap location, thanks to appropriately designed infrastructure. The roll-out of ORLEN Mobile, an application dedicated to mobile payments to enable customers to pay at the pump, was continued. Currently, all service stations are prepared to support mobile payments.

By 2019, 39 charging stations had been launched at PKN ORLEN's urban, motorway and trunk road service stations, with further ones undergoing commissioning procedures. They can charge up to two vehicles at a time through 50 kW or 100 kW DC points, and one vehicle with up to 43 kW through the AC point. This essentially means that our charging stations are equipped with connectors supporting all electric vehicles now available on the European market. By 2021, PKN ORLEN intends to have 150 fast EV chargers deployed within its service station chain.

An IT system is now being implemented to support the management of PKN ORLEN's charging station network, Ultimately, its full implementation will enable motorists to make payments through the mobile application.

In 2019, ORLEN continued its partnership with Nextbike Polska, whereby 36 PKN ORLEN service stations launched a bike rental service, with a total of 360 (both standard and electric) bicycles available.

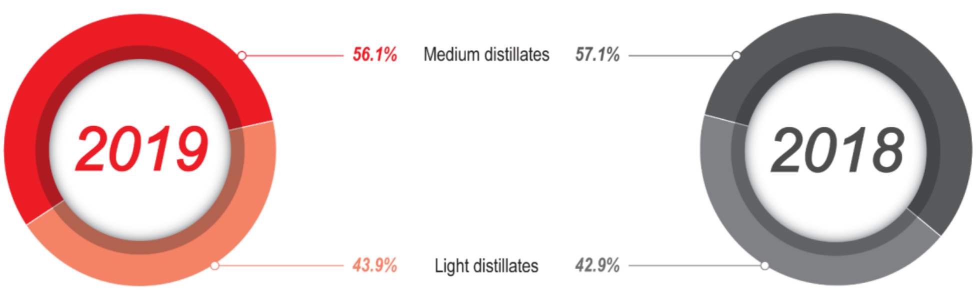
German market

In 2019, the ORLEN Group recorded a 4.3% year-on-year increase in its fuel sales volume on the German market. The average annual flow per station rose to 5.0 million litres.

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

Sales	2019	2018	2017	change	change %
	2	3	4	5=(2-3)	6=(2-3)/3
Light distillates	1 299.5	1 216.2	1 143.1	83.3	6.8%
Medium distillates	1 661.2	1 621.3	1 450.5	39.9	2.5%
Total	**2 960.7**	**2 837.5**	**2 593.6**	**123.2**	**4.3%**

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



The number of service stations managed by ORLEN Deutschland was 585 (568 in the Star economy segment and 16 Famila stations), having expanded by 3 locations year on year. Almost 85% of them were CODO stations, with the remaining outlets owned by private individuals (DODO). In 2019, the chain launched 4 CODO stations and took over 2 DODO outlets. One service station was removed from the Star chain following the contract expiry. The Star connect food & drink service was launched at another 45 locations, as a result of which at the end of 2019 the format was already available at 117 ORLEN Deutschland stations. Taking all formats into account (both Star connect and Star cafe), food & drink service was available at 385 stations within the chain.

In 2019, ORLEN Deutschland recorded a 1.5% improvement in its non-fuel margin. The range of Polish products offered at Star stations was also significantly broadened.

The Star network has the highest number of car washes among all retail chains managed by the ORLEN Group (including 412 portal facilities and 54 self-service facilities). In 2019, 34 portal and three self-service washes were upgraded. Work was also commenced to test solutions designed to improve customer service. At three stations, a mobile application was launched on a pilot basis to support mobile payments for car wash services.

An important step in expanding the retail network in southern Germany was the opening of the first Star station in Bavaria (Munich) in October. As a result, since 2019 the Star network has been present in all German states.

In 2019, ORLEN Deutschland continued its partnership with ADAC, one of Europe's largest automotive clubs with more than a dozen million members in Germany. Star is one of the three German station chains (and the first one in the economy segment) working with ADAC.

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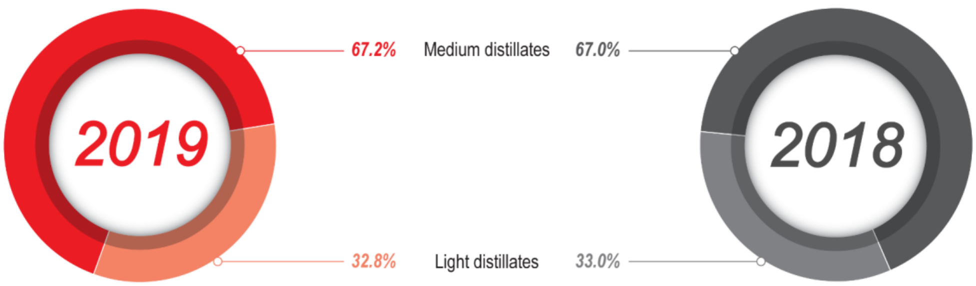
Czech and Slovak markets

The ORLEN Group's fuel sales on the Czech market grew again, by 6.6% year on year, and its average annual sales per station reached 2.6 million litres.

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

Sales	2019	2018	2017	change	change %
	2	3	4	5=(2-3)	6=(2-3)/3
Light distillates	292.5	276.4	250.2	16.1	5.8%
Medium distillates	600.5	561.0	499.0	39.5	7.0%
Total	**893.0**	**837.4**	**749.3**	**55.6**	**6.6%**

DIAGRAM 27. Structure of sales volume of the ORLEN Group in the retail segment on the Czech market.



As at the end of 2019, the ORLEN Group managed a network of 416 stations in the Czech Republic, including 401 CODO and 15 DOFO outlets. Its retail stations on the Czech market operated under the Benzina brand, but there was also one ORLEN-branded station. During the year, seven new service stations were added to the chain.

As at the end of 2019, the number of Benzina-branded stations on the Slovak market was ten, all of them operated under the CODO model.

In 2019, the volume of fleet sales grew on the back of a steady increase in the number of stations, new schemes and relationship models for fleet customers, and development of a pre-paid fleet card scheme for private individuals. The share of fleet sales in the total sales volume topped 37%.

Benzina continued to invest in upgrading and expanding the service station chain in the Czech Republic. The Stop Cafe 2.0 format was rolled out into another 60 outlets, so at the end of 2019 it was already available at 160 stations within the Benzina chain. In total, 306 Benzina stations offered food & drink services across all formats (Stop Cafe, Stop Cafe Bistro and Stop Cafe 2.0). In addition, automatic car washes were upgraded at 27 locations.

Thanks to the extensive investment programme and a host of replacement projects, the Benzina chain delivered improved non-fuel performance, with store sales up 11% and food & drink service sales (up 27% year on year).

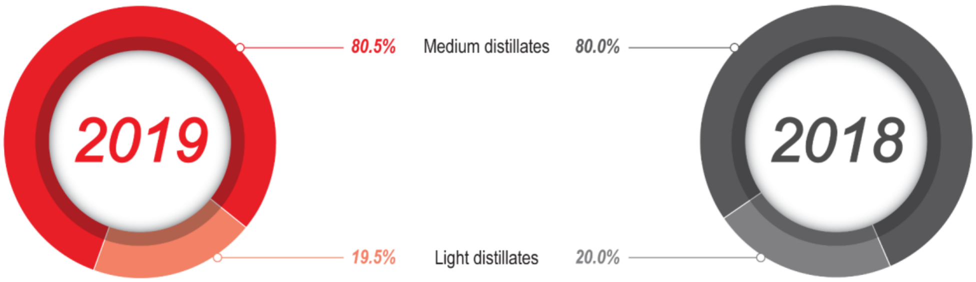
Lithuanian market

In 2019, ORLEN Baltics Retail posted a 2.6% year-on-year increase in fuel sales on the Lithuanian market, as the average annual flow per station rose to 3.9 million litres.

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

Sales	2019	2018	2017	change	change %
	2	3	4	5=(2-3)	6=(2-3)/3
Light distillates	15.2	15.2	15.1	-	-
Medium distillates	62.7	60.8	54.4	1.9	3.1%
Total	**77.9**	**75.9**	**69.4**	**1.9**	**2.6%**

DIAGRAM 28. Structure of sales volume of the ORLEN Group in the retail segment on the Lithuanian market.



The number of stations did not change relative to the previous year, standing at 25 COCO locations at the end of 2019. In 2019, work to construct four new service stations and one 'Demolish and Build' project were commenced. At the same time, upgrade work was completed at eight retail sites. As at the end of 2019, 32% of the network was operated to the Stop Cafe 2.0 standard. Extension of the offering at the upgraded stations translated into a 15% year-on-year increase in non-fuel revenue.

An increase in Lithuanian fleet sales was the main driver of the recorded increase in diesel oil sales. During 2019, the share of fleet sales grew by 1.6 pp, to nearly 48% of total sales.

3.2.2.5. Sources of supply

In 2019, the ORLEN Group's refining assets were the main source of fuel supplies for the Polish, Czech and Lithuanian service station chains. The Group does not operate its own production plants in Germany. Unlike in the case of other local markets, ORLEN Deutschland works with suppliers operating on the German wholesale market, including Deutsche BP AG, Shell Deutschland Oil GmbH, Total Deutschland GmbH, and Esso Deutschland GmbH. A considerable volume of fuels sold by ORLEN Deutschland comes from the Litvínov refinery run by Unipetrol RPA s.r.o., part of the ORLEN Group. In 2019, the volume of supplies from the Czech Republic did not change year on year, meeting almost 20% of ORLEN Deutschland's fuel demand.

3.2.3. Upstream segment

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

"The changing macroeconomic conditions require continuous efforts on our part to optimise the business model, while reviewing our objectives and the pace at which they are being pursued, to make the best of our resources. As part of these efforts, we reallocate and optimise our capital expenditure and seek savings on our operating costs, but on the other hand we focus on the most promising and economically viable assets. Such measures are in line with our existing strategy for the Upstream segment, which is to implement a prudent continuation scenario."

2019

OUTPUT AND PRODUCTION

	units	Canada	Poland
Oil and natural gas reserves (2P)	million boe	186.3	11.0
Output	million boe/year	6.3	0.4
Average production	thousand boe/day	17.2	1.0
Output structure (liquid/gas)	%	49/51	-/100
Drillings (net)[1]	number	16.6	3.0
Licences	number	-	20

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

3.2.3.1. Market trends in the Upstream segment

In the Evolving Transition (ET) scenario developed by BP, demand for primary energy will grow by approximately 30% by 2040. Most of the growth will be generated by Asian economies, mainly India and China. Evolving Transition is one of the key scenarios for long-term development of the global fuel market. It assumes that government policies, technologies and societal preferences will evolve in a manner and speed similar to the recent past.

The growth in demand for primary energy will mainly be generated through renewable energy sources (approximately 50% of the increase) and natural gas, consumption of the latter growing faster than that of crude oil or coal. In total, renewable energy and gas sources will account for 85% of the increase in primary energy consumption, and gas will surpass coal as the second most important primary energy source by 2030. Crude oil consumption will grow at a yearly rate of 0.3%, before gradually plateauing in the 2030's.

In the ET scenario, the global economy will grow at 3.25% p.a., while the world's population will expand by 1.7 billion, to almost 9.2 billion, by 2040. 80% of the economic growth will be the result of increased productivity. Total primary energy demand will be offset by lower energy intensity of the economies, rising by 1.2% p.a. (down from 2% in 2000–2020).

China will remain the largest energy market until 2040, but by mid-2020s its transition towards a more sustainable economic model will cause it to be overtaken by India in terms of the growth in primary energy demand, the latter country accounting for more than 25% of the global increase in primary energy by 2040. While both China's and India's economies depend largely on coal, China will have significantly reduced its use as a primary energy source from 60% in 2017 to 35% in 2040.

In the ET scenario, both the United States and Europe have a diversified energy mix and follow a similar path, reducing the shares of coal and crude oil in favour of renewables and, in the case of the United States, of natural gas. The United States will generate the largest increase in primary energy production until the mid-2020s, driven by increased production of crude oil, natural gas and renewable energy. Starting from the second half of the 2020s, energy production in the United States will slow down due to a reversal of the trend in unconventional tight oil production. Russia will remain the world's largest exporter of oil and gas, despite a decline in its share of primary energy production globally.

In terms of primary energy demand in individual sectors, demand growth from transport will slow sharply relative to the past as gains in vehicle efficiency accelerate (with strong demand for transport services). Energy consumed by buildings will grow faster compared with industry and transport, reaching 30% of total primary energy consumption in 2040. In the ET scenario, the share of crude oil in transport will fall from 94% to 85% in 2040, while natural gas, electricity and biofuels will each account for 5%.
By 2040, about a half of primary energy will be absorbed by power generation, which will use 75% of the increase in primary energy. Almost the entire growth will be generated by developing countries, led by India and China. By 2040, the share of gas in power generation will level out at some 20%, while renewable energy will overtake coal to become the leading source of power, ultimately accounting for 30% of total power generation.

Crude oil, despite its lower share in the mix, will continue to play a significant role in the energy sector. Growing demand from developing economies will be met by increased oil supply, mainly from the US and OPEC. In the ET scenario, demand for liquid hydrocarbons will peak at 108 million boe/d in the second half of the 2030's. Transport will remain their largest consumer, absorbing approximately 55% of the supply, but it will cease to drive demand with higher gains in energy efficiency. The single-largest source of growth in liquid hydrocarbon consumption will be the non-combusted use, including as petrochemical feedstock.

Natural gas, consumption of which will grow at an annual rate of 1.7%, will be the only source alongside renewables with an increasing share in the mix. The increase in demand for natural gas will be widespread across almost every country and region of the world, and will be generated in practically equal parts by the industry and power generation. Despite the strongest growth rate, transport will record a low volume of gas consumption. Key producers of natural gas are the United States and the Middle East, in particular Qatar and Iran. In aggregate, the United States and Middle East will account for nearly 50% of the increase in natural gas production by 2040. Expansion of LNG supplies, which will satisfy more than 15% of total gas demand in 2040, will entail an increasingly important role of global gas trading. The main LNG export centres will be the United States and Qatar, which jointly will account for 40% of the total volume of LNG exports by 2040.

The global activity of oil and gas producers, measured by the number of drilling rigs in operation, was lower at the beginning of 2020 than a year earlier due to a decline in the number of drilling rigs in the US. Canada and the other regions saw an increase in drilling activities.

In the United States, a more rigorous approach to upstream capex is evident in the face of price volatility and investor sentiment. The International Energy Agency (IEA) forecasts moderate growth in oil production in 2020 and a positive impact of the IMO regulations on light crude oil demand in the United States. In Canada, the extended applicability of the oil output caps policy in 2020 should have a positive effect on the differential to the US light WTI benchmark. Low gas production volumes in Canada in 2019 and the cold winter pushed up gas prices at the Alberta AECO hub in Q4 2019, fast-tracking drilling plans for 2020.

3.2.3.2. Position and competitive environment

In line with its strategy, the ORLEN Group intends to continue its exploration and production efforts to increase output and secure wider access to its own oil and gas resources under a prudent continuation scenario, which enables flexible response and adaptation of upstream capex to price changes on the hydrocarbon market.

The international team of experts from Poland and Canada has the necessary competence and experience to carry out PKN ORLEN's mission and vision of exploration for and production of crude oil and natural gas through efficient management of a diversified portfolio of assets.

At the end of 2019, the ORLEN Group held on its own or with a partner (PGNiG) 20 exploration and appraisal licences in Poland, covering a total area of almost 13,500 km^2 and spread over six provinces, with 2P reserves of 11.0 million boe. The ORLEN Group holds 100% interests in nine licences, 49% interests in nine licences and 49% interests in parts of two licences within a separate area covered by the Sieraków Joint Operations Agreement.

In Alberta, Canada, the ORLEN Group is a recognised operator and holds exploration and production assets covering a total area of 274.4 thousand acres (1,100 km^2), with total 2P reserves of 186.3 million boe.

3.2.3.3. Operations in Poland

The Group's operations in Poland 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**, 3D seismic data acquired in 2018 was processed and interpreted. In addition, geophysical profiles were digitised, and data collected from old boreholes within the area was interpreted to determine its lithological and reservoir characteristics.

Under the **Miocene Project**, 3D seismic data was acquired, processed and interpreted to map further prospects within the region. Two exploration wells were drilled on the Bystrowice deposit, and the well drilled in 2018 which had discovered the deposit was completed to start production. Conceptual, design and documentation work was also carried out with a view to further drilling and development of the Bystrowice field. The general contractor was selected to execute Stage 1 of the Bystrowice field development.
In 2020, work will be continued to develop the field and further analyses will be carried out prior to drilling another well within the area.

Under the **Bieszczady Project**, implemented together with a partner (PGNiG S.A.), the drilling of a well, commenced in late 2018/early 2019, was finished. In addition, the processing and interpretation of 2D seismic data acquired in the previous year were completed. As part of further exploration work, another well was spudded within the area.

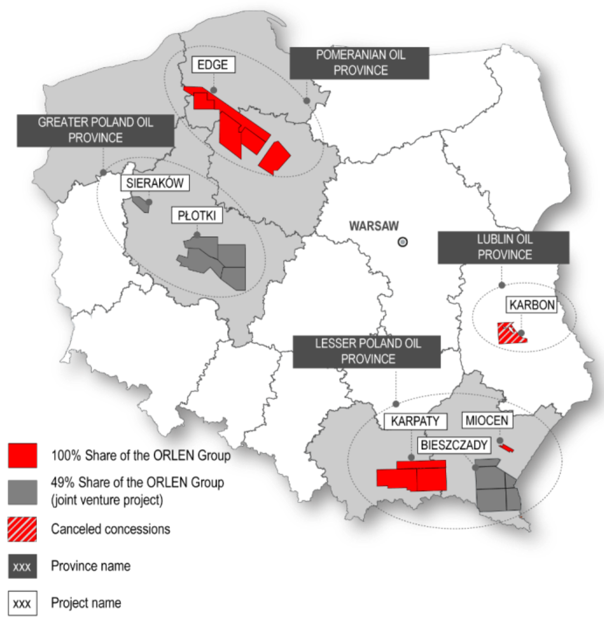
In the **Poznań Oil Province** work was being performed on two projects implemented under a Joint Operations Agreement with PGNiG S.A. Under the **Sieraków Project**, work was under way to complete the relevant legal formalities and design a horizontal well as part of the field development. Conceptual work was also being continued to develop the crude oil field.

Under the **Płotki Project**, construction and assembly work was being carried out to develop the Miłosław-5H well (on the Miłosław field), with production from the well launched in early August. Planning and preparatory work was also going on to develop the Chwalęcin discovery made in 2018. 3D seismic was acquired, processed and interpreted; and an old 3D dataset was reprocessed and interpreted. In the fourth quarter, another exploration well was spudded within the area, and 3D seismic data was acquired over its south-western part.

In the **Gdańsk Oil Province**, work was being carried out within five licence areas under the **Edge Project**. In 2019, 3D seismic data acquired in the previous year was processed and interpreted. Also, more 3D seismic was acquired over the north-western part of the area. A feasibility study was completed for development of the Bajerze and Tuchola natural gas fields, based on a power generation project. Preparatory work was being carried out prior to development of the fields and a contractor was selected to prepare design and legal documentation.

In the course of the operations in **the Lublin Oil Province** under **the Karbon Project**, based on analyses made with a view to optimising the project portfolio, a decision was made to relinquish the Lublin licence – the last one held under the Karbon Project.

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 is engaged in upstream operations in Canada through its subsidiary – ORLEN Upstream Canada Ltd. ("OUC"). Its 2019 capex programme focused primarily on the key areas of Ferrier and Kakwa in the Province of Alberta.

Within **the Ferrier** area, drilling of 12 wells (9.6 net) began. Additionally, hydraulic fracturing was performed on 12 wells (9.2 net), which were subsequently brought on stream. By the end of the year, two of the new wells were ranked as the top producers on the Cardium formation in the Province of Alberta.

Within the **Kakwa** area, drilling of seven wells (6.0 net) began.In addition, hydraulic fracturing was performed on eight wells (6.8 net), which were later brought on stream. The Kakwa area was recognised in Scotiabank's reputable ranking as the best oil basin in Canada and the second best in North America in terms of PIR (the profit to investment ratio).

Within the **Lochend** area, drilling of two wells (1.0 net) commenced, followed by fracturing operations.

Production and transmission infrastructure was being constructed and upgraded within the key areas of operations to enable cost synergies and improve the project economics.

In 2019, the average output was 17,200 boe/d, of which 49% were liquid hydrocarbons (crude oil and NGL, including condensate).

Good reservoir properties of the assets and their location in a well-surveyed area minimise the operational risks of the projects. The Canadian OFS (oilfield services) market offers good access to comprehensive drilling and well services. The stable tax regime and measures aimed at reducing the overall tax burden combined with a friendly regulatory environment support efficient operations. On the other hand though, the oversupplied local market is facing infrastructure constraints, which at times adversely affect the Canadian hydrocarbon prices. Gradual elimination of pipeline capacity constraints and step-by-step expansion into new sales markets are expected within the next few years.

Seeking to achieve operational synergies and focus on the most profitable areas, ORLEN Upstream Canada is keeping a watchful eye on the local market. On January 3rd 2019, it closed the sale of its Pouce Coupe asset. The area producing mainly natural gas, being of secondary importance to ORLEN Upstream Canada, was sold with the proceeds used to partly finance the 2019 capex on much more profitable areas. Moreover, in December 2019, OUC successfully closed an asset exchange transaction within its key Ferrier area, with a view to strategic asset consolidation and addition of new drilling sites.

ORLEN Upstream Canada also holds minor exploration and production assets in New Brunswick, and a 2.3% interest in Pieridae Energy – an integrated company developing an LNG export terminal in Nova Scotia. To date, the process of obtaining administrative, legal, environmental and construction permits has been completed. In 2019, Pieridae Energy acquired upstream and midstream assets which will secure future production and transmission of natural gas volumes from Western Canada, necessary for the launch of the first terminal module. Should the final investment decision be made, the operational start of the project is currently expected in late 2024 or early 2025.

SCHEME 8. Assets in Canada.

Source: Own preparation.

3.2.3.5. Sales volume of the Upstream segment

TABLE 13. The ORLEN Group sales volume in the Upstream segment [thousand tonnes].

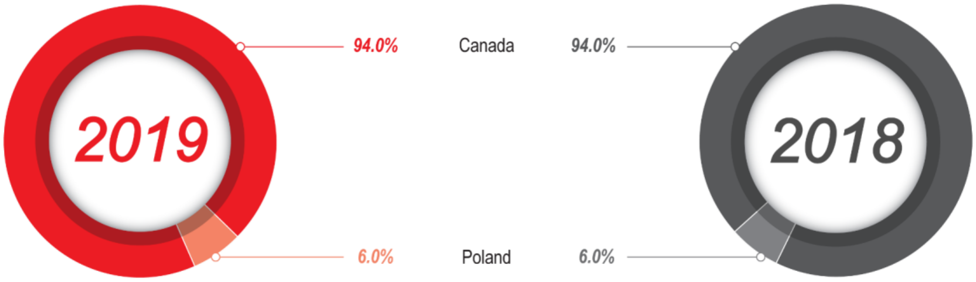
Sales	2019		2018		2017		change %	
	Value	Volume	Value	Volume	Value	Volume		
1	2	3	4	5	6	7	8=(2-4)/4	9=(3-5)/5
Crude oil	126	96	95	77	62	52	33%	25%
Natural gas	163	441	168	456	196	439	(3%)	(3%)
Other[1)]	319	199	342	195	257	147	(7%)	2%
Total	**608**	**736**	**605**	**728**	**515**	**638**	**0%**	**1%**

1) Other: in volume terms consists mainly of NGL (Natural Gas Liquids), in value terms includes sale of NGL 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 2019, the combined volume of sales on the two markets was 736,000 tonnes, having gone up 1% year on year, mainly on higher hydrocarbon production in Canada.

DIAGRAM 29. Sales volume structure in the Upstream segment of the ORLEN Group.



3.3. RISK MANAGEMENT

3.3.1. Enterprise Risk Management System

In 2019, 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 and reducing probability of occurrence.

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 information identification about identified risks and support effective management 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.

Risks are assessed regularly by individual business areas of PKN ORLEN S.A. and the ORLEN Group as part of their self-assessment and risk controls testing. The key objective is to ensure that risk estimation is up to date, and that the risk controls are validated for adequacy and effectiveness. Process and risk owners and in charge of the assessment, based on their positions and remits.

In the risk asessment, the materiality of each risk is determined under three scenarios:

- where there are no risk-specific controls in place (gross risk assessment);
- where the existing risk-specific controls are in place (net risk assessment). The net risk assessment requires testing relevant risk mitigating controls, in line with the guidelines

adopted by the Company as part of the ERM Procedure, prepared in accordance with the ERM Policy adopted by the Company's Management Board;

- where the risk is at a desired (acceptable) level – target risk assessment.

Once the risk assessment and risk controls testing processes are completed, the Company's Management Board and Supervisory Board receive a report highlighting the material risks.

Risks at PKN ORLEN S.A. and other ORLEN Group companies are defined based on a common model, and further detailed at the level of individual business processes or strategic objectives.

In 2019, as part of an annual risk self-assessment process and risk controls tests at PKN ORLEN, **552** risks were assessed based on tests of **999** control mechanisms in **176** business processes. The ORLEN Group companies evaluated **633** risks and **1 807** control mechanisms in **169** processes.

In 2019, the ERM system covered the following entities: PKN ORLEN S.A., Anwil S.A., Grupa ORLEN Lietuva, Grupa Unipetrol, ORLEN Deutschland GmbH, ORLEN Paliwa Sp. z o. o. and ORLEN Centrum Usług Korporacyjnych Sp. z o. o.

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 14. 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. Providing appropriate mechanisms for continuous monitoring of threat and risk assessment 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 • absence of including cost of additional work in project • unplanned costs arising during the implementation of the project	Current monitoring of the contractor's activities and potential delays in project realization. Systematic cost verification vs. planned budget.
Schedule overrun	• inappropriate assumptions concerning the project completion time • underestimating the deadlines for completing the work carried out under the project	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 • lack of including all project work • extending the scope of the project with additional works	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. Verification of planned and implemented works included in the scope of the project.

Division of competences	• inappropriate division of competences between the organisational/substantive units involved in the project • unavailability of key decision makers	Preparation and implementation of methodology concerning competency division of project team members in order to avoid conflict of interests. Appropriate allocation of human resources during project preparation and implementation. 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/or of a quality not corresponding to the requirements • planning supplies of crude oil in such a way as to meet the quality requirements	Current monitoring of the process of supplies carried out by land and by sea. Using dedicated analytical and statistical tools, analysing industry and news portals. Systematic verification of the market of selected crude oil types with regard to their availability and purchase possibility. Verification and 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). Verification of the market situation in terms of the availability of needed services, raw materials and the high of prices offered.
	• 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. Control of the frequency and quality of Reports from Production Implementation and their flow to the required organizational units.
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. Verification of the preparation and approval of Maintenance and Technology Shutdowns Plans.
	• ineffective production balancing related with the lack of supporting methods and tools or the inability to obtain data	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. Systematic inspections checking verification process of production balance as well as level of balance differences.
	• 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. Checking compliance of the business justification of the project implementation with applicable regulations.
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. Supervision of air measurements in accordance with legal requirements.
	• failure to comply with the requirements to physically maintain an appropriate level of mandatory stocks	Ongoing monitoring of mandatory stock levels. Systematic preparation of reports on the amount of warehouse stocks and forwarding to all interested units.
	• failure of the logistics infrastructure affecting supply of products continuity or risk of their loss	Periodic inspections of the condition of the logistic infrastructure. Ongoing monitoring of product stocks, planning of complementary shipments. Verification of the correctness of functioning of the secondary logistic scheduling process.
Retail		
	• inefficient process of contract conclusion and price	Pricing policy setting forth the rules of collaboration with

	negotiations	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. Systematic verification of the correctness of negotiated price conditions.
	• 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. Systematic inspections of fuel stations and terminals.
	• 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 and pylon price level on PKN ORLEN S.A. fuel stations.
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. Ongoing recording of long-term contract negotiations.
	• the contractor's failure to meet his financial obligations	Credit decisions based on the financial analysis model. Regular monitoring of overdue receivables and recovery run on the basis of Policy and Instructions for the recovery of collateral for commercial transactions.
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. Systematic verification of the level of permissions.

	• 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 13 of the Consolidated Financial Statements for 2019.
2) The principal legislative acts regulating the oil sector include:

- ***Biofuels*** *– in Poland, the process of achieving the National Indicative Target in 2019 is governed by the Act Amending the Act on Biofuel Components and Liquid Biofuels and Certain Other Acts of November 24th 2017, which entered into force on January 1st 2018 – the purpose of the amendment was to facilitate the achievement of the National Indicative Target (NIT) by fuel companies and to modify the structure of its achievement. In 2019, the NIT baseline value was 8.0%, and starting from 2020 – 8.5%. Also applicable is the Act Amending the Act on the Fuel Quality Monitoring and Control System and Certain Other Acts of May 27th 2011 (as amended), where under entities which can document the use of at least 70% of biofuel components produced in compliance with the requirements set out in the Act are eligible to reduce their NIT. In 2019, the reduction coefficient was 0.82, while the NIT was 5.576% (based on the energy value, after taking into account the reduction coefficient and a 15% 'buy-out' price). The National Reduction Target (NRT) was also introduced − an obligation to reduce GHG emissions relative to 2010 by 6% by the end of 2020. On July 19th 2019, the most recent amendment to the Biofuels Act was enacted. In 2020, the NIT was set at 5.576 (8.5% baseline level x 0.82 reduction coefficient x 0.8 'buy-out' price). Moreover, there are no provisions in the new Act that would limit the possibility of achieving the NIT through wholesale trade in B100 biofuels. The NIT baseline levels for 2021-2024 have been set at: 8.7%, 8.8%, 8.9%, 9.1%, respectively. The reduction mechanism (reduction coefficient of 0.82) and the buy-out price mechanism (applicable when the NIT is met in 80% or more) were extended for the years 2020-2022, and the quarterly mandatory blending cycle was changed to an annual one. In addition, the Act contains a number of provisions not directly related to meeting the NIT, i.e. the obligation to mark fuel pumps and nozzles so as to clearly identify the type of liquid fuel distributed, as well as changes to biofuel reporting and to regulations applicable to the Low Emission Transport Fund.*
  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 is accounted for on a quarterly basis, and GHG emissions are to be reduced by 6% by the end of 2020. Work is currently under way to introduce E10 fuel, which may be brought to the market in 2020. E98 gasoline will contain a higher amount of ETBE than E95, and both types will become E10 fuel.*
  - *Lithuania: mandatory blending of biocomponents into E95 gasoline (blending level of 5% until 2019) and into diesel oil, with the exception of arctic diesel (blending level of 7%). Starting from January 2020, E95 gasoline is subject to mandatory blending at a level of 10% in Lithuania and Latvia. In Lithuania, A1 and A2 arctic diesel oils are exempt from blending obligations.*
- ***Emergency stocks*** *– producers and traders must pay a 'stocks charge' for gradual reduction in the amount of physical stocks they are required to hold. Poland: fulfilment of the physical stocks target – from December 31st 2017: 53 days, the stocks charge 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 at a level of 90 days' net imports of crude oil and are financed from the state budget. Lithuania: maintaining stocks equivalent to the higher of 90 days' average daily net imports or 61 days' average daily domestic consumption. The amount equal to at least 30 days' average daily domestic consumption is accumulated and maintained by the state agency as earmarked stocks, with the balance held by businesses.*
- ***Reduced electricity costs*** *– a notification procedure is under way relating to a capacity surcharge reduction for energy-intensive industrial users (capacity surcharge reduction). If approved by the European Commission, the solution will make it possible to allocate the capacity surcharge to various end user groups, thus reducing the capacity market costs at the ORLEN Group. The Act on the Promotion of Electricity from High-Efficiency Cogeneration Plants provides for possible reductions in CHP surcharges for energy-intensive industries. A reduced CHP surcharge will apply to energy-intensive industrial users whose energy intensity is calculated as the quantity of grid electricity consumed in a given settlement period, taking into account the electricity produced by this entity in its own cogeneration sources. The quality surcharge is the tariff rate of the Transmission System Operator (TSO) which is passed on to end users through its distribution tariff. Ensuring continued application of reductions with respect to the RES surcharge and excise duty for energy-intensive industrial users.*
- ***Power generation support schemes.***
  - *Capacity market – securing the interests of industrial power plants in the capacity market.*
  - *The Act on the Promotion of Electricity from High-Efficiency Cogeneration Plants eliminates industrial cogeneration units from the support scheme. The restrictions 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 a public heating network. A new solution provides for the introduction of a unit CO_2 emissions ratio of less than or equal to 450 kg/MWh of electricity output, which will exclude from the support scheme all generation units other than gas-fired ones. The certificate-based support scheme is to be replaced by a scheme involving guaranteed bonuses for existing generation units and an auction system for new electricity generators.*
  - *Offshore Wind Power Generation – a draft State Energy Policy outlines the potential for developing a 10 GW Wind Farm by* 2040. *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 up to decommissioning, as well as a support scheme guaranteeing the project's economic viability throughout its lifecycle. 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 *current RES support scheme under the Act on Renewable Energy Sources of February 20th 2015 does not provide adequate support for Small Hydropower Plant (SHP) projects, mainly as a consequence of structural constraints related to the organisation of competitive auctions and the overall situation of the Polish RES sector (including SHP projects*).
- ***CO_2 emissions*** *– following a revision of Directive 2003/87/EC of the European Parliament and of the Council of October 13th 2003 establishing a scheme for greenhouse gas emission allowance trading, work is under way on EU ETS implementing measures for the next trading period (phase 4). 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 with the 1990 levels and to meet the obligations under the Paris Agreement. In addition, pursuant to Commission Delegated Decision (EU) 2019/708 of February 15th 2019 concerning the determination of sectors and subsectors deemed at risk of carbon leakage for the period 2021-2030, ORLEN Group companies were included in the carbon leakage list, and thus became eligible to receive free emission allowances up to the benchmark values throughout the period 2021-2030. Following completion of the EU ETS reform, the price of emission allowances went sharply up, to reach the average level of EUR 25/UEA in 2019, which is reflected in the growing electricity prices.*
- ***Regulations on the liquid fuels market and combating informal fuel trade:***
  - *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 entities applying for energy licences and sets down rules governing intra-community acquisition of goods (fuels) – the so called 'VAT quick fixes'. 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, supervision powers, etc.*
  - *The Act Amending the Value Added Tax Act and Certain Other Acts of July 4th 2019 (amendments to the fuel package) modifies the definition of liquid fuel, introduces procedures for amending energy licences, and extends the catalogue of goods (fuels) eligible for 'VAT quick fixes' in intra-community acquisition transitions (when imported to Poland).*
- ***Monitoring of the Carriage of Goods by Road and Rail*** *– the Act on the Monitoring System for the Carriage of Goods by Road and Rail and on Fuel Oil Trade of March 9th 2017. The purpose of the Act is to further curtail the informal fuel trade in Poland, and the legislation supplements solutions introduced as part of the fuel package and the energy package. It imposes an obligation to register road and rail transport of goods considered sensitive and to establish a relevant supervision system. Also, new provisions governing the fuel package and the monitoring of LPG transport came into force as from September 1st 2019 and December 1st 2019, respectively, providing for relevant transition periods. Apart from obligations to monitor the carriage of fuel oils and LPG, there are also amendments applicable to the transactions themselves and to provisions of the Excise Duty Act relating to fuel oil trade.*
- ***Emission charge*** *− an emission charge is to be paid on motor fuels introduced to the Polish market. The obligation to pay the emission charge arises on the date of excise duty liability. An emission charge is calculated based on the quantity of motor fuels on which excise duty is payable. The rate for both motor gasolines and diesel oils is PLN 80 per 1,000 litres. The amount of an 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. The emission charge regulations came into force on January 1st 2019 and will apply in the coming years.*
- ***Retail sales tax*** *– the tax is levied exclusively on retail sales 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 to be understood as a natural person (entered in the Central Registration and Information on Business – 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). In November 2019, the Polish Council of Ministers extended the suspension of the Act of December 31st 2019 until July 1st 2020, when the General Court of the European Union is expected to issue a judgment concerning the appeal lodged by the European Commission.

- ***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 hold emergency gas stocks. The Act abolished the obligatory approval of gas tariffs for businesses by the President of URE (Polish Energy Regulation Authority) as of October 1st 2017 and imposed the obligation to reserve additional capacity on gas interconnectors (which cannot be used for commercial purposes) for the purpose of maintaining stocks abroad, which increases the cost of fulfilling the 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, regulating retail trading. In 2019, retail trading was allowed on the last Sunday of each month and on three Sundays before public holidays (15 trading Sundays and 37 non-trading Sundays). Starting from January 1st 2020, retail trading will only be allowed on three Sundays before public holidays and on four additional Sundays throughout the year (7 trading Sundays and 45 non-trading Sundays). Pursuant to the Act, service stations are exempted from the trading ban.*
- ***Taxation of upstream activities in Poland*** *– tax on production of certain minerals, payable from December 2019, calculated individually for each well, at a rate of 1.5%–6% of 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 fixed assets, CIT at the rate of 19%.*
- ***Taxation of upstream activities in Canada****: royalties – payable on wells spudded 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 25%.*

3.4. SIGNIFICANT AGREEMENTS, TRANSACTIONS AND PROCEEDINGS

3.4.1. Significant agreements

Material agreements announced in current reports.

Year 2019

QUARTER 1	
Agreement regarding building of "Research and Development Centre in Płock"	PKN ORLEN announced that on 24 April 2019 the Company's Management Board decided to invest in a "Research and Development Centre in Płock" ("RDC") and the Company's Supervisory Board gave consent for PKN ORLEN to assume liabilities under the agreement on the building of the RDC, which was followed by the conclusion of an agreement with Budimex S.A. for its construction. The maximum value of the agreement will amount to approximately PLN 167 million and the total cost of the investment will amount to approximately PLN 184 million. The finalization of the investment is planned by the end of 2020. The RDC in Płock is a necessary part of the PKN ORLEN 2018 Program of the Petrochemical Segment Development ("Program") and completion of the research infrastructure of the ORLEN Group. It will function as a facility to carry out research and to support the other projects included in the Program as well as the further extension of the value chain of petrochemical production announced as part of the PKN ORLEN Strategy. It will also be a place to undertake research in the other areas of the ORLEN Group's activity. Regulatory announcement no. 8/2019.
Agreement for building a nitric acid and neutralization installation by ANWIL S.A.	PKN ORLEN announced that on 24 April 2019 ANWIL S.A. signed an agreement with Thyssenkrupp Industrial Solutions AG for the design, deliveries and building "in turn key" formula of a nitric acid and neutralization installation in ANWIL S.A. in Wloclawek. The building of a nitric acid and neutralization installation is a key stage in the realization of investment into the extension of the fertilizer production capacities of ANWIL S.A. The agreement signed with Thyssenkrupp Industrial Solutions AG is the first of three most important contracts to be concluded in relation to the extension of the fertilizer production capacities of ANWIL S.A. The project assumes an annual increase of fertilizers production capacities of 495 thousand tons, i.e. to the level of 1,461 thousand tons annually. The estimated total cost of the investment amounts to approximately PLN 1.3 billion. The finalization of the investment is planned by the close of the first half of 2022. After realization of the project it is estimated that the operating profit increased by depreciation and amortization (EBITDA) of ANWIL S.A. may increase by approximately EUR 57 million annually. Regulatory announcement no. 9/2019.
Agreement for building a granulation unit by ANWIL S.A.	PKN ORLEN announced that on 28 June 2019 ANWIL S.A. signed an agreement with Tecnimont S.p.A. for design, deliveries and building "in turn key" formula a granulation unit in ANWIL S.A. in Wloclawek ("Agreement"). The agreement signed today with Tecnimont S.p.A. is the second of the three most important contracts to be concluded within the frames of the extension of fertilizers production capacities in ANWIL S.A. The project assumes increase of fertilizers production capacities by 495 thousand tons annually, ie. to the level of 1,461 thousand tons annually. Estimated total cost of the investment amounts to approximately PLN 1.3 billion. The finalization of the investment is planned by the half of 2022. After realization of the project it is estimated that the operating profit EBITDA of ANWIL S.A. may increase by approximately EUR 57 million annually. PKN ORLEN holds 100% of shares in the share capital in Anwil S.A. Regulatory announcement no. 30/2019.

QUARTER 3	
ANWIL S.A. concluded an agreement for building an OSBL infrastructure within the frames of the extension of fertilizers production capacities	PKN ORLEN announced that on 12 September 2019 ANWIL S.A. signed an agreement with PROCHEM S.A. for building an OSBL infrastructure (Outside Battery Limits – supporting infrastructure) in ANWIL S.A. in Wloclawek ("Agreement"). The Agreement signed with PROCHEM S.A. is the last of three most important contracts concluded within the frames of the extension of fertilizers production capacities in ANWIL S.A. The project assumes increase of fertilizers production capacities by 495 thousand tons yearly, ie. to the level of 1,461 thousand tons yearly. Estimated total cost of the investment amounts to approximately PLN 1.3 billion. The finalization of the investment is planned by the half of 2022. After realization of the project it is estimated that the operating profit EBITDA of ANWIL S.A. may increase by approximately EUR 57 million yearly. Regulatory announcement no. 36/2019.

Year 2020

QUARTER 1

Signing an agreement for realization of project of building Visbreaking Installation at production plant in Plock	On 5 February 2020 the Management Board of PKN ORLEN, as a part of investment project called "Visbreaking Installation at production plant in Plock", signed an agreement with consortium of companies: KTI Poland S.A. and IDS-BUD S.A. for design, deliveries and building "in turn key" formula of the Visbreaking Basic Installation for a total amount of ca. PLN 750 million. The project's implementation aims to improve crude oil production efficiency by increasing the yield of high-margin products as a result of in-depth conversion of vacuum residue from the Crude Distillation Unit. The cost of investment will amount to ca. PLN 1 billion. The finalization of the investment is planned by the end of 2022. After realization of the project it is estimated that the operating profit EBITDA of PKN ORLEN may increase in the range of PLN 340 to 415 million yearly. Regulatory announcements no. 7/2020.

Contract with the auditor of financial statements

In the period covered by the foregoing consolidated financial statements the entity authorized to conduct audit of the Company's financial statements was Deloitte Audyt spółka z ograniczoną odpowiedzialnością spółka komandytowa. Deloitte Audyt spółka z ograniczoną odpowiedzialnością spółka komandytowa beginning from the 1st quarter of 2017 conduct the interim reviews and audit of separate financial statements of PKN ORLEN and consolidated financial statements of the Group. Deloitte Audyt spółka z ograniczoną odpowiedzialnością spółka komandytowa was selected to conduct reviews of interim financial statements and audit separate financial statements of PKN ORLEN and consolidated financial statements of the Group for the years 2019-2021 by resolution of the Supervisory Board No. 2071/18 of 20 December 2018 as amended by resolution No. 2103 / 19 of 25 January 2019.
Further information concerning the agreement mentioned above are described in section 14.7. of the Consolidated Financial Statements for the year 2019.

3.4.2. Other transactions and proceedings

Contingent assets

On 5 March 2020 PERN S.A. informed PKN ORLEN that due to the stock count of crude oil delivered by the tank farm in Adamów, carried out by PERN S.A. as a pipeline system operator, the Company's operating stock of crude oil REBCO-type (Russian Export Blend Crude Oil) is lower by 89,653 net metric tons due to differences in the methodology for calculating the quantity of this stock. Consequently, according to PERN S.A. as at 31 December 2019, the Company's operating stock of REBCO-type crude oil amounted to 535,812 net metric tons.
PKN ORLEN does not agree with PERN S.A. position, because in the opinion of PKN ORLEN it remains without merit, unproven and inconsistent with the binding agreements between PKN ORLEN and PERN S.A., and the current methodology used for calculating the quantity of REBCO-type crude oil sent by PERN S.A. to PKN ORLEN is correct and has never been questioned before. PKN ORLEN is currently analysing the possibilities of taking appropriate legal steps related to the information provided by PERN S.A. and reserves the right to take all actions aimed at protecting the legitimate interests of PKN ORLEN, including pursuing claims related to infromation shared by PERN S.A. on the quantity of PKN ORLEN's operating stock of REBCO-type crude oil. Regardless of this, being the most cautious, PKN ORLEN adjusted the stock by the amount of PLN (156) million in correspondence with other operating expenses. In the opinion of PKN ORLEN, the amount of the allowance on stock is also a contingent asset of PKN ORLEN.

Contingent liabilities

Information concerning significant proceedings in front of court, body appropriate for arbitration proceedings or in front of administration bodies 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 300 million, translated using the exchange rate as at 31 December 2019 (representing CZK 1,789 million). Unipetrol RPA s.r.o. is one of eight defendants which were jointly and severally claimed. At the request of the I.P.-95 s.r.o proceeding was 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. On 20 March 2019 I.P. - 95 s.r.o. filed 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 84 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 have been held (last on 28 September 2018), during which witnesses submitted by the parties were heard by the court . On 19 December 2018, a hearing took place, during which the Court heard the parties' position in the scope of the grounds for any repeal of the freezing order. By a decision of 2 January 2019 the Regional Court set aside the order granting security for claims. Warter Fuels S.A. submitted a complaint against this decision on 5 February 2019. PKN ORLEN submitted a response to the complaint. The matter of complaint consideration is at the stage of secondary proceedings, i.e. before the Court of Appeal in Łódź. The freezing order has been legally repealed.
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 has not been considered yet. The court is currently looking for an expert or institute to issue an opinion. 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 319 million, translated using the exchange rate as at 31 December 2019 (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. Polocktransneft Druzhba appealed against the judgment dismissing the claim. ORLEN Lietuva responded to the appeal. The hearing took place on 6 May 2019. The witness, the former chief representative of the Druzhba Polocktransneft in Lithuania, was heard. On 4 September 2019, another hearing was held, at which the Court decided several procedural issues, including admitted evidence from expert opinions appointed by the parties, refused to attach to the case documents from other criminal cases requested by Polocktransneft Druzhba. The court appealed the plaintiff and the defendant to submit documents and information to the case file by 22 October 2019. On 6 November 2019, on 22 January 2020 and on 7 February 2020 subsequent hearings were held at which documentary evidence was submitted and witness was questioned. On 9 March 2020 the Court of Appeal dismissed the plaintiff's appeal. Polocktransneft Druzbha has the right to lodge a cassation appeal within 3 months from the date of delivery of the judgment of the Court of Appeal. In the opinion of ORLEN Lietuva, the above claim is without merit.
According to ORLEN Lietuva, the above claim is without merit.

- **UAB Baltpool claim against ORLEN Lietuva**

In May 2019, UAB Baltpool (an entity administering the funds and responsible for collecting fees for so-called Public Service Obligation in Lithuania) filed a claim against ORLEN Lietuva for payment of system fees (so–called PSO fees) related to electricity consumption for the period from February 2013 to March 2019 (excluding May 2017). The claim relates to unpaid by ORLEN Lietuva system fees on the amount of electricity generated and consumed by ORLEN Lietuva for own needs. ORLEN Lietuva believes, that such system fees (self-producer fees) are not due. The value of the dispute together with interest was included in the books of ORLEN Lietuva and amounted to PLN 64.8 million, translated using the exchange rate as at 31 December 2019 (representing EUR 15.2 million).
The case is connected with 7 administrative cases brought by ORLEN Lietuva (since 2013), in which ORLEN Lietuva challenges the legality of charging PSO on electricity generated and consumed for own needs. All these administrative cases are suspended in connection with proceedings pending before the Court of Justice of the EU. The outcome of the case brought by UAB Baltpool depends on a large extent on the outcome of these administrative proceedings and proceedings before the Court of Justice of the EU. The Court of Justice of the EU decided, that the Lithuanian PSO program constitutes the nature of state aid. In the opinion of the ORLEN Lietuva the claims are without merit.

- **POLWAX S.A. - ORLEN Projekt S.A. dispute**

On 19 April 2019, ORLEN Projekt filed a claim against POLWAX with the District Court in Rzeszów for payment of the amount of PLN 6.7 million together with due statutory interest for delay in commercial transactions in respect of remuneration for performed and received by POLWAX construction works in connection with the Agreement concluded on 7 April 2017 for "Construction and start-up of the paraffin wax solvent deoiling installation together with auxiliary installations for POLWAX .S.A.". On 23 May 2019 the Court issued a warrant for payment to ORLEN Projekt in a writ of payment proceedings covering the entire amount claimed, thanks to which ORLEN Projekt obtained subsequently a bailiff's security for this amount on the POLWAX bank account. The motion submitted by POLWAX for overturning the warrant of payment was dismissed by the decision of the Court of First Instance. Currently, the lawsiut is in the process of considering POLWAX's complaint against the indicated decision of the Court of First Instance by the Court of Appeal. The planned deadline for considering the POLWAX's complaint is 6 March 2020. After it has been considered, the lawsuit's files will be transferred back to the District Court to continue the evidentiary proceedings.

On 31 May 2019, ORLEN Projekt filed another claim against POLWAX with the District Court in Rzeszów for payment of further PLN 6.5 million together with due statutory interest for delay in commercial transactions in respect of another part of remuneration for performed and received by POLWAX construction works.

Thereafter this claim was extended twice - the extension of the claim dated 20 September 2019 by the amount of PLN 13.9 million for groundless reimbursement of a performance guarantee and covering the costs of its execution, and the extension of the claim dated 6 November 2019 by the amount of PLN 25 million for other claims related to withdrawal from the Agreement by ORLEN Projekt due to POLWAX's fault, up to the total amount of PLN 45 million. The case is pending.

On 25 February 2020, ORLEN Projekt received from POLWAX a payment demand of PLN 132 million, consisting of the following: PLN 84 million for damages incurred by POLWAX in the form of

actual loss and PLN 48 million for lost benefits resulting from improper performance and non-performance of the Agreement. On February 28th 2020, POLWAX published a current report No. 6/2020 informing that a claim for payment of the amounts included in the payment demand dated 25 February 2020 was filed with the court. In the opinion of ORLEN Projekt, the above claim of POLWAX is unfounded and immediately after delivery of the claim, ORLEN Projekt will take the measures provided by law to prove that the claim is unfounded. According to information available to ORLEN Projekt, POLWAX before filing the claim, applied to the District Court in Rzeszów to secure the claim which it intended to claim from ORLEN Projekt, however the Court dismissed the application in its entirety by decision of 6 February 2020.
On 10 March 2020 POLWAX published current report no. 7/2020 informing about filing a lawsuit with the court for payment of PLN 10 million due to: (i) removal and utilization of waste of contaminated soil from the Investment area, and (ii) non-contractual land storage outside the investment area on plot no. 3762/70. In the opinion of ORLEN Projekt, the above claims of POLWAX are without merit and immediately after delivery of a copy of the lawsuit, ORLEN Projekt will take measures provided for by law to show their groundlessness.

- **Arbitration proceedings brought by Elektrobudowa S.A. against PKN ORLEN S.A.**

Elektrobudowa S.A. field a claim for payment against PKN ORLEN with the Court of Arbitration at the Association of Engineers, Advisers and Experts (SIDIR) in Warsaw (reference number P/SA / 5/2019) for the total amount of PLN 103,997,758.85 and EUR 11 481 955.37.
The case concerns the performance of the EPC contract for the construction of the Metathesis Unit concluded between PKN ORLEN and Elektrobudowa.
The above amount consists of the following amounts:
1) PLN 20,570,866.83 and EUR 7,585,851.61 together with interest for delay due to the payment of the outstanding remuneration provided for in the EPC Agreement - to Elektrobudowa, or possibly to Citibank, if it is determined that the remuneration is due to Citibank as a result of the assignment,
2) PLN 7,832,245.97 and EUR 1,261,191.54 together with statutory interest from October 23, 2018 for remuneration for additional and replacement works - for Elektrobudowa or Citibank as above,
3) 62,355,170.15 PLN together with statutory interest from 27 December 2019 for remuneration, by which the lump sum should be increased in favor of Elektrobudowa, or Citibank as above,
4) PLN 13,239,475.90 and EUR 2,634,912.22 together with statutory interest from October 25, 2019 - as compensation for damage caused by the unjustified payment by PKN ORLEN of guarantee sums available under bank guarantees - to Elektrobudowa.

PKN ORLEN will submit a response to the lawsuit by April 17, 2020. In the opinion of PKN ORLEN, the claim is groundless and has not been classified as a contingent liability.

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 2019 and in 2018 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 2019 in section 14.6.2., while the ORLEN Group companies' transactions with entities related to the State Treasury in section 14.6.3.

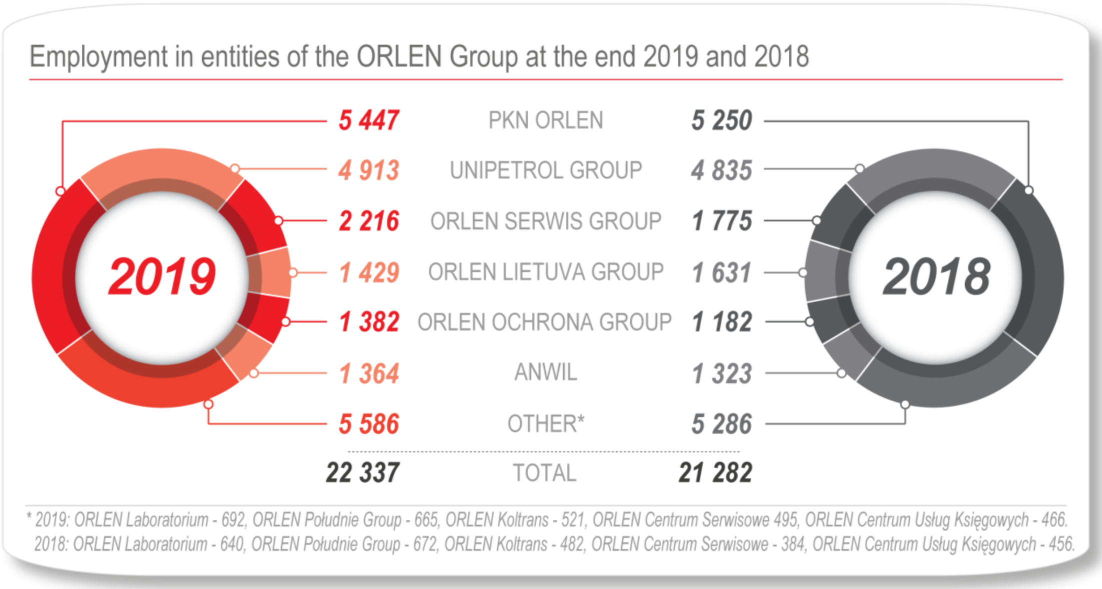
3.5. EMPLOYMENT AND PERSONNAL PROGRAMMES

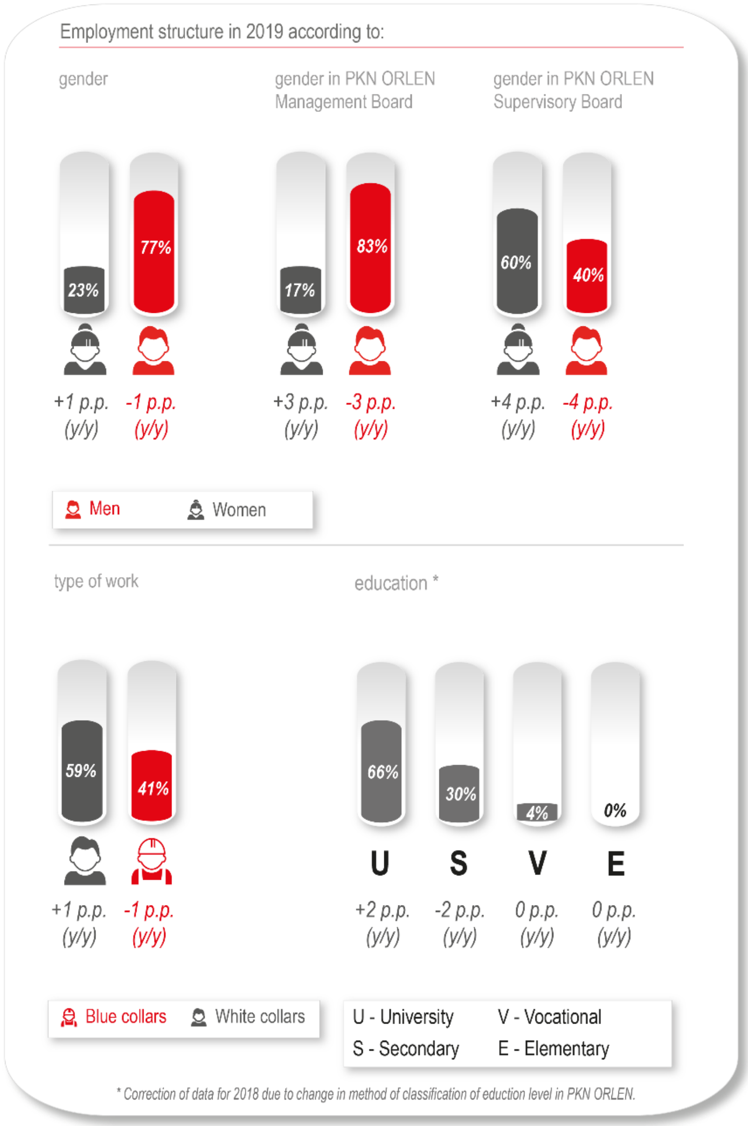
Wioletta Kandziak – Executive Director for HR:
"Being awarded the TOP Employer title means that we are on the right track, but we also regard it as a commitment to keep raising these standards and strive for excellence. On January 2020 we received the award for the ninth consecutive time, as one of Poland's ten best employers. A variety of solutions focused on staff development, a wide range of employee benefits tailored to individual needs, and the implementation of technologies supporting HR processes – are but a few examples of our successful activities. We are not resting on our laurels, though. We continuously implement and manage a wide array of practices intended to attract, engage, and retain the best professionals.

First of all, I would like to thank our employees who have developed and are working to further enhance our HR standards. I want to thank them for their everyday commitment, which has been recognised by an independent auditor and is the source of our today's success."

In 2019, 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, petrochemical, plant maintenance, IT and trade activities led to a 1,055 year on year increase in total workforce, to 22,337 employees. In 2019, the average annual headcount at the ORLEN Group was 21,826, an increase by 950 employees year on year.

DIAGRAM 30. Basic data concerning of the ORLEN Group employment.





The rules of remuneration in place at PKN ORLEN are laid down in the Collective Bargaining Agreement. The main components of remuneration are base pay (determined according to the Pay Grade Table and Base Pay Table) and a bonus.
Employees are covered by monthly, quarterly, quarterly/annual or annual bonus schemes, 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. On April 1st 2019, amendments to the PKN ORLEN Collective Bargaining Agreement came into effect, relating in particular to the Pay Grade Table and Base Pay Table.

In 2019, Collective Bargaining Agreements/Pay Rules were also agreed upon or amended at the following ORLEN Group companies: ORLEN Laboratorium Sp. z o.o., ORLEN Serwis S.A., ORLEN Administracja Sp. z o.o., ORLEN Projekt S.A., ORLEN Południe S.A., ORLEN Centrum Usług Korporacyjnych Sp. z o.o., Basell Orlen Polyolefins Sp. z o.o., Energomedia Sp. z o.o., Sigma BIS S.A. and Ship - Service S.A.

In 2019, the average gross monthly remuneration (including base pay, bonuses, awards, lump-sum allowances and overtime) at the ORLEN Group was PLN 8,316.

In 2019, PKN ORLEN entered into a pay agreement for 2019, which provided for obligatory base pay rises of PLN 250 for employees graded 1 to 6 and one-off bonuses of PLN 2,100 for employees graded 7 and 8. In addition, Christmas bonuses totalling PLN 3,500 and an additional bonus on account of PKN ORLEN's anniversary ranging from PLN 1,000 to PLN 2,000 were agreed upon, depending on the length of service.

In 2019, uniform Employee Capital Plans (PPK) were implemented at PKN ORLEN and the ORLEN Group companies.

HR PROGRAMMES

Human resources management policy

People are invariably one of the key pillars of the ORLEN Group's strategy. The activities carried out in 2019 focused on consistent implementation of the HR policy to support the building of an experienced team of professionals and development of leadership skills among the management staff. In addition, employee satisfaction and commitment surveys were undertaken, a Career Development Session was conducted, and the Employer's Brand Ambassador programme was launched.

PKN ORLEN and the ORLEN Group companies consistently implemented various initiatives envisaged in the updated 'ORLEN Group Human Resources Management Policy', first adopted in 2017. The Policy highlights the role of employees, acknowledging them as one of the Group's most precious assets, and recognising the fact that their unique knowledge, skills and experience are a source of competitive advantage to the Group. The priorities and key tasks of the Policy have been defined based on best market practices, reflecting market challenges and trends in human capital development. The document defines activities in such areas as reinforcement of the Group's corporate culture, segment-based management, employee development, compensation and employee benefits, and performance management, to name just a few. Priority initiatives for the Group in 2019 were to promote its image as an attractive employer, on-board new employees, support managers in the recruitment processes, work with trade unions in implementing the Collective Bargaining Agreements and encourage employees to partner with ORLEN in the pursuit of its business objectives (business awareness). Moreover, non-financial incentive schemes for employees were being developed by expanding the benefits programme (launch of the MyBenefit platform) and employee health initiatives.

ORLEN Group's age management policy

The ORLEN Group has implemented age management solutions to counteract adverse consequences of demographic shifts on the labour market. Activities in this area focus, among other things, on raising the management staff's awareness of age management, promoting intergenerational diversity and communication, facilitating knowledge and skill transfers, Employer Branding efforts in relations with the outside world, especially with the local labour market, universities and schools, building successor competencies within the Company, implementing dedicated staff development and mentoring programmes, and undertaking preventive healthcare measures.

Anti-workplace bullying policy

In 2019, the ORLEN Group prepared 'Rules to prevent workplace bullying, discrimination, and any forms of harassment' at the Group. They are intended to support the implementation of the ORLEN Group's anti-workplace bullying policy adopted in 2017, which also includes measures designed to prevent any behaviour that could amount to bullying, discrimination, or other forms of harassment.

Education and talent acquisition policy

PKN ORLEN works consistently to meet its talent acquisition and retention needs, focusing on specific target groups relevant to each segment (identified in the Employer Branding strategy). Such activities are targeted at existing and prospective employees, as well as students and graduates of vocational schools and universities. Being aware of the need for synergies between business and academia, the ORLEN Group collaborates with the academic community. PKN ORLEN and the ORLEN Group companies are able to offer a broad range of job openings to prospective employees.

PKN ORLEN is also committed to offering employment opportunities to the disabled. In 2019, PKN ORLEN and selected ORLEN Group companies joined the PFRON Praca- Integracja programme, aimed at recruiting people with disabilities from the open labour market.

Realising the need to build an HR pipeline in professions that are crucial to the industry, given especially the specific business profiles of the ORLEN Group companies, PKN ORLEN engages in active partnerships with vocational schools. Students receive expert support during hands-on activities and have the opportunity to take part in study visits and trainee placements offered by the Group companies. PKN ORLEN cares for the professional development of young people − students, university graduates and school leavers, by providing them with opportunities to gain their first professional experience on internship and work placement programmes, attended by dozens of university graduates and school leavers every year. In 2019, there were over 100 interns under the 'Headed for ORLEN' and the '#Energy for the Future' programmes run in association with the Polish Ministry of Energy, and in a programme carried out jointly with the Faculty of Power and Aeronautical Engineering of the Warsaw University of Technology. PKN ORLEN also offers development opportunities to Polish students studying abroad. This year, we were a strategic partner of the 'Go4Poland-Choose Poland!' programme, aimed at encouraging young talented Poles studying abroad to plan their career paths at Polish or multinational companies, public institutions operating in Poland, or foreign branches of Polish companies. As part of the programme, we provided holiday internship, workshop and mentoring opportunities. The student internships were completed by 135 individuals, mostly in the production segment, but also in other business areas.

PKN ORLEN also participated in various job fair events (the Activity and Entrepreneurship Fair in Płock, the JOBICON in Warsaw, the Engineering Job Fair at the Warsaw University of Technology, the London Job Fair) at technical universities, and provided students and graduates with opportunities to gain professional experience. Additionally, it was involved in a number of education and awareness projects, including the ORLEN Knowledge Day and the Dignity Day organised by the PKN ORLEN Ethics Officer. PKN ORLEN employees delivered a Communication Workshop for students of the Pawel Wlodkowic University College in Płock, and participated in Employers Panel held with the objective of assessing the needs of employers and institutions cooperating with the Warsaw University of Technology in the field of chemical engineering.

For another year running, PKN ORLEN, ORLEN Laboratorium and ANWIL actively participated in Industry Seminars – a series of meetings at the Faculty of Chemistry of the Warsaw University of Technology. The participants are Faculty students 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 specific development paths with a view to getting a job with a given company. In addition, PKN ORLEN attended the Science-Industry Seminar at the Faculty of Materials Science and Engineering of the Warsaw University of Technology, and students' meetings with employers at the Business Networking Day held at the Warsaw University of Technology, Faculty of Production Engineering and Faculty of Chemistry.

Students of the Płock branch of the Warsaw University of Technology regularly visited the Płock Production Plant and were invited to the 'Refining Industry Open Days' event held as part of the European Industry Week.

Development and training

Development activities in 2019 focused on shaping attitudes and skills in diversity management, management ethics, innovation, cooperation, reviewing lessons learnt, project work, work planning and organisation, and negotiation skills. These and other dedicated training programmes supported the delivery of business strategies. The so-called 'Career Development Session' was introduced to help plan individual career paths, based on the assessment of an employee's development needs and business requirements in a given business area. The session involves a friendly talk between an employee and their line manager, and hence its important component is the feedback the manager receives from the employee. Apart from being a tool used to identify development needs, the session has become helpful in developing a culture of openness and dialogue. Its implementation was preceded by dedicated workshops for the management staff and employees.

Programmes were also run to support skills identified as important for the development of business functions in the context of future challenges, including: a programme to develop advanced analytical skills (with respect to 'big data') and a comprehensive programme to develop project management skills. Under these programmes, employees were developing unique skills related to Data Analytics trends and learned how to employ them for business and project management, spanning a range of topics from budget management, project team management and project lifecycle analysis, to project risk and quality management.

There was also the comprehensive management development programme implementing a common standard for all management levels, which was continued from previous years. Its themes centred on engaging leadership, value-based management, efficiency improvement and building multifaceted collaboration and innovation within a team. Moreover, the management staff were working to develop their mentoring and feedback giving/receiving skills.

Further programmes were also delivered to train the management staff in preventing workplace bullying, in labour laws, and in management and business ethics, demonstrating the ORLEN Group's special concern for ethics-based management and respect for corporate values.

Another important training programme covered the anti-corruption policy, and was provided to employees of various levels and business areas, supporting the implementation of the ORLEN Group Anti-Corruption Policy.

In 2019, a new e-learning platform was launched, featuring diverse content, including mandatory training in AML regulations, a public company's disclosure obligations, prevention of adverse effects of shift work, everyday innovation, and diversity. The platform content can be created and posted by individual business areas, in different formats, which makes it a handy tool for internal knowledge transfer.

PKN ORLEN employees benefited from a wide range of diversified development activities. They attended tailored training events (both open and closed), designed specifically to address the needs of a given area or employee, postgraduate courses, or MBA programmes. In addition, they were offered opportunities to broaden and share their knowledge of the market through participation in trade conferences and events.

As in previous years, we continued initiatives fostering a culture of work safety: from educational projects to mandatory training and post-graduate courses dedicated specifically to PKN ORLEN, such as those focused on skills necessary to operate power generation units. The Safe Driving Academy was also continued with a view to helping its participants master safe driving techniques and learn how to react in difficult situations on the road.

Employees also improved their foreign languages skills as part of the PKN ORLEN Language Academy and summer English courses. Training and development activities were carried out not only on a classroom basis, but also as e-learning courses.

In 2019, almost 5,100 employees were trained at PKN ORLEN, and the average number of training hours per employee was 39. Overall, more than 15,000 training units were completed in 2019.

Social dialogue and employee benefits

The principles of social dialogue at PKN ORLEN are grounded in internal regulations and generally applicable laws, which facilitates development of constructive and lasting solutions in partnership with employee representatives. PKN ORLEN offers a uniform benefits package to all employees of the Company and the other ORLEN Group companies participating in the common social benefits programme. The current package includes: financial support towards the costs of holidays or sanatorium treatment, child care, leisure activities for children and youth, school starting kits, recreation and sports 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 association with Centrum Medyczne Medica Sp. z o.o. of Płock and the Military Institute of Medicine of Warsaw. In 2019, preventive medical examinations at the workplace were carried out under Wellbeing projects. Similar programmes of medical and preventive care are also operated by other companies of the ORLEN Group. Moreover, in 2019 a uniform pre-paid medical care plan was provided to all employees (and optionally for their family members) throughout the Group.

Family-Friendly Employer

As a company implementing modern-day solutions aimed at keeping the right 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 of age, two days off to care for a disabled child under 24 years of age, a nursery school for children of ORLEN Group employees, one additional hour for breastfeeding, medical care during pregnancy, baby feeding rooms, gifts for new-born babies, and providing employees on parental/childcare leaves with up-to-date information on developments across the Group. Many of the programme components have also been implemented by other ORLEN Group companies as part of best practice sharing.

3.6. CORPORATE SOCIAL RESPONSIBILITY („CSR")

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, 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 our CSR activities are defined in the CSR strategy, which is consistent with the business strategy.
In 2019, PKN ORLEN launched the 'ORLEN Group's CSR Strategy until 2022', based on the Group's business strategy, 'The Core Values and Standards of Conduct of PKN ORLEN' – the internal code of ethics, providing guidance to employees on how to behave ethically and responsibly both inside and outside the organisation, and the '2030 Agenda' – the UN resolution on sustainable development at the global and local level.
Besides seeking to align business with social objectives, other priorities of the CSR Strategy are to build PKN ORLEN's image as a leader in CSR and sustainability, generate CSR synergies across the Group, leverage the CSR area to gain a competitive advantage on the market, and support the pursuit of Sustainable Development Goals and the 'Accessibility Plus' programme.

PKN ORLEN's CSR Strategy as implemented in 2019 covered five key areas of responsibility: **Society, Environment, Employees, Customers, and Business Partners.** The identification of these areas facilitated the allocation of tasks corresponding to the needs of specific stakeholder groups.

In the **Society** area, the objective is to support the development of local communities, prevent social exclusion, equalise opportunities, ensure safety and healthcare, and protect the national heritage.

CSR strategy implementation – Society area	
Health City	The project is intended to promote preventive healthcare as well as an active and healthy lifestyle. Two editions of the Health City were held in 2019, available freely for residents of Płock and the neighbouring areas and for employees of PKN ORLEN. The honorary partner of the project was the Polish Minister of Health. During the first edition, approximately 4,000 medical examinations and consultations were provided, and the number was up to approximately 6,000 during the second one.
Comprehensive Programme for the Prevention, Diagnostics and Treatment of Cancers and Respiratory System Diseases for Residents of the City and County of Płock	In 2019, PKN ORLEN signed an agreement with the National Institute of Oncology on Poland's first pioneering cancer control project for the local community of Płock and the surrounding areas. The programme is delivered by the National Institute of Oncology, in partnership with the National Tuberculosis and Lung Diseases Research Institute. Its focus is on early diagnosis, promotion of recognised treatment standards, as well as education and outreach activities motivating people to change their lifestyles.
My Place on Earth	In 2019, the second edition of the programme was completed, with as many as 276 organisations awarded by the ORLEN's Foundation Dar Serca. Nearly 50 % of them were rural organisations, and 25% – from towns with up to 20,000 of residents. Financial support was granted, among others, to various societies, farmers' wives associations, foundations, sports clubs, libraries, schools, nursery schools, voluntary fire brigades, and parishes. More than a third of the successful projects are initiatives in the fields of education, culture and art, and nearly 50 of them have a pro-environmental theme.
Support to Firefighters	'ORLEN for Firefighters' is a programme run jointly with the ORLEN's Foundation Dar Serca. In 2019, 249 firefighting units from every province in Poland received financial support. Moreover, in January 2019, PKN ORLEN launched a loyalty scheme for firefighters registered in the National Firefighting and Rescue System, offering them daily support in the form of fuel discounts at all ORLEN service stations throughout Poland. In April 2019, the ORLEN's Foundation Dar Serca launched a dedicated programme of free training to Voluntary Fire Brigades from all over Poland on fund raising and project management. The 'Grow Up with Us' Foundation

	provides support and assistance to children of public service officers whose parents lost their health or lives while on duty.
Support to Foster Care Homes	The programme is delivered together with the ORLEN's Foundation Dar Serca, which for nearly 20 years has provided support to Foster Care Homes – unique places where children with traumatic experiences can find warmth and comfort. The Foundation's support to Foster Care Homes is comprehensive through targeted donations, e.g. for medical treatment and school kits, annual summer and winter holidays, conferences organised for caregivers and scholarships for children, as well as employee volunteering schemes engaging employees in various support initiatives. Currently, several hundred sites are supported under the programme.
Scholarship programmes of the ORLEN Foundation	Scholarship programmes are available for primary and secondary schoolchildren and for university students. Under all of the Foundation's programmes, 535 schoolchildren and students received scholarships in 2019. Its flagship programmes include scholarships dedicated to residents of Płock and the county of Płock, and the 'For Eagles' programme for children of the ORLEN Group employees.
'We keep watch! We remember!'	The grant programme, launched on the 100th anniversary of Poland's regained independence, offers financial support to restore or protect memorial sites. The purpose is to encourage local communities to commemorate forgotten heroes and broaden their knowledge of local history. In 2019, the second edition of the programme was held.
Free Information System for inhabitants of the Płock region	The system was established to provide information about social, cultural, sports and other projects initiated by PKN ORLEN and the ORLEN Foundation. It also warns of possible environmental nuisance and impediments to residents' everyday lives caused by the operations of PKN ORLEN's Production Plant in Płock. Since February 18th 2019, emails and text messages under the Free Information System have been sent not only to employees of PKN ORLEN, but also to residents of Płock and surrounding areas – the neighbours of the PKN ORLEN plant. The system's key advantages include the short time needed to deliver a message and its direct delivery to the target audience.
Workshops for representatives of the Płock municipal crisis management services	A series of workshops provided by PKN ORLEN on safe operation of its Production Plant, intended to improve its cooperation with the Płock crisis management services.
Cross-sectoral partnership - 'Grant Fund for Płock' Foundation	Thanks to PKN ORLEN's assistance, the Foundation is able to financially support various local associations, clubs and foundations in their own efforts to improve the lives of Płock residents in all areas, from sports, to social welfare, to culture. The Foundation's activities focus on grant competitions for projects consistent with the Strategy for Sustainable Development of the City of Płock until 2030 and the UN Sustainable Development Goals. For example in 2019, the 'Grant Fund for Płock' financed the 'Happy Holidays in Płock' project for over 620 young local residents who participated in free-of-charge summer holiday activities in the city. Overall more than PLN 100,000 was committed by the Foundation to organise leisure activities for kids. During the 2019 summer holidays, the Foundation supported projects involving regular activity classes on astronomy, sailing and handicraft, as well as holiday play centres providing cultural, sports and recreation activities.
Health promotion session for members of farmers' wives associations from municipalities of the Płock county, entitled 'Say YES to your healthy future'	During the meeting, medical professionals discussed factors affecting human health. The cancer control programme was also presented, run in partnership with the Warsaw Oncology Centre (National Institute of Oncology). Basic diagnostic tests (covering the sugar level, blood cholesterol and blood pressure) were available to the participants, alongside specialist advice provided by a physiotherapist (on podoscopic posture analysis), pulmonologist (on spirometry), and dermatologist (on skin lesions). All persons with abnormal test results were informed what specialists they should see to further diagnose their condition and receive treatment.
'Proud of the past, brave about the future'	The exhibition of Polish hussar (winged cavalry) armour purchased by the ORLEN Foundation for the Polish History Museum, with two vernissages held, in Warsaw and Płock, for history lovers and fans.
Christmas concert for senior citizens	Senior citizens from towns and villages around Warsaw were invited by PKN ORLEN to a Christmas concert featuring artists from the Opera Academy. Its venue (the Redutowe Rooms of the Teatr Wielki – Polish National Opera in Warsaw) was not randomly chosen. In October 2019, PKN ORLEN became a patron of the Teatr Wielki – Polish National Opera, the largest opera theatre in Europe and the second largest in the world.

The main objective of the second pillar of the CSR Strategy – **Environment –** is to optimise the Group's environmental impact, protect biodiversity, and develop environmental awareness.

Environmental protection is one of the key aspects of PKN ORLEN's social responsibility. In pursuit of its ambitious objectives for this area, the Company engages in a number of initiatives with a view to developing environmental awareness, protecting biodiversity, and optimising its environmental impact.

CSR strategy implementation – Environment

Peregrine falcon restoration project	Since 1999, PKN ORLEN has been actively involved in efforts to restore the peregrine falcon population in Poland, in partnership with the 'SOKÓŁ' ('FALCON') Wildlife Protection Association. In 2019, the 46th and 47th peregrine falcon chicks were hatched and raised at the Płock Production Plant, whereupon they were reintroduced to natural sites.
Unique exhibit donated by ORLEN to the Museum of Natural History in Wrocław	Thanks to PKN ORLEN, the Museum of Natural History in Wrocław received Poland's only full clutch of eggs laid by a saker falcon – a bird of prey strictly protected as an endangered species, and extremely rarely seen in Poland. The clutch of four eggs was removed from PKN ORLEN's refinery premises in Płock. According to experts in environmental protection, the bird's appearance in Poland, and – more importantly – the laying of eggs are a true ornithological sensation.
Nature watching cruises on the Vistula River	Free cruises on the Vistula River for residents of Płock are offered as an unusual form of environmental dialogue and education. During four trips, a guide presented the most valuable species of fauna and flora that can be sighted in the middle section of the Vistula River. The guide also disclosed to the participants what species, including protected ones, live at PKN ORLEN's Płock Production Plant and in neighbouring areas.
Environmental leaflet	An environmental leaflet is one of the ways to communicate, in an accessible and attractive form, the various environmental protection initiatives undertaken at the PKN ORLEN Production Plant in Płock and in its immediate vicinity. It focuses primarily on the presentation of results of the wildlife and habitat features inventory, while also containing some interesting facts about our voluntary environmental initiatives, including air quality control. Apart from being a source of valuable knowledge, the publication offers fun activities related to nature and the Production Plant, such us jigsaw puzzles for children with a family board game hidden underneath. The winner of the board game receives sunflower seeds, which they can grow on their own. In this way, our publication gets a 'second life'. The environmental leaflet is printed on paper from FSC certified forests.
'Bees in Human Life. Biodiversity and Protection' conference	An educational conference organised by PKN ORLEN and the Warsaw Province Agricultural Advisory Centre (MODR) in Płock for secondary school students with an extended biology curriculum and for beekeepers. An apiary was established on the MODR premises in Płock, near PKN ORLEN's plant, with almost a million bees.
Yet another time, peregrine falcon chicks hatched in the nesting box on the FGD stack	For more than 17 years, PKN ORLEN has been involved in a restoration project concerning the peregrine falcon, which is included in the Polish Red List of Endangered Species as a CR (critically endangered) species.
Electric cars in ORLEN's Fleet	In 2019, PKN ORLEN expanded its fleet to include electric Nissan LEAF cars, to be used by the Company's employees in the course of their routine duties. The purpose is to raise electro-mobility awareness, among both our own employees and other road users.
Financial support for a project to connect fishing ponds in Osieczany near Myślenice	The connecting of recreation fishing ponds in Osieczany near Myślenice will enable fry migration and restoration of the fish population. The project was carried out by the Sports Angling School in Osieczany.
'Tree for a Bottle' campaign	PKN ORLEN volunteers, together with members of their families and the local communities, took part in the 'Tree for a Bottle' campaign, aimed at cleaning up the areas around Płock and Włocławek. The event ended with a picnic, with tree saplings awarded to the participants. The purpose was to promote environmental and climate protection efforts.
Beekeeping workshops	The purpose of the workshops is to familiarise children with the world of bees and the crucial role played by them in the environment. Through active and fully sensory environmental education, children are taught sensitivity and respect for these beneficial insects. At the same time, they are encouraged to learn on their own and be creative in getting to know the natural world around them.
Forest for future generations	Employees of PKN ORLEN's Environmental Protection Office engaged in annual forest planting in Brwilno to support the Płock Forestry District.
Nature Observatory	Employees of PKN ORLEN's Environmental Protection Office, together with pupils of primary school No. 20 in Płock, created a mini educational trail. Working hand in hand, they planted and marked over 80 plants representing 32 different species. The joint project was a hands-on botany lesson, and the hedge made of various tree and shrub species will provide a natural safety barrier between the access road leading to the school and the green area where kids play during recess.

The third pillar of the ORLEN Group's CSR Strategy – **Employees** - is about creating a safe work environment, ensuring fair working conditions, tackling inequalities, fostering employee development, and helping employees successfully combine their personal, career and social goals.

At PKN ORLEN, we focus on our employees' needs, regarding safety and top quality as our key priorities. We strive to provide the best possible occupational health and safety conditions and to maximise the safety of our processes.

Implementation of the CSR strategy – Employees

Employee volunteering projects	2019 saw another edition of our employee volunteering programme. There are two ways to get involved: employees can either participate in initiatives of the ORLEN Foundation or propose their own ideas. The programme is open to employees of PKN ORLEN and other Group companies. In 2019, a total of 800 employees were involved in all volunteering projects, whose beneficiaries included persons under the care of NGOs, students, and the natural environment.
Information and consultation campaign on disabilities in the workplace	The target group of the initiative includes all ORLEN Group employees, especially those with disabilities. The purpose is to raise their awareness of disability-related issues and to build the image of PKN ORLEN as an inclusive employer, providing equal opportunities to all employees in keeping with its core values and standards of conduct.
'Work and Integration' Programme	The declaration of partnership for the disabled signed between PKN ORLEN and the State Fund for the Disabled (PFRON) is the first step in a series of initiatives for people with disabilities, focusing especially on their recruitment across the ORLEN Group, which will increase the proportion of disabled staff to the Group's total workforce.
Working time devoted to employee volunteering projects	Designating one day off work every year to be devoted to employee volunteering projects. Establishing guidelines on how to account for working time devoted to employee volunteering projects and preparing a formal proposal to that end.
Distinguished Employee	The project is meant to honour employees who have distinguished themselves in the following categories: outstanding service, special achievements, and socially responsible attitudes.
Seniors Club	The project is available to former employees of PKN ORLEN and other Group companies as their joint CSR initiative. The objective is to foster ties between former employees and encourage them to stay in touch with the company after retiring, while providing aid and support to those in need.
Health Zone	At the end of May, PKN ORLEN made available 'health zones' to its employees in Warsaw (May 28th 2019), Płock (May 30th 2019) and Włocławek (May 27th 2019). As part of the project, 350 or so employees consulted a physiotherapist on the correct body posture during work and had their upper back massaged.
Two Hours for the Family	The goal of the initiative is to highlight the importance of family ties, especially with the closest ones. As a family-friendly employer, PKN ORLEN helps its staff maintain a healthy work-life balance.
'Family-Friendly Employer' programme	Supporting employees in their parental duties. Facilitating return to work after parental leaves. Offering a company-run nursery facility for employees' children.
Fostering a feedback culture through Career Development Sessions	As part of annual Career Development Sessions, employees and their line managers discuss business objectives and the employee's career development plan, based on mutual feedback (from supervisor to employee and from employee to supervisor).
Operator Training Centre	A modern Operator Training Centre was established at the Płock refinery, where newly hired production staff can learn the details of their jobs. The induction training will give them the know-how needed to work more efficiently and in a safe manner.

In the fourth pillar of the ORLEN Group's CSR Strategy – **Customers** - the focus is on ensuring health and safety, responding to customer expectations, increasing availability and inspiring responsibility.

Implementation of the CSR strategy – Customers

Environmental leaflet	An environmental leaflet is one of the ways to communicate, in an accessible and attractive form, the various environmental protection initiatives undertaken at the PKN ORLEN Production Plant in Płock and in its immediate vicinity. It focuses primarily on the presentation of results of the wildlife and habitat features inventory, while also containing information on our voluntary environmental initiatives, including air quality control. Apart from being a source of valuable knowledge, the publication offers fun activities related to nature and the Production Plant, such us jigsaw puzzles for children with a family board game hidden underneath. The environmental leaflet is printed on paper from FSC certified forests.
Loyalty scheme for firefighters of Volunteer Fire Brigades registered in the National Firefighting and Rescue System	VFB firefighters participating in the scheme are entitled to a discount of PLN 0.08 (gross) per 1 litre of fuel purchased at ORLEN service stations. The loyalty scheme has been in effect since January 1st 2019, with 46,563 cards used at least once since its inception. As a result, firefighters are currently a strong group of ORLEN fuel consumers.
Materials promoting responsible consumption	In 2019, PKN ORLEN was involved in the work of the Sustainable Development and Corporate Social Responsibility Team of the Consumer Working Group, initiated by the Polish Ministry of Investment and Development. As part of an awareness campaign promoting responsible consumption and delivery of Sustainable Development Goals, leaflets and animated video materials focusing on five key areas (transport, shopping and consumption, health, home life and finance) were prepared. PKN ORLEN partnered with the Responsible Development Forum to develop materials dedicated to transport.
#GoodDriver (#DobryKierowca) CSR campaign	Environmental protection, safety, health and support for local communities were the key points of focus of our #GoodDriver campaign. The purpose was to show that even small changes can make a big difference for many people around us. Through the campaign, PKN ORLEN makes its customers aware that together we can create a better future. By buying fuel and other products at ORLEN service stations, they can support not only Polish producers, but also projects focused on environmental protection, health or safety. The countrywide #GoodDriver campaign will be advertised in the press, television, internet and on roadside billboards. In addition, PKN OLREN organised special communication platforms for the inhabitants of Płock to present its pro-environmental projects.
LifeVac life-saving device tests at selected ORLEN service stations	As part of a pilot project, 40 stations in Motorway Service Areas were equipped with LifeVac devices for resuscitating choking victims. Each service station received a kit including the device and three face masks suitable for different age groups. The service station personnel were provided with e-learning training based on materials provided by the manufacturer, and had an opportunity to test the device using a practice mask included in the kit. Based on the test results, a decision will be made to equip more service stations with LifeVac kits following an open procurement process.
Safe Driving Academy	Promoting safe driving, H&S and fire protection standards among PKN ORLEN's key fleet customers, through organised events, which involved theoretical and practical training delivered by road traffic psychologists and firefighters of the State Fire Service.
Promotion of the 'My Place on Earth' programme	Dozens of events were held at ORLEN service stations to promote the second edition of the ORLEN Foundation's 'My place on Earth' grant programme. At each such event, ORLEN customers could learn about the programme, and find out how to apply and support their 'small homelands' (i.e. local communities). The events also provided an opportunity to present the ORLEN Foundation and to promote ORLEN service stations as good meeting venues.
Fairtrade coffee at ORLEN service stations	The Fairtrade mark, displayed on each cup of coffee available at our Stop Cafes, is a guarantee that small coffee bean farmers and farm workers were fairly paid for their work and given fair working conditions. Every coffee bought at ORLEN service stations is our own contribution to building a fairer world.
'Slow Down Near Schools' campaign	In 2019, a promotional campaign was launched in the YANOSIK driver application to promote safe driving around schools. It was a fourth edition of the programme, under which motorists were rewarded with VITAY points for driving safely in the vicinity of over 1,000 schools located near very busy roads. Those who conformed to safe driving practices along three such road sections per week (each on a different day) received 1,000 VITAY points.
'VITAY in YANOSIK'	Users of the Yanosik application could earn VITAY points for reporting road incidents. Every month, Yanosik and ORLEN rewarded motorists with a total of 4m points. Half of them were credited to the motorists' accounts, while the remainder were used to support charitable causes selected by participants of the 'VITAY in Yanosik' campaign in a joint vote. Every six months, ORLEN monetised those points, making it possible for Yanosik users to help those in need.
Charitable contributions in the VITAY Prize Catalogue	Participants of the VITAY scheme can donate their points to charitable causes of their own choice. Every six months, they are converted to PLN and the resulting donations are transferred to the ORLEN Foundation. Charitable contributions are made to support foster care homes and environmental protection initiatives.

In the fifth pillar of the ORLEN Group's CSR Strategy - **Business Partners** - the objective is to inspire responsibility, engage in and foster successful business partnerships, and promote responsible attitudes.

Implementation of the CSR strategy – Customers

Investment Academy launched by PKN ORLEN	The project is run as part of 'ORLEN IN YOUR PORTFOLIO' – Poland's first long-term programme for retail investors. The Investment Academy is a multi-faceted project. Free-of-charge, unlimited access to the educational platform is open to all those interested, not only Company shareholders. Anyone looking to enhance their knowledge on the capital market and how to stay on the safe side while investing on the stock exchange is welcome to participate. Participants of the Investment Academy will have a chance to earn a prestigious certificate signed by the CFA Society Poland.
Safe External Contractor	2019 saw a third edition of the 'Safe External Contractor' competition organised by PKN ORLEN to disseminate and promote best practice in occupational health and safety, and to reward contractors who conform to H&S standards. The competition is open to any contractor that has been involved in new build or maintenance work at PKN ORLEN over the past two years, without having reported any accidents while on the Group's premises.
Space3ac accelerator programme	PKN ORLEN joined the Space3ac accelerator programme, under which it seeks innovative solutions in the area of petrochemicals, retail sales support tools, logistics, and more. The accelerator project is named among the key strategic development directions for the innovation ecosystem, as set out in the ORLEN Group's updated Strategy for 2019–2022.
PKN ORLEN signs up to the declaration on promoting aviation safety	On April 24th 2019, PKN ORLEN signed the *European Corporate Just Culture Declaration,* whose signatories commit to fostering a culture of fair treatment and promoting improvements in aviation safety. The initiative was also joined by ORLEN Aviation.
PKN ORLEN joins the GovTech government programme	The programme promotes partnerships of state-owned companies and public administration bodies with SMEs operating in the IT sector. As part of the GovTech initiative, the Company will be on the lookout for a solution to support automatic identification of vehicles refuelled via the existing PKN ORLEN mobile application. The technology sought by PKN ORLEN is to facilitate and improve the security of mobile transactions at service stations.
Pilot Maker Electro ScaleUp acceleration programme	PKN ORLEN has partnered with Polish start-ups with a view to acquiring innovative technologies. Thanks to the Pilot Maker Electro ScaleUp, an acceleration programme run under an agreement signed in September 2018 with techBrainers, PKN ORLEN has commenced tests of a system designed to optimise the EV charging process. As part of the programme, PKN ORLEN has also established cooperation with Enelion, a Polish manufacturer of EV chargers and dedicated software.

One of the priorities of the ORLEN Group's CSR Strategy across all areas (Society, Environment, Employees, Customers, and Business Partners) is to inspire a shared sense of responsibility among its stakeholders by sharing good practice.
Examples of initiatives taken in 2019 include the presentation of PKN ORLEN's good practice in the Responsible Business Forum's Report – 13 projects of PKN ORLEN and the ORLEN Foundation were featured in Poland's most comprehensive CSR review, the 'Responsible Business in Poland. Good Practices' Report. This proves that ORLEN's CSR activities are widely recognised.
In May 2019, employees of the External Relations Office also ran visiting classes for Management and Leadership students at the SWPS University of Warsaw. Students could learn about such topics as the concept of sustainable development, dialogue with stakeholders, and strategic approach to CSR. The classes were an opportunity not only to share the Company's best practices, but also to listen to the young generation, which is already an important stakeholders of the Group.
Another initiative undertaken in the implementation of best practices in relations with stakeholders is the participation of PKN ORLEN representatives in the 11th European Economic Congress, the largest economic event in Central Europe. The Congress discussed such issues as the role of young people in the transformation of Europe and the future of the European Union, or the relationship between expansive technologies and economic and social development.
PKN ORLEN's External Relations Office also participated in the 2019 Inspiration Forum as part of the '17 Sustainable Development Goals' campaign, where we had an opportunity to share PKN ORLEN's best practices in preventative healthcare.
The ORLEN Group and the ORLEN Foundation participated in the European Sustainable Development Week. The 'Tree for a Bottle', 'Beekeeping Workshops for the Youngest', 'Vege Day', 'Cinema with ORLEN on the Children's Day', 'Excursion for Students of the Warsaw University of Technology', 'Railway is Not a Playground', 'Polish Fruit for ORLEN CUK employees' and 'Work and Rest Safely – It's the Tick Season' initiatives were implemented. The events were attended by nearly 2,000 people. Particularly important topics this year were climate, health, education, clean energy and sustainable urban development. The main objective of the campaign was to encourage businesses and other entities to promote activities supporting the implementation of the 2030 Agenda.
On June 5th and 6th 2019 the Polish Chemical Industry Congress took place in the Płock ORLEN Arena. The main topics discussed at the Congress issues were the environment, circular economy and plastics. During debates and panels, PKN ORLEN was represented, *inter alia*, by Management Board members Zbigniew Leszczyński and Józef Węgrecki, as well as Damian Wieczorek, Executive Director for Development and Technology. More than 600 participants discussed environmental regulations, support for competitiveness, raw materials for the future, security, investments and regulatory trends.
On June 24th and 25th 2019, the second edition of the Vision for Development Forum, the largest economic event in Northern Poland, was held in Gdynia. The Forum was attended by Daniel Obajtek, President of PKN ORLEN, who spoke about ORLEN's

merger with Lotos. Experts discussed the importance of automation, innovation and corporate social responsibility in the development of the Polish economy. One of the speakers was Agata Górnicka, Head of the External Relations Office, who took part in the 'Modern methods of implementing responsible business practices' panel.
PKN ORLEN also co-organised the Polish workshop session at the High-Level Political Forum on Sustainable Development during the UN Forum in New York. The Polish event took place on July 9th, the first day of the summit. The theme of the Polish workshop was Goal 10 – 'Less inequalities', addressing equal opportunities by supporting families, women, senior citizens, the disabled, the poor and local communities. PKN ORLEN was represented by Armen Artwich, Member of the Management Board for Corporate Affairs. The event was carried out in partnership with the Ministry of Entrepreneurship and Technology and the Ministry of Family, Labour and Social Policy. Organising the event was a great distinction for PKN ORLEN, as it was the only Polish company to have an opportunity to share its best CSR practices during the year's Forum.

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 2019. The report is available at https://www.orlen.pl/en/pages/default.aspx.

3.7. ENVIRONMENTAL PROTECTION

Armen Artwich – Member of the Management Board for Corporate Affairs:
"*In 2019, following a review of ORLEN Group's production facilities in terms of meeting the requirements of the BAT LVOC Conclusions, steps were initiated to adapt the facilities to the Conclusions' requirements pertaining to the petrochemical industry. PKN ORLEN and the ORLEN Group companies are obliged to take pro-environmental measures in the legal, investment and organisational spheres of its operations. Such measures include the deployment of a leakage detection and repair (LDAR) system in the Group's units and facilities, and analyses to develop an odour management plan to reduce odour nuisance.*
With respect to refining facilities, the first verification measurements were carried out as part of the LDAR system maintenance. The measurements confirmed the high tightness of the facilities.
At the end of 2019, further BAT Conclusions were published, this time concerning waste incineration. Since the ORLEN Group has such installations, we are now facing a new challenge and have to carry out an analysis of requirements and take adaptation measures if needed."

Reducing the environmental footprint has long been one of the ORLEN Group's top priorities. Most of the environmental projects carried out in 2019 involved adaptation of plant and process units to new environmental requirements and standards defined in the EU regulations (LVOC BAT Conclusions). Those efforts included both administrative work to have the terms of the integrated permits for the Group's plants amended, as well as preparation of capex projects related to the production plant and equipment. Key initiatives carried out in 2019 included the start of deployment of the LDAR system for petrochemical facilities and analyses to develop an odour management plan.
Efforts aimed at ensuring compliance with BAT Conclusions for the production of large volume organic chemicals were also underway in the Czech Republic.

A number of environmental projects were also implemented at PKN ORLEN's distribution facilities. These included work undertaken to ensure proper water and wastewater management and to upgrade linear drains and separators at service stations and car washes. In addition, two fuel terminals (in Wrocław and Świnoujście) were upgraded to improve water and wastewater management and air-tightness of petroleum products handling.

PKN ORLEN holds all permits and decisions required by law and in 2019 operated in compliance with their terms. 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 2019, in view of amendments to the Waste Act, an application to amend the waste collection permit was prepared.
Documents concerning allocation of allowances for heat generation for the fourth trading period (2021–2025) for the installations covered by the EU ETS Scheme were prepared and submitted to the Warsaw Province Marshal's Office, in accordance with the provisions of the Emissions Trading Act. In addition, monitoring methodology plans to monitor activity levels, effective as of January 1st 2021, were prepared in order to obtain approval of the method of allocation and confirm allocation of allowances for that trading period.
In accordance with legal requirements, in 2019 applications for amendment of integrated permits for installations covered by BAT Conclusions (the CCGT Unit in Płock and the Petrochemical Installations) were prepared and submitted. A total of 167 water-law permits were obtained for service stations and fuel terminals.
A significant organisational and technical challenge was to prepare for a smooth implementation of the electronic waste management recording system in the national waste database (BDO). As at December 31st 2019, all facilities (approximately 1,400) were introduced into the system, enabling proper waste management.

In 2019, compliance of PKN ORLEN's production units' operations with environmental laws was verified by the Płock and Włocławek Branches of the Provincial Inspectorate of Environmental Protection, which performed eight inspections. The inspections did not reveal any non-conformity. Only in one case a minor exceedance of the permitted dust emissions was recorded, at the Catalytic Cracking II unit.

A total of 46 inspections were carried out within the regional structures of PKN ORLEN (fuel terminals and service stations, standalone assets) by the national water management authority (PGW Wody Polskie) and Provincial Inspectorates of Environmental Protection. After one of these inspections, a follow-up instruction was issued requiring that the notification of liquid fuel storage and handling facilities be updated in compliance with applicable laws. The requirement was fulfilled. As a result of another inspection, a decision was issued to suspend the commissioning of a new service station in Warsaw. The decision was appealed against with a higher-level authority and repealed in its entirety. No fines were imposed following the inspections.

PKN ORLEN has implemented and maintains and improves the following systems:

- 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),
- KZR INiG certification system for the co-hydrogenation process,
- Factory Production Control System (ZKP) – for bitumen production,
- Energy Management System based on ISO 50001,
- Food Safety Management System (HACCP) based on Codex Alimentarius.

The Company has valid certificates of conformity to ISO 9001: 2015, AQAP 2110, ISO 14001:2015, PN-N-18001, ISO/IEC 27001, ISO 50001, ISCC, KZR INiG and ZKP. In 2019, the implementation of the Energy Management System based on the ISO 50001 standard was completed. In November 2019, following an audit of the new system by an external party, PKN ORLEN obtained a certificate of compliance with the ISO 50001 standard.
The Integrated Management System in place at PKN ORLEN is also described in Section 3.3.

3.8. OCCUPATIONAL HEALTH AND SAFETY

As part of its efforts to protect the health and safety of employees and stakeholders, the Personal and Process Safety Strategy is consistently pursued at the ORLEN Group.
2019 saw the continuation of Safety Plus, a project aimed at implementing uniform safety standards across the Group's main production companies, covering 15 safety areas of critical importance to the fuel and energy industry. These standards represent industry-leading safety benchmarks for fuel and energy producers. The project will be completed in 2021.
As part of the Group's strategic efforts, initiatives to improve the functioning of the Process Safety Management System at PKN ORLEN and harmonise it across the ORLEN Group were carried out. In line with the implemented concept of the OSHA 1910.119 standard, the Process Safety Management System covers 14 areas, including ensuring the safety of people, property, the environment and the Company's image. This approach not only makes it possible to implement operational excellence solutions more efficiently, but also urges proactive steps. The idea behind these projects is to ensure acceptable organisational, operational and technical conditions necessary for safe production processes at process, storage and auxiliary units, thus preventing any emergencies that could affect the safety of employees or processes.

In the area of safety, the ORLEN Group has rolled out a comprehensive self-check system involving preventive visits (consultancy, consultancy and follow-up, and coordination visits), which constituted internal audits. Checks are carried out by teams of experts in personal and process safety. In 2019, four consultancy visits and six consultancy and follow-up visits were held, which involved verification of the follow-up measures recommended during consultancy visits held in previous years.

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 2019 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 is designed to encourage PKN ORLEN employees and contractors to follow safe working methods or to discourage them from engaging in any unacceptable behaviour, and to promote good OHS practices. A number of multifaceted projects were also undertaken in an effort to promote safe work practices and good conduct among contractors.
The ORLEN Group has implemented incentive, information and education schemes dedicated to contractors' personnel. As part of this concept, PKN ORLEN set up a Training Centre providing training for contractors' staff working on the production plant's premises as well as induction training for new production employees. The Training Centre also holds detailed reviews of the employees' theoretical and practical knowledge in three areas: OHS, technology, and local hazards in production facilities. In addition, employees' knowledge of and skills in mechanical engineering are verified in practice, and special equipment is used to verify whether employees are prepared to perform their job.

2019 saw a number of projects which became a permanent fixture in an extensive range of initiatives taken across the ORLEN Group to promote work safety culture, such as preventive programmes, incentive schemes and competitions for employees and contractors. The Group continued some of its best practices, including the 'Report a Safety Hazard' initiative, the 'OHS Incentive' programme, and the 'Safety First' project. Other projects included the 'Open Day' at the PKN ORLEN Fire Brigade for employees' children, and 'The ORLEN Group Occupational Health and Safety Days' – the annual event dedicated to promoting work safety and healthy lifestyle among the employees and contractors, as well as the customers of PKN ORLEN service stations. PKN ORLEN has also partnered with the Chancellery of the Prime Minister to promote new road traffic rules.

At the same time, the ORLEN Group engaged in efforts to improve and develop the area of fire safety, including drills at fuel terminals. Members of the PKN ORLEN Fire Brigade participated in dedicated courses and training, including in fire prevention, rescue at height, water rescue operations and rescue diving, as well as operation of unmanned aircraft (drones). Reference visits were held at the ORLEN Group Fire Brigades, which included examination of each unit's technical equipment. Meetings bringing together fire prevention specialists representing individual ORLEN Group companies were also held, at which joint rules of preventive inspections were established and a uniform format of follow-up documentation was drafted.

Under the project carried out in partnership with the Warsaw University of Technology, PKN ORLEN experts delivered another series of lectures on 'Plant safety' for full-time and part-time students of Chemical Technology.

In 2019, PKN ORLEN and PERN S.A. signed an agreement on effective cooperation and active integration of the initiatives taken by both companies in an effort to prevent safety emergencies (accidents, breakdowns, disasters, fires).

In 2019, as a result of measures taken to monitor work safety and support the improvement of personal and process safety across the ORLEN Group, the Total Recordable Rate* (TRR) for employees and contractors was 0.90, and the T1 Process Safety Events Rate* (PSER) reached 0.09.

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

Jan Szewczak – Member of the Management Board for Finance:

„In 2019 global economy has slowed down to which many factors had vastly contributed, among others: decrease of globals demand for crude oil and liquid fuels, customs wars impacting on international trade, conflict between US and Iran as well as apparent weakening of perspectives for growing economies and eurozone.

Another year in a row the impact of macroeconomic parametres wasn't favourable for Oil&Gas sector, in which the ORLEN Group operates. Decrease in crude oil price of over USD (7)/bbl caused deeper correction of products' quotations and as the result the model downstream margin we are presenting decreased by USD (1.5)/bbl in comparison to the level from 2018. I would also like to draw attention to the very low level of Ural/Brent differential amounting barely USD 0.8/bbl.

The amounts I've presented are significantly different from the market assumptions and predictions that we expected in connection with the entry into force of the IMO regulations. What I wanted to say is a significant difference in the quotations between Ural and Brent crude oil, i.e. the aforementioned differential and high margins on medium distillates.

The ORLEN Group, despite the negtive impact of the macro environment, achieved very good operating results in 2019.

EBITDA LIFO amounted to PLN 9.2 billion and net profit to PLN 4.3 billion. The Concern has stable financial foundations - net debt decreased by nearly PLN (3.2) billion to PLN 2.4 billion and the financial leverage was 6.3%. PKN ORLEN systematically shares profits with its shareholders - in 2019 we paid PLN 1.5 billion in dividends that is PLN 3.5 per share."

4.1. MACROECONOMIC SITUATION

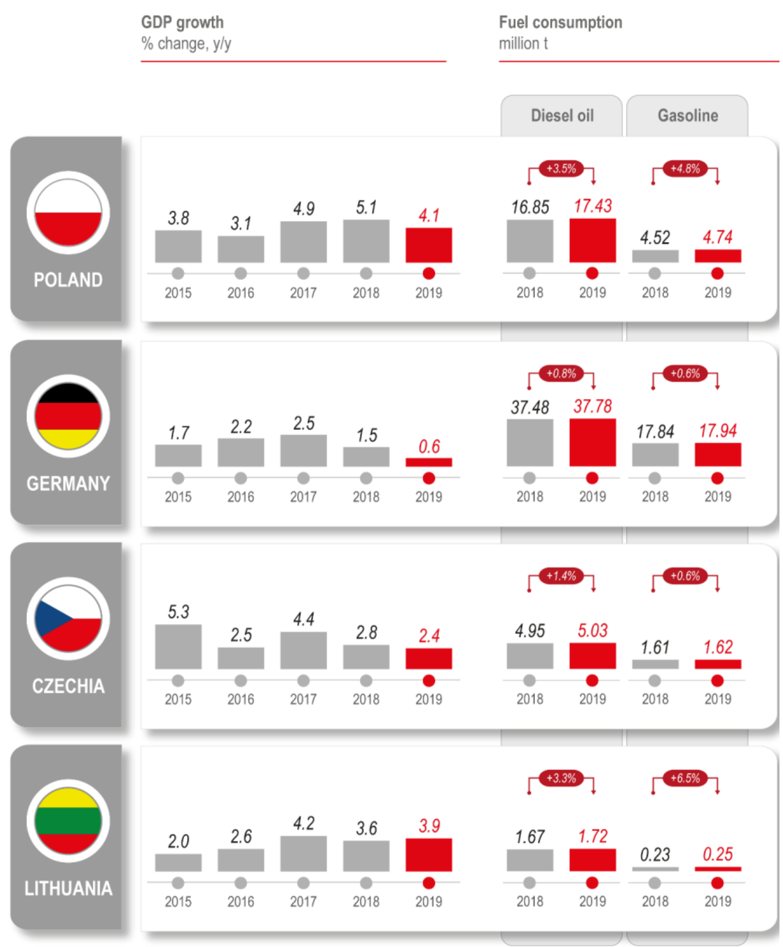
The ORLEN Group operates within variable macroeconomic environment.

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 31. GDP index and fuel consumption



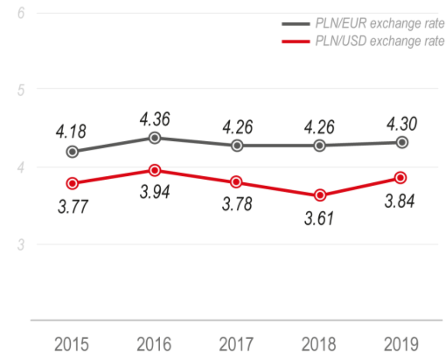
Source: GDP based on EUROSTAT and the Central Statistical Office
Consumption – own preparation based on own estimation, databases form Energy Market Agency, the Lithuanian Statistical Office, the Czech Statistical Office and the German Oil Industry Association.

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 32. Average exchange rate.



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

Among external indicators typical for refinery and petrochemical industry, the following macroeconomical parameters are of crucial importance: crude oil price, so called Brent/Ural differential and margins on refinery and petrochemical products offered by the ORLEN Group.

The main raw material used by the ORLEN Group is crude oil, of which world prices fluctuate as a result of changes in global demand and supply as well as under the influence of geopolitical indicators. Due to about 76% share of high-sulphur crude oils Ural type in the crude oil slate of the ORLEN Group also Brent/Ural differential affects the operating results significantly.

DIAGRAM 33. Brent crude oil (USD/bbl).

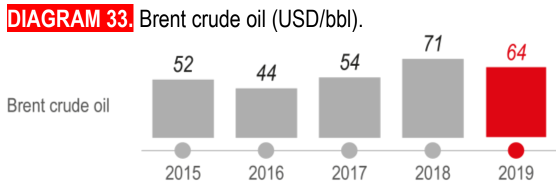
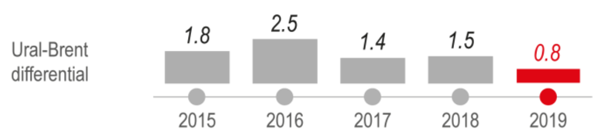


TABLE 15. Ural/Brent differential (USD/bbl).

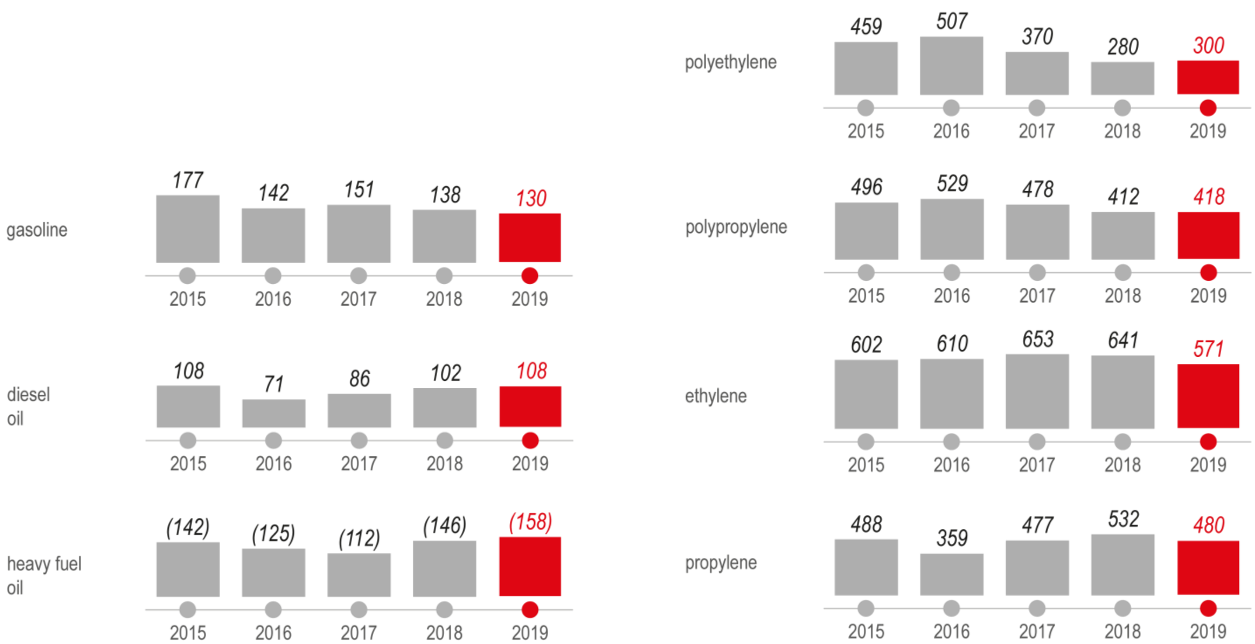


Source: Owned preparation.

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 34. Refinery margins („crack") (USD/t) and petrochemical margins (EUR/t) from quotations.



Source: Own preparation based on Platts and ICIS data.

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 35. Model Downstream margin [USD/bbl].

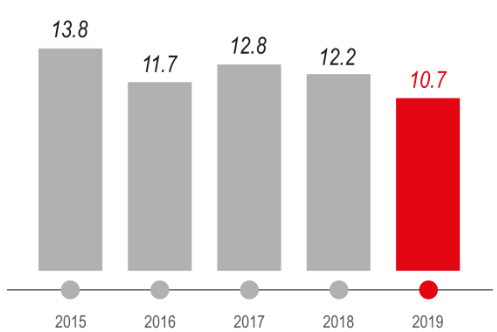


TABLE 16. The Downstream margin product structure – crack margins from quotations for base products.

Product	2019	2018	2017	2016	2015
Refinery products (USD/t)					
Gasoline	130	138	151	142	177
Diesel oil	108	102	86	71	108
Heavy heating oil	(158)	(146)	(112)	(125)	(142)
SN 150	102	191	295	139	177
Petrochemical products (EUR/t)					
Ethylene	571	641	653	610	602
Propylene	480	532	477	359	488
Benzene	184	261	398	296	278
Paraxylene	431	448	418	431	416

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 industry terms at the end of this report.

DIAGRAM 36. Model refining margin [USD/bbl].

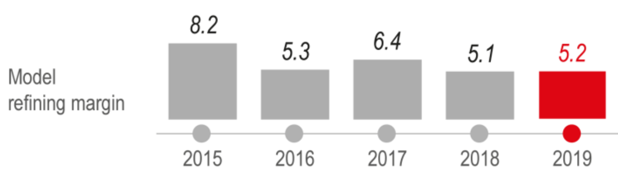
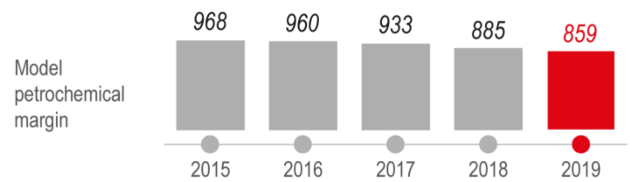


DIAGRAM 37. Model petrochemical margin [EUR/t].



Source: Own preparation based on Platts and ICIS data.

The Upstream segments results are to a large extend dependent on curret quotations of CLS (Canadian Light Sweet) crude oil and AECO natural gas.

DIAGRAM 38. CLS crude oil price [USD/bbl]

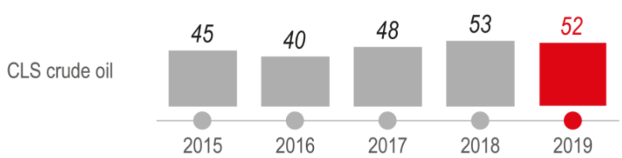
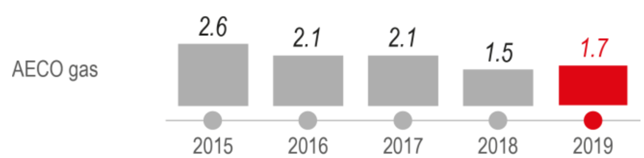


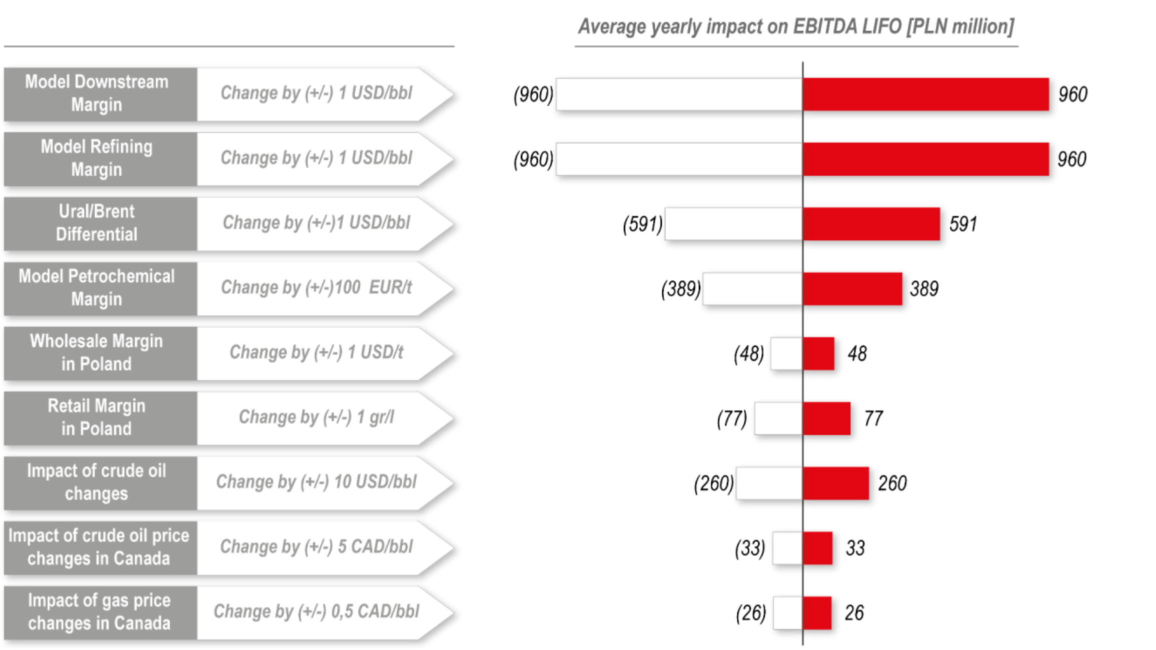
DIAGRAM 39 AECO Natural gas quotations [CAD/GJ]



Source: Own preparation based on Platts and ICIS data.

Sensitivity analysis

DIAGRAM 40. Sensitivity analysis of the change in the key macroeconomic parameters[1] [PLN million].



- Estimates of impact of charges in **the model downstream margin and model refining margin** were performed assuming the average yearly processing capacity of crude oil in the ORLEN Group around **250** million bbl.
- Estimates of impact of changes in **Ural/Brent differential** were performed assuming processing capacity of URAL crude oil in the ORLEN

Group at the level **154** million barrels.

- 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 **905** thousand tonnes per year (Unipetrol / 519 thousand tonnes and BOP (50%) / 386 thousand tonnes).
- Estimates of the impact of changes in **wholesales margin** were performed assuming the volume of sales (gasoline and diesel oil) in Poland approximately **12.5** million tonnes per year, while impact of changes in **retail margin** were performed assuming the volume of sales of fuel in Poland of approximately **7.7** billion litres.
- Estimates of the impact of changes in crude oil prices were performed assuming the structure of the basket of products and inputs from model downstream margin, consists mainly of the effect of higher costs of raw materials' usage for own energy needs.
- Estimates of the impact of changes in hydrocarbon quotations in Canada were performed assuming the production of hydrocarbons at the level of **6.3** 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.

4.2. FINANCIAL RESULTS

For information on the policies applied in the preparation of the full-year consolidated financial statements see section 2 and section 5.2. of the Consolidated Financial Statements for 2019.

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

Items, PLN million	2019	2018	2017	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Sales revenues	111 203	109 706	95 364	1 497	1.4%
Cost of sales	(97 301)	(97 265)	(81 766)	(36)	(0.0%)
Gross profit on sales	**13 902**	**12 441**	**13 598**	**1 461**	**11.7%**
Distribution expenses	(6 355)	(4 745)	(4 327)	(1 610)	(33.9%)
Administrative expenses	(1 806)	(1 590)	(1 537)	(216)	(13.6%)
Other operating income	1 246	2 150	1 243	(904)	(42.0%)
Other operating expenses	(1 717)	(1 152)	(568)	(565)	(49.0%)
Share in profit from investments accounted for under equity method	136	127	248	9	7.1%
Profit from operations under LIFO increased by amortisation and depreciation (EBITDA LIFO) before impairment allowances1)	**9 172**	**8 324**	**10 448**	**848**	**10.2%**
Profit from operations under LIFO increased by amortisation and depreciation (EBITDA LIFO)	**8 993**	**9 028**	**10 279**	**(35)**	**(0.4%)**
Profit from operations increased by amortisation and depreciation (EBITDA)	**8 862**	**9 888**	**11 078**	**(1 026)**	**(10.4%)**
Profit from operations (EBIT)	**5 365**	**7 215**	**8 657**	**(1 850)**	**(25.6%)**
Financial income	890	1 413	1 760	(523)	(37.0%)
Financial costs	(901)	(1 517)	(1 700)	616	40.6%
Net financial revenues and expenses	**(11)**	**(104)**	**60**	**93**	**89.4%**
Profit before tax	**5 352**	**7 110**	**8 717**	**(1 758)**	**(24.7%)**
Income tax	(1 054)	(1 506)	(1 544)	452	30.0%
Net profit	**4 298**	**5 604**	**7 173**	**(1 306)**	**(23.3%)**

1) The net allowances for impairment of property, plant & equipment and intangible assets:
- *year 2019 in the amount of PLN (179) million – concerns mainly upstream assets of the ORLEN Upstream Group in Poland.*
- *year 2018 in the amount of PLN 704 million – concerns mainly reversal of allowance for impairment of the 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 the ORLEN Upstream Group in Poland.*

As at 31 December 2019, an impairment indicators were identified in the ORLEN Group in accordance with IAS 36 "Impairment allowances of assets" related to the approval on 19 December 2019 The Financial Plan of PKN ORLEN S.A. and the ORLEN Group for the year 2020 by the Management Board and the Supervisory Board of PKN ORLEN.
The macroeconomic assumptions of The Financial Plan of PKN ORLEN S.A. and the ORLEN Group for 2020 were based on the analyses and recommendations of renowned global advisors,

including IHS Markit, Nexant, JBC Energy, PVM, EIA, Platts, Continuum Economics, Wood Mackenzie Chemicals, observations of main competitors and expert knowledge of the ORLEN Group.
Production assets of the Upstream segment located both in Poland and Canada have been assessed by independent companies using current knowledge and geological techniques, engineering and computer software.

For description of the methodology of impairment testing and recognition of impairment losses, see section 12.4. of the Consolidated Financial Statements for 2019.
For the complete consolidated statement of profit or loss and other comprehensive income, see the Consolidated Financial Statements for year 2019.

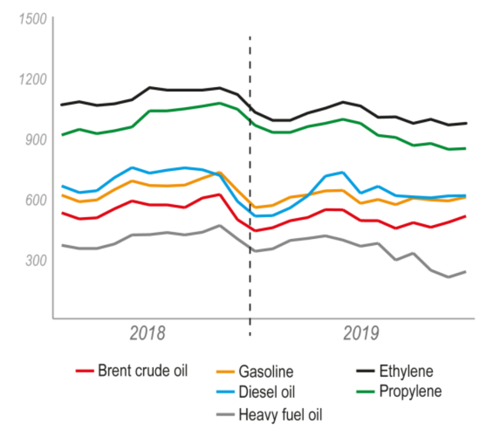
Sales revenue

Revenue of the ORLEN Group amounted to PLN 111,203 million, an increase of 1.4% (y/y) mainly as a result of higher volume of sales in all operating segments and changes in the sales' structure:

- Revenue of the **Downstream segment** increased by 1.1% (y/y), despite lower products quotations, mainly due to the reduction of sales of low-margin heavy refinery fraction by (355) thousand tonnes and higher volume by 24 thousand tonnes.
- Revenue of the **Retail segment** increased by 4.3% (y/y), which was chiefly an effect of higher sales volume of fuels by 369 thousand tonnes (y/y) as well as higher non-fuel sales.
- **The Upstream segment** increased revenue by 0.5% (y/y) mainly as a result of higher by 8 thousand tonnes (y/y) production of hydrocarbons.

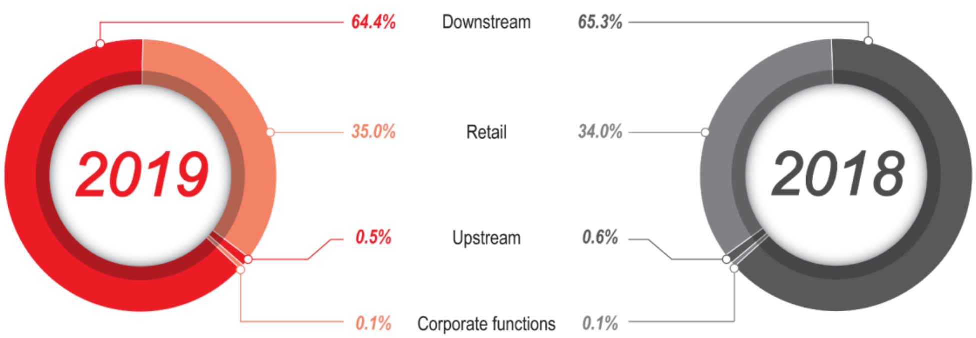
The increase in revenue was achieved in conditions of lower quotations of gasoline by (9)%, diesel oil by (7)%, heavy heating oil by (17)%, ethylene by (9)% and propylene by (8)%.

DIAGRAM 41. Quotation of crude oil and main products of the ORLEN Group.



Source: Own preparation based on Platts and ICIS data.

DIAGRAM 42. Revenues from sales of the ORLEN Group by segment.



For description of changes in sales volumes of the operating segments, see section 3.2.1.3.

Poland continues to be the ORLEN Group's main market in terms of revenue, with PLN 51,591 million worth of products and services sold, followed by Germany PLN 16,102 million. In the Czech Republic, the Group earned revenue of PLN 14,802 million, and in the Baltic States – PLN 11,972 million.

Operating expenses

TABLE 18. Cost of goods sold in the ORLEN Group.

Item, PLN million	2019	2018	2017	structure 2019	structure 2018	structure 2017	change %
1	2	3	4	5	6	7	8=(2-3)/3
Materials and energy	(75 468)	(75 789)	(57 277)	71.4%	72.7%	64.7%	(0.4%)
Cost of merchandise and raw materials sold	(16 035)	(16 484)	(20 500)	15.2%	15.8%	23.2%	(2.7%)
External services	(4 519)	(4 593)	(4 218)	4.3%	4.4%	4.8%	(1.6%)
Employee benefits	(2 942)	(2 628)	(2 391)	2.8%	2.5%	2.7%	11.9%
Depreciation and amortisation	(3 497)	(2 673)	(2 421)	3.3%	2.6%	2.7%	30.8%
Taxes and charges	(2 659)	(1 540)	(1 204)	2.5%	1.5%	1.4%	72.7%
Other	(647)	(543)	(524)	0.6%	0.5%	0.5%	19.2%
Cost by nature	**(105 767)**	**(104 250)**	**(88 535)**	**100.0%**	**100.0%**	**100.0%**	**17.8%**
Change in inventories	164	479	688				(65.8%)
Cost of products and services for own use	141	171	217				(17.5%)
Operating cost	**(105 462)**	**(103 600)**	**(87 630)**				**1.8%**
Selling costs	6 355	4 745	4 327				33.9%
General and administrative costs	1 806	1 590	1 537				13.6%
Cost of goods sold	**(97 301)**	**(97 265)**	**(81 766)**				**0.0%**

Operating expenses increased by PLN (1,862) million (y/y) to PLN (105,462) million, mainly on the back of higher taxes and charges, which went up by PLN (1,119) million primarily due to the introduction of the emission charge in Poland as of January 2019. As a manufacturer and importer of motor fuels, the ORLEN Group becomes liable to pay the emission charge on the date when excise duty liability arises.
The main item of operating expenses were raw materials and consumables, mainly crude oil and other chemicals used in technological processes. In the reporting period, raw materials and consumables decreased by PLN 321 million, primarily on the back of falling crude oil prices - down USD (7)/bbl. Lower costs of processed raw materials due to lower crude oil prices were partly offset by the higher oil throughput volume (up 1% (y/y)) and the larger share of low-sulphur crudes in the crude slate.

Higher oil throughput (up by nearly 500 thousand tonnes) was mainly attributable to a year-on-year drop in maintenance shutdowns which, combined with the higher share of sweet crudes in the crude slate, contributed to the rising sales figures for Company-produced fuels and a PLN (449) million decline in cost of merchandise and materials sold.
Higher **distribution costs** were mainly attributable to the above-mentioned emission charge applicable as of the beginning of 2019, an increase in logistics costs on the back of higher fuel sales volumes (both wholesale and retail figures), and rising costs of commissions paid to service station operators.
Higher **administrative expenses** were due to rising salaries and higher workforce (cf. section 3.5). Market pressures to raise wages also impacts the cost of services purchased by the ORLEN Group, including legal, consulting, advisory, IT, and other services.
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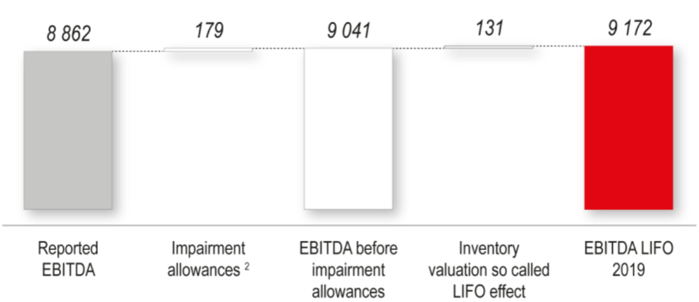
Profit from operations under LIFO[1] increased by amortisation and depreciation before impairment allowances.

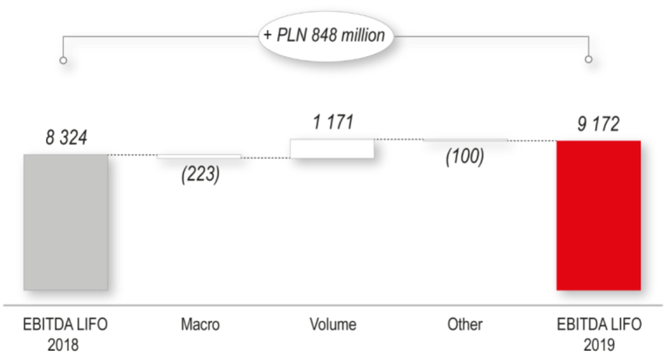
DIAGRAM 43. Reported EBITDA and EBITDA LIFO before impairment allowances [PLN million]



- The ORLEN Group's EBITDA in the w amount of PLN 8,862 million in year 2019.
- Before accounting for the impairment allowances of PLN (179) million, the ORLEN Group's EBITDA amounted to PLN 9,041 million.
- The impact of changes in crude oil prices on inventory valuation included in EBITDA amounted to PLN (131) million.
- As a result the ORLEN Group's **EBITDA LIFO for year 2019 amounted to PLN 9,172 million**.

1) The definitions of LIFO method of inventories valuation is presented in "Glossary of selected industry terms".
2) Net impairment allowances of property, plant and equipment and intangible assets in the amount of PLN (179) million concerned mainly exploration assets of the ORLEN Upstream Group in Poland.

DIAGRAM 44 Factors affecting change of EBITDA LIFO (y/y) [PLN milion].



The ORLEN Group's EBITDA LIFO before impairment of non-current assets was higher by PLN 848 million (y/y).

- Macroeconomic volatility drove down the ORLEN Group's results by **PLN (223) million (y/y)**, which was mainly due to the negative impact of lower Ural/Brent differential (down USD (0.7)/bbl) and lower margins on light distillates, heavy fractions, olefins, PTA and PVC, partly offset by higher margins on middle distillates and fertilizers as well as the depreciation of the złoty against other currencies.
- Improved downstream segment's sales structure as a result of lower sales of heavy fractions, combined with higher sales volumes across all operating segments (up 1% (y/y)), triggered a positive volume-related effect of **PLN 1,171 million (y/y).**
- The negative impact of other factors was **PLN (100) million (y/y)** and included mainly:
  - the negative effect of a change in net other income/(expenses) of PLN (586) million (y/y) (after elimination of the net effect of impairment losses on assets), mainly due to the absence of the compensation of PLN (264) million paid by insurers in 2018 in connection with the accident at the Unipetrol Group's ethylene unit, the measurement and net settlement of derivative financial instruments related to operating exposures and the net ineffective portion of the measurement and settlement of operating exposures of PLN (180) million (y/y) as well as shortages of materials in external warehouses in the amount of PLN (156) million.
  - the effect of net changes in inventory write-downs to net realisable values, of PLN 203 million (y/y), mainly due to the negative effect of falling crude prices in 2018.
  - PLN 283 million (y/y) – other factors, including mainly the effect of higher fuel wholesale and retail margins combined with higher overheads and labour costs.

Net financual income / costs and net result

In 2019, net finance expenses were PLN (11) million and included mainly net interest expense calculated using the effective interest rate of PLN (241) million as well as the settlement and measurement of net financial instruments of PLN 254 million.
After tax expense of PLN (1,054) million, the ORLEN Group posted a net profit of PLN 4,298 million, down by PLN (1,306) million (y/y).

Detailed information on financial income and costs (section 11.11) and income tax (section 11.13) are available in Consolidated Financial Statement for year 2019.

Segments' results of the ORLEN Group

DIAGRAM 45. EBITDA LIFO – segments' results [PLN million].

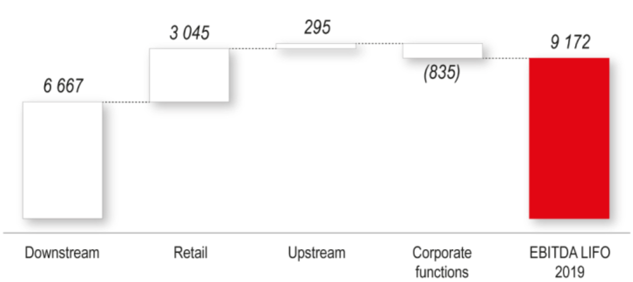
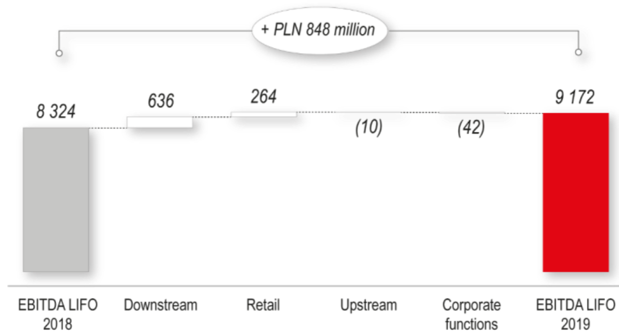


DIAGRAM 46. Change in segments' results [PLN million]



Downstream Segment

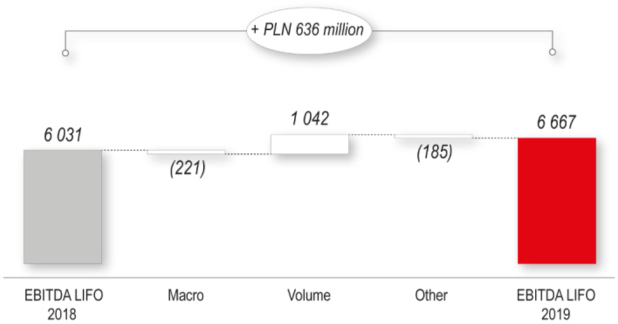
TABLE 19. Basic financial data of the Downstream segment.

Downstream Segment, PLN million	2019	2018	2017	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Segment revenues, including:	90 703	89 737	75 241	966	1.1%
Sales revenues from external customers	71 604	71 663	61 425	(59)	(0.1%)
Sales revenues from transactions with other segments	19 099	18 074	13 816	1 025	5.7%
Segments expenses	(86 419)	(85 204)	(68 410)	(1 215)	(1.4%)
Other operating income/expenses, net	(311)	1 137	854	(1 448)	-
(Loss)/reversal of loss due to impairment of financial instruments	(10)	(5)	0	(5)	(100.0%)
Share in profit from investments accounted for under equity method	136	127	247	9	7.1%
Profit from operations under LIFO increased by depreciation and amortisation (EBITDA LIFO) before impairment allowances[1)]	**6 667**	**6 031**	**8 720**	**636**	**10.5%**
Profit from operations under LIFO increased by depreciation and amortisation (EBITDA LIFO)	6 610	6 723	8 701	(113)	(1.7%)
Profit from operations increased by depreciation and amortisation (EBITDA)	6 479	7 583	9 500	(1 104)	(14.6%)
Profit from operations under LIFO (EBIT LIFO)	**4 230**	**4 932**	**7 133**	**(702)**	**(14.2%)**
Profit from operations (EBIT)	4 099	5 792	7 932	(1 693)	(29.2%)
Increase in non-current assets	2 989	2 451	2 925	538	22.0%

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

- *Year 2019 in the amount of PLN (57) million – related mainly to allowance created for impairment in PKN ORLEN in the amount of PLN (24) million and in the Unipetrol Group in the amount of PLN (32) million,*
- *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.*

DIAGRAM 47. Downstream Segment – factors impact (y/y) [million PLN].



In 2019, EBITDA LIFO of the ORLEN Group's Downstream segment, before impairment of non-current assets, amounted to PLN 6,667 million and was higher by PLN 636 million (y/y).

- Macroeconomic volatitlity drove down the ORLEN Group's results by PLN (221) million (y/y), which was mainly due to the negative impact of lower Ural/Brent differential (down USD (0.7)/bbl) and lower margins on light distillates, heavy fractions, olefins, PTA and PVC, partly offset by higher margins on middle distillates and fertilizers as well as the depreciation of the złoty against other currencies
- Improved downstream segment's sales structure as a result of lower sales of heavy fractions, combined with higher sales volumes mainly in petrochemistry and power industry, triggered a positive volume-related effect of PLN 1,042 million (y/y).
- The negative impact of other factors was PLN (185) million (y/y) and included mainly:
  - PLN (699) million (y/y) – the negative effect of a change in net other inome/(expenses) (after elimination of the net effect of impairment losses on assets), mainly due to the absence of the compensation of PLN (264) million paid by insurers in 2018 in connection with the accident at the Unipetrol Group's ethylene unit and the measurement and net settlement of derivative financial instruments related to operating exposures.
  - PLN 514 million (y/y) – other factors, including mainly the effect of higher fuel wholesale margins combined with higher overheads and labour costs as well as the positive effect (y/y) of net changes in inventory write-downs to net realisable values of PLN 205 million (y/y).

After accounting for impairment of non-current assets of PLN (57) million, the ORLEN Group's EBITDA LIFO in 2019 amounted to PLN 6,610 million.

The negative impact of changes in crude oil prices in inventory valuation amounted to PLN (131) million and as a result the ORLEN Group's EBITDA amounted to PLN 6,479 million.

The segment's capital expenditures increased by PLN 538 million (y/y) to the level of PLN 2,989 million – the key capital expenditure projects are decribed in **section 4.4.**

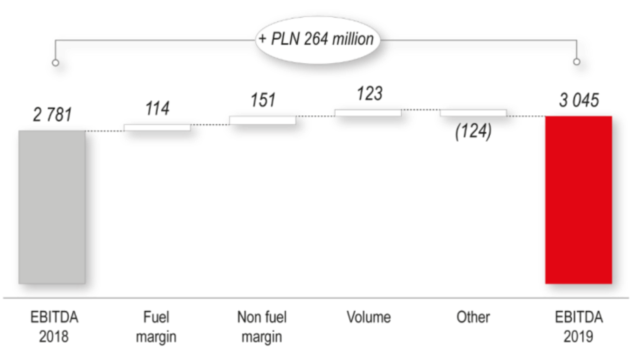
Retail Segment

TABLE 20. Basic financial data for the Retail segment.

SEGMENT DETAL, mln PLN	2019	2018	2017	zmiana	zmiana %
1	2	3	4	5=(2-3)	6=(2-3)/3
Segment revenues, including:	39 089	37 474	33 630	1 615	4.3%
Sales revenues from external customers	38 910	37 339	33 350	1 571	4.2%
Sales revenues from transactions with other segments	179	135	280	44	32.6%
Segment expenses	(36 645)	(35 139)	(31 986)	(1 506)	(4.3%)
Other operating income/expenses, net	(6)	(27)	(28)	21	77.8%
(Loss)/reversal of loss due to impairment of financial instruments	(7)	(2)	0	(5)	(250.0%)
Profit from operations increased by depreciation and amortisation (EBITDA) before impairment allowances 1)	**3 045**	**2 781**	**2 049**	**264**	**9.5%**
Profit from operations increased by depreciation and amortisation (EBITDA)	3 061	2 767	2 038	294	10.6%
Profit from operations (EBIT)	**2 431**	**2 306**	**1 616**	**125**	**5.4%**
Increase in non-current assets	1 391	832	678	559	67.2%

1) The net allowances for impairment of property, plant & equipment and intangible assets:
- *year 2019 in the amount of PLN 16 million – related mainly to PKN ORLEN S.A. of PLN 23 million.*
- *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.*

DIAGRAM 48. Retail segment – factors impact (y/y) [PLN million].



In 2019, EBITDA of the ORLEN Group's Retail segment, before net impairment allowances of non-current assets, reached a recor level of PLN 3,045 million and was higher by PLN 264 million (y/y).

- Positive impact of fuel margins, mainly on the Polish and Czech markets.
- Positive impact of non-fuel margins on all operating markets.
- Higher by 3% (y/y) sales volume on all retail markets of the ORLEN Group.
- The other factors include mainly increased costs of operations of fuel stations resulting from the higher sales volume.

After accounting for impairment of non-current assets of PLN 16 million, the ORLEN Group's EBITDA for year 2019 amounted to PLN 3,061 million.

The segment's capital expenditures increased by PLN 559 million (y/y) to the level of PLN 1,391 million – the key capital expenditure projects are decribed in section 4.4.

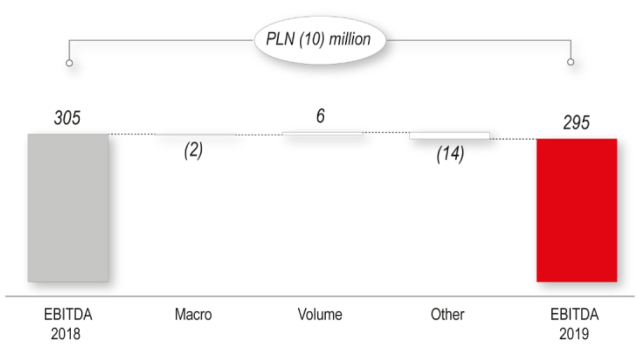
Upstream segment

TABLE 21. Basic financial data for the Upstream segment.

Upstream Segment, PLN million	2019	2018	2017	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Segment revenues, including:	608	605	515	3	0.5%
Sales revenues from external customers	608	605	515	3	0.5%
Sales revenues from transactions with other segments	0	0	0	0	-
Segment expenses	(598)	(570)	(540)	(28)	(4.9%)
Other operating income/expenses, net	(165)	(56)	(141)	(109)	(194.6%)
(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	0	1	0	-
Profit from operations increased by depreciation and amortisation (EBITDA) before impairment allowances[1)]	**295**	**305**	**293**	**(10)**	**(3.3%)**
Profit/(Loss) from operations increased by depreciation and amortisation (EBITDA)	164	287	153	(123)	(42.9%)
(Loss) from operations (EBIT)	**(155)**	**(21)**	**(165)**	**(134)**	**(638.1%)**
Increase in non-current assets	632	740	778	(108)	(14.6%)

1) The net allowances for impairment of property, plant & equipment and intangible assets:
- *Year 2019 in the amount of PLN (131) million – concerns mainly exploration assets of ORLEN Upstream Group in Poland,*
- *year 2018 in the amount of PLN (18) million – concerns mainly exploration assets of ORLEN Upstream Group in Poland,*
- *year 2017 in the amount of PLN (140) million – concerned mainly exploration assets of ORLEN Upstream Group in Poland.*

DIAGRAM 49. Upstream segment – factors impact (y/y) [PLN milion].



In 2019, EBITDA of the Upstream segment, before net impairment allowances of non-current assets, amounted to PLN 295 million and was lower by PLN (10) million (y/y).

- Lower CLS crude oil and NGL condensate quotations with higher AECO gas prices.
- Positive impact of higher (y/y) hydrocarbons production mainly on Canadian market.
- Other factors include mainly an increase in segments' operating costs due to carried out exploration and extraction activities and higher production of hydrocarbons.

After accounting for impairment of non-current assets of PLN (131) milion, the ORLEN Group's EBITDA for year 2019 amounted to PLN 164 million.

The segment's capital expenditures decreased by PLN (108) million (y/y) to the level of PLN 632 million – the key capital expenditure projects are decribed in section 4.4.

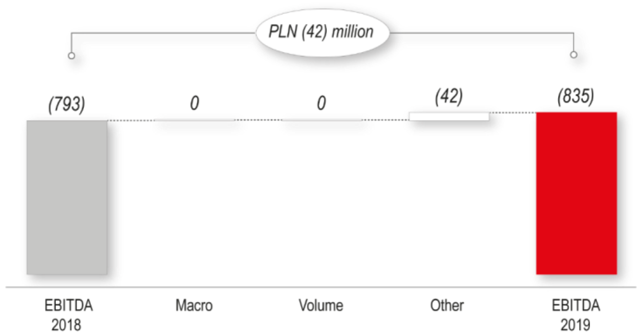
Corporate Functions

TABLE 22. Basic financial data for Corporate Functions.

Corporate Functions segment, PLN million	2019	2018	2017	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Segment revenues. including:	525	530	416	(5)	(0.9%)
Sales revenues from external customers	81	99	74	(18)	(18.2%)
Sales revenues from transactions with other segments	444	431	342	13	3.0%
Segment expenses	(1 522)	(1 327)	(1 132)	(195)	(14.7%)
Other operating income/expenses. net	11	(56)	(10)	67	-
(Loss)/reversal of loss due to impairment of financial instruments	(24)	(9)	0	(15)	(166.7%)
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)	**(835)**	**(793)**	**(614)**	**(42)**	**(5.3%)**
(Loss) from operations increased by depreciation and amortisation (EBITDA)	(842)	(749)	(613)	(93)	(12.4%)
(Loss) from operations (EBIT)	**(1 010)**	**(862)**	**(726)**	**(148)**	**(17.2%)**
Increase in non-current assets	445	257	221	188	73.2%

1) The net allowances for impairment of property, plant & equipment and intangible assets:
- *year 2019 in the amount of PLN (7) million – related mainly impairment allowances in PKN ORLEN,*
- *year 2018 and 2017 amounted to respectively: PLN 44 and 1 million – related mainly to reversal of impairment allowances of Unipetrol Group.*

DIAGRAM 50. Corporate Functions – factors impact (y/y) [PLN million].



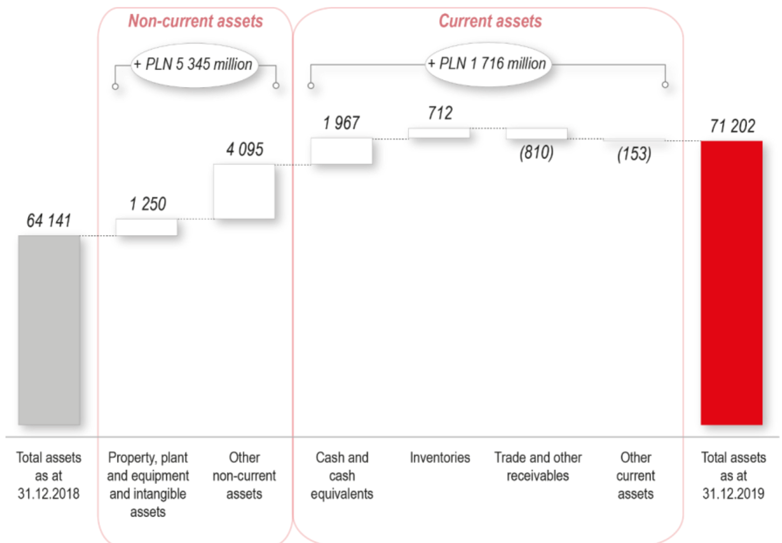
In 2019, EBITDA of the Corporate functions, before net impairment allowances of non-current assets, was lower by PLN (42) million (y/y).

- Wage preassure from the labour market (y/y) and increase in oveheads, mainly costs of sponsorhip and advertisement (Formula 1).
- The positive effect of net other income/(expenses), after eliminating the impact of impairment allowances, resulting mainly from lower (y/y) donations for charity and social needs.

The capital expenditures incurred within corporate functions in year 2019 increased by PLN 188 million (y/y) to the level of PLN 445 million – the key capital expenditure projects are decribed in section 4.4.

4.2.2. Consolidated statement of financial position

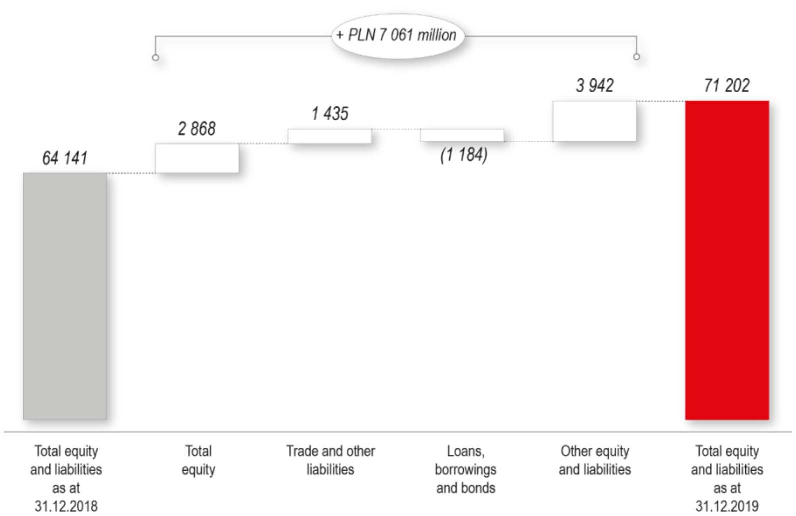
DIAGRAM 51. Change of selected items from consolidated assets [PLN million].



As at December 31st 2019, the ORLEN Group's total assets grew by PLN 7,061 million compared with the end of 2018.

- The PLN 5,345 million increase in non-current assets was mainly attributable to:
  - an increase in property, plant and equipment and intangible assets of PLN 1,250 million as a result of capital expenditure of PLN 4,382 million – key investment projects were presented in section 4.4, and depreciation and amortisation charges of PLN (3,497) million,
  - recognition of a right-of-use asset of PLN 3,952 million following the introduction of the new IFRS 16 standard effective as of January 1st 2019.
- The PLN 1,716 million increase in current assets was mainly attributable to:
  - higher cash and cash equivalents,
  - increase in inventories due to higher emergency stocks of crude oil and fuels – a combined effect of higher sales volumes and stock replenishment after using crude oil inventories following contamination of pipelines with organic chlorine compounds,
  - decline in trade and other receivables due to lower revenue reported as at the end of Q4 2019. Unfavourable macroeconomic conditions resulted in lower production output and product sales figures, mainly at the ORLEN Lietuva Group.
  - decline in other current assets due to non-current assets held for sale by PLN (164) million, mainly the sale of Pouce Coupe assets in Q1 2019.

DIAGRAM 52. Changes of selected items from consolidated equity and liabilities [PLN million].



ORLEN Group's total equity and liabilities increased by PLN 7,061 million compared with December 31st 2018.

- Increase in equity chiefly as a result of recognition of a net profit of PLN 4,298 million for 2019 and the effect of exchange gains/(losses) on translating the equity of foreign operations of PLN 138 million, combined with a decline in equity following payment of PLN (1,497) million as dividend from retained earnings and the effect of hedging reserve of PLN (33) million.
- Increase in trade and other payables on the back of increases in trade payables (PLN 614 million), investment commitments (PLN 295 million), tax liabilities (PLN 143 million), and other liabilities related mainly to the squeeze-out of Unipetrol's non-controlling interests (PLN 190 million).
- The ORLEN Group's debt fell as a result of net repayment of PLN (1,111) million under borrowings and bonds, and the PLN (73) million net effect of exchange gains on remeasurement of foreign currency debt and interest.
- Other liabilities include mainly an increase in lease liabilities of PLN 3,998 million following the implementation of the new IFRS 16 standard effective as of January 1st 2019.

As at 31 December 2019, the area of the ORLEN Group's freehold land was 32,5 million m^2 .The Group also held land with an areas of 33.9 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 the Consolidated Financial Statements for 2019.

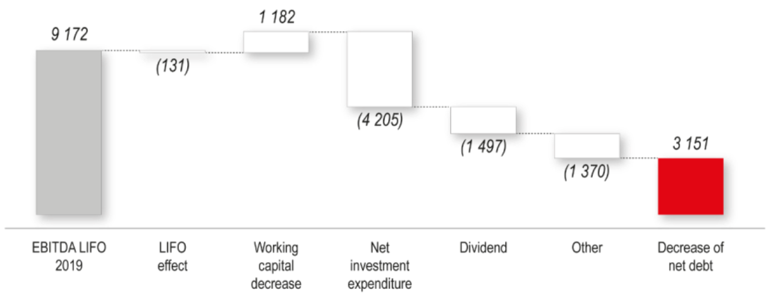
4.2.3. Consolidated statements of cash flows

TABLE 23. Consolidated statement of cash flows.

Item, PLN million	2019	2018	2017	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Net cash from operating activities, including:	**9 319**	**4 980**	**8 050**	**4 339**	**87.1%**
Change in working capital	**1 182**	**(3 059)**	**(1 967)**	**4 241**	**-**
Net cash (used in) investing activities	**(3 994)**	**(3 798)**	**(3 925)**	**(196)**	**(5.2%)**
Net cash (used in) financing activities	**(3 363)**	**(3 237)**	**(2 832)**	**(126)**	**(3.9%)**
Net increase/(decrease) in cash and cash equivalents	**1 962**	**(2 055)**	**1 293**	**4 017**	**-**
Effect of exchange rate changes on cash and cash equivalents	5	3	(121)	2	66.7%
Cash and cash equivalents, beginning of the period	4 192	6 244	5 072	(2 052)	(32.9%)
Cash and cash equivalents, end of the period	**6 159**	**4 192**	**6 244**	**1 967**	**46.9%**

The cash balance in 2019 increased by PLN 1,967 million to PLN 6,159 million as at 31 December 2019.

DIAGRAM 53. Free cash flows [PLN million].



Net debt declined by PLN 3,151 million relative to the end of 2018.

- EBITDA LIFO before impairment losses of PLN 9,172 million, combined with a negative effect of an increase in crude prices on inventory valuation of PLN (131) million.
- Positive effect of the PLN 1,182 million decrease in net working capital – a positive effect of net change in receivables and liabilities combined with a negative effect of higher inventories, mainly crude oil and fuels, following the replenishment of emergency stocks.
- Net expenditure on acquisition of property, plant and equipment, intangible assets and right-of-use assets of PLN (4,205) million.
- Dividends paid in the amount of PLN (1,497) million, i.e. PLN 3.5 per share.
- Other: mainly income tax paid in the amount of PLN (1,498) million, interest paid in the amount of PLN (286) million and lease liabilities paid in the amount of PLN (656) million, as well as dividends received in the amount of PLN 112 million.

4.2.4. Financial ratios

Financial ratios of the ORLEN Group in years 2016-2019 are presented in section 1.4.

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 2019

Change of the ORLEN Group operating results for year 2019, relative to the data presented in the Q4 2019 report issued on 30 January 2020 includes, among others:

- reversal of impairment allowances of non-current assets in Retail and Upstream segment in the amount of PLN 36 million,
- updating estimates of inventory revaluation to net realizable value by current exercise prices in the amount of PLN (93) million.
- shortages of materials in external warehouses in the amount of PLN (156) million.

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 2019.

4.3. FINANCIAL RESOURCES MANAGEMENT

4.3.1. General management policies

Liquidity management
The ORLEN Group uses cash-pool arrangements ("cash-pool systems") to effectively manage its current liquidity and optimise finance costs. As at the end of 2019, 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 2019 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 2019 above system were used by 8 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 2019, 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 ORLENGroup 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 2019 PKN ORLEN did not carry out factoring services.

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

As at the end of 2019, the net working capital was PLN 15,609 million and was lower by PLN (777) million as compared to the level at the end of 2018.

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 24. Sources of financing.

Item, PLN million	2019	2018	2017	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Bank loans	2 136	2 263	48	(127)	(5.6%)
Borrowings	0	0	0	0	-
Debt securities	6 471	7 528	6 957	(1 057)	(14.0%)
Financial indebtedness[1]	**8 607**	**9 791**	**7 005**	**(1 184)**	**(12.1%)**
By maturity:					
Non-current	8 185	8 598	6 688	(413)	(4.8%)
Current	422	1 193	317	(771)	(64.6%)

1) doesn't include liabilities from finance lease

DIAGRAM 54. The debt structure [%].

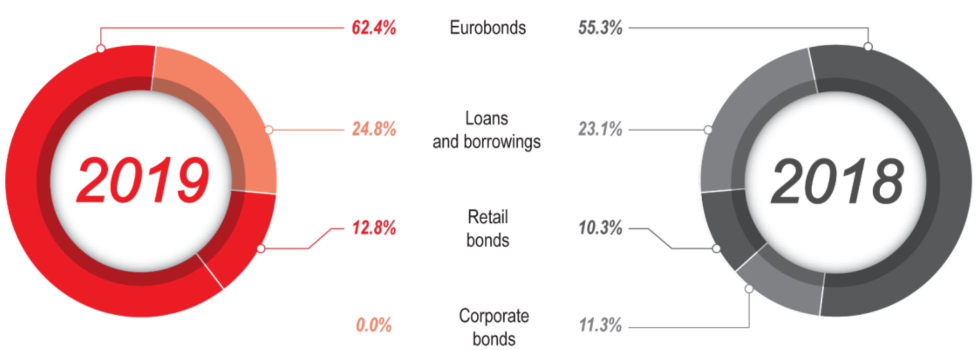


TABELA 25. Credit facilities in force in the ORLEN Group as at 31 December 2019 (excess PLN 100 million).

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 (PLN 6 388 million)	2014	2021	Floating rate + margin
PKN ORLEN	PKO BP	PLN 300 million[2]	2008	Revolving loan	Floating rate + margin
PKN ORLEN	PKO BP	EUR 5 million[2] (PLN 21 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 670 million)	2014	Revolving loan	Floating rate + margin
Unipetrol Group	(Česká spořitelna)	CZK 4 000 million (PLN 670 million)	2014	2020	Floating rate + margin
Unipetrol Group	Commerzbank	CZK 1 000 million (PLN 168 million)	2007	Revolving loan	Floating rate + margin
ORLEN Upstream Group	Citibank, Canadian branch	CAD 70 million (PLN 204 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 2019.
2) The amount will be increased in accordance with annexes of credit facilities.

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

The ORLEN Group companies are required to maintain certain financial indicators within ranges agreed in their credit facility agreements. 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 0.27.

The Group's financial indicators reported for 2019 and presented in section 1.4 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 12.6 of the Consolidated Financial Statements for 2019.

4.3.3. Issue of bonds and use of proceeds

In 2019, 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 5 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 4 series of bonds, issued under this programme of total value PLN 700 million. In 2018 the Company redeemed 1 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 4 series of 4-year retail bonds with a total nominal value of PLN 800 million and 1 series of 5-year bonds with a nominal value of PLN 200 million, of which in 2018 issued 3 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.

Series of both 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 2019 was EUR 1,250 million (PLN 5,323 million, translated at the mid-rate quoted by the National Bank of Poland for EUR/PLN on 31 December 2019). Whereas the nominal value of public bonds issues under Programme 1 and 2 amounted to PLN 1,100 million, as at the end of 2019.

For additional information on bond issues, see section 12.6.1.2 of the Consolidated Financial Statements for 2019.

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 2019:

– 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 849 million at the mid-rate quoted by the National Bank of Poland for CAD/PLN on 31 December 2019) and in August 2019 to CAD 331.5 milion (PLN 966 million at the mid-rate quoted by the National Bank of Poland for CAD/PLN on 31 December 2019).

The outstanding balance as at 31 December 2019 was CAD 331.5 million (PLN 966 million at the mid-rate quoted by the National Bank of Poland for CAD/PLN on 31 December 2019). The final maturity repayment date set for 31 December 2025,

- 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 2019, the outstanding balance of the loan was PLN 28 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 2019 was PLN 75 million. Total loan amount available as at 31 December 2019 was PLN 15 million. The final maturity repayment date was set for 30 June 2021,
- PLN 27 million investment loan advanced to ORLEN Oil in March 2019. The loan payment was divided into tranches. The outstanding balance as at 31 December 2019 was PLN 20 million. Total loan amount available as at 31 December 2019 was PLN 7 million. The final maturity repayment date was set for 30 December 2022,
- PLN 0.6 million investment loan advanced to ORLEN Budonaft in May 2019. The outstanding balance as at 31 December 2019 was PLN 0.6 million. The final maturity repayment date was set for 31 May 2023,
- PLN 336 million and EUR 234 million (PLN 997 million at the mid-rate quoted by the National Bank of Poland for EUR/PLN on 31 December 2019) investment loan advanced to Anwil in May 2019. The outstanding balance as at 31 December 2019 was PLN 13 million and EUR 40 million (PLN 169 million at the mid-rate quoted by the National Bank of Poland for EUR/PLN on 31 December 2019). The final maturity repayment date was set for 30 December 2025,
- PLN 336 million and EUR 234 million (PLN 997 million at the mid-rate quoted by the National Bank of Poland for EUR/PLN on 31 December 2019) investment loan advanced to Anwil in May 2019. The outstanding balance as at 31 December 2019 was PLN 13 million and EUR 40 million (PLN 169 million at the mid-rate quoted by the National Bank of Poland for EUR/PLN on 31 December 2019). The final maturity repayment date was set for 30 December 2025,
- PLN 263 million and EUR 25 million (PLN 106 at the mid-rate quoted by the National Bank of Poland for EUR/PLN on 31 December 2019) investment loan advanced to ORLEN Południe in May 2019. The outstanding balance as at 31 December 2019 was PLN 39 million and EUR 3 million (PLN 13 million at the mid-rate quoted by the National Bank of Poland for EUR/PLN on 31 December 2019). The final maturity repayment date was set for 30 September 2030,
- PLN 15 million investment loan advanced to IKS Solino in August 2019. The outstanding balance as at 31 December 2019 was PLN 8 million. The final maturity repayment date was set for 31 March 2031.

Listed below are loan agreements between the Parent (borrower) and ORLEN Group companies (lenders) which were in effect at the end of 2019:

- 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 2019 was EUR 496 million (PLN 2,111 million at the mid-rate quoted by the National Bank of Poland for EUR/PLN on 31 December 2019) – see section 4.3.3.,
- EUR 740 million long-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 2019 was EUR 740 million (PLN 3,153 million at the mid-rate quoted by the National Bank of Poland for EUR/PLN on 31 December 2019) – 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 2019, the ORLEN Group increased of-balance-sheet liabilities under guarantees and sureties by PLN 1,583 million to PLN 15,358 million. In year 2019 above amount included:

- guarantees and sureties provided to subsidiaries in favour of third parties, for total amount of PLN 9,946 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,
- securities for excise and excise duty on products and goods undergoing the procedure of suspended excise collection in the amount of PLN 2,826 million,
- guarantees concerning liabilities towards third parties issued in the course of normal business operations in the amount of PLN 2,586 million. The amount of PLN 2 billion is a bank guarantee for liabilities under the call issued by PKN ORLEN to subscribe for the sale of all shares of ENERGA S.A. Other guarantees concerned mainly: civil-law guarantees of contract performance and public-law guarantees resulting from generally applicable regulations secured regularity of business licensed in the liquid fuels sector and resulting from this activity tax and customs receivables.

Additional information on sureties and guarantees are presented in section 13.5.4 of the Consolidated Financial Statement for 2019.

Contingent liabilities were presented in section 14.4 of the Consolidated Financial Statement for 2019.

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 13.1. of the Consolidated Financial Statements for 2019.

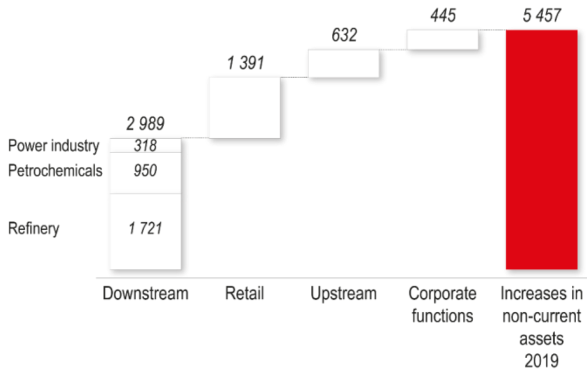
4.3.7. Ratings

In 2019, PKN ORLEN's investment grade ratings granted by two leading rating agencies Fitch Ratings Ltd. and Moody's Investor Services were maintained at the level of BBB- with a stable outlook and Baa2 with a negative outlook, respectively. In December 2019, Moody's Investor Services changed PKN ORLEN's rating outlook from stable to negative, pointing out that the Company's acquisition plans may adversely affect its financial position.

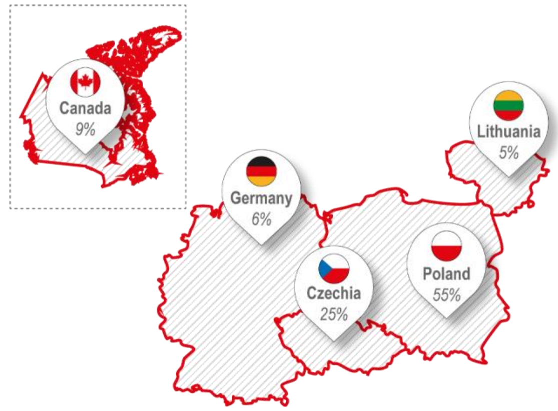
For description of the ratings assigned to bonds and notes issued by the ORLEN Group, see section 4.3.3.

4.4. REALISATION OF INVESTMENT PLANS

DIAGRAM 55. Increase in non-current assets. [PLN million].



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



Major investments projects carried out in 2019 included:

Downstream

- Construction of Polyethylene Unit in the Czech Republic
- Costruction of Metathesis Unit in Płock
- Construction of PPF Splitter in Lithuania
- Projects under the Cavern Strategy in Poland
- Expansion of fertilizer production capacity at Anwil
- Purchase of a licence and front-end-engineering design for the second generation Bioethanol unit in ORLEN Południe
- Construction of the Glycol unit at ORLEN Południe
- Construction of the Research and Development Centre at Płock
- Construction of a boiler house for the Steam Cracker in the Czech Republic
- Construction of a unit for separation of paraffins from reforming feedstock MaxEne at PKN ORLEN

Retail

- 64 new fuel stations opened (43 in Poland, 6 in Germany, 7 in the Czech Republic and 8 in Slovakia),
- 132 fuel stations upgraded and rebranded (127 in Poland and 5 in the Czech Republic),
- 297 new Stop Cafe/Star Connect (including O!SHOP outlets)

Upstream

- Canada – PLN 476 million / Poland – PLN 158 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.

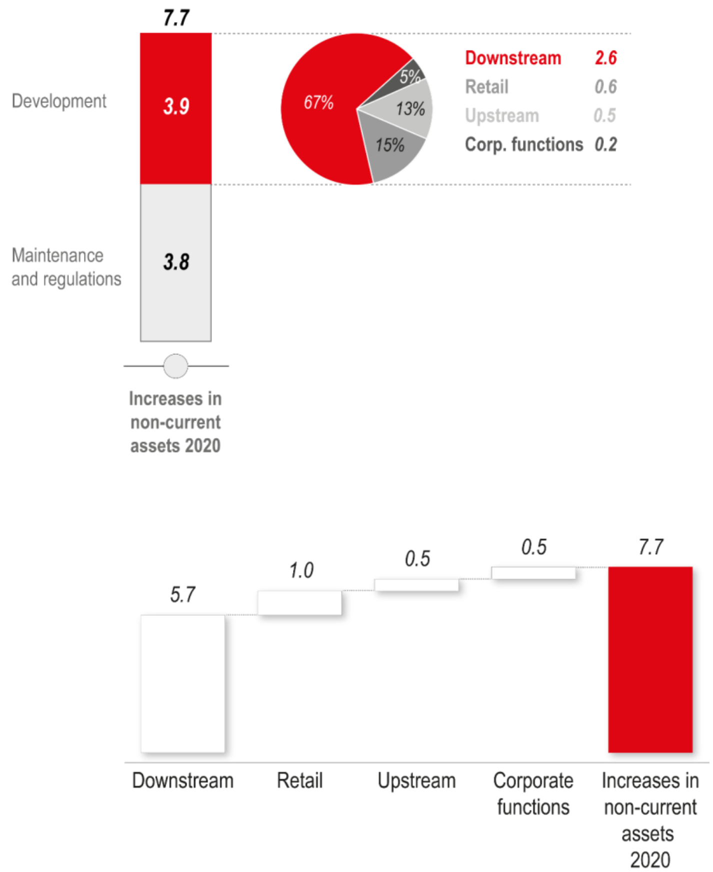
4.5. DEVELOPMENT PROSPECTS

Market prospects in year 2020

Expected macroeconomic environment	• **GDP forecast for 2020** - Poland 3.6%, the Czech Republic 2.4%, Germany 0.9%, Lithuania 2.5%. • **Brent crude price** – crude oil price are expected to be on the higher level than the average price in 2019. Expected increase in crude oil price as a result of OPEC+ countries agreement concerning decreasing of crude oil extraction by 500 thousand bbl/d in the 1st quarter 2020 and further 400 thousand bbl/d in the 2nd quarter 2020 (in total by 2.1 million bbl/d), possible agreement in trade negotiations between USA and China as well as geopolitical risks, limited by decrease of crude oil price as a result of slowdown of global economy and increase of extraction in USA. • **Downstream** margin – expected higher level of downstream margin in comparison with the average downstream margin in year 2019. Refining margin with differential Brent/Ural is expected to growth as an effect of growing demand for medium distillates reduced by falling demand for heavy heating oil and falling demand for Ural crude oil resulting from upcoming implementation of IMO regulation from 1st January of 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. 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	• **Retail sales tax** – enter into force starting from 1st July 2020. • **NIT** – in 2020 basic level of NIT is 8.5% PKN ORLEN will be able to reduce the blending ratio to 5.576%.
Investment activities of the ORLEN Group	• **Main development investments in 2020:** **Downstream** • Extension of fertilizers production in Anwil • Construction of Propylene Glycol Unit in ORLEN Południe • Construction of Visbreaking Unit in Płock • Construction of Research and Development Centre in Płock • Construction of Biogas Unit in ORLEN Południe • Construction of units under the Petrochemical Segment Development Program • Preparation for construction of offshore wind farm on Baltic Sea **Retail** • Development of fuel network (37 new own stations) • Development of non-fuel sales (over 170 new points) • Launching new products and services • Construction of EV chargers (50 new fast charging stations) **Upstream** • Capital expenditure: Canada – ca. PLN 300 million / Poland – ca. PLN 200 million

- **Increase in non-current assets 2020**

DIAGRAM 56. Increase of non-current assets by segments in 2020 [PLN billion].



Scheduled maintenance shutdowns

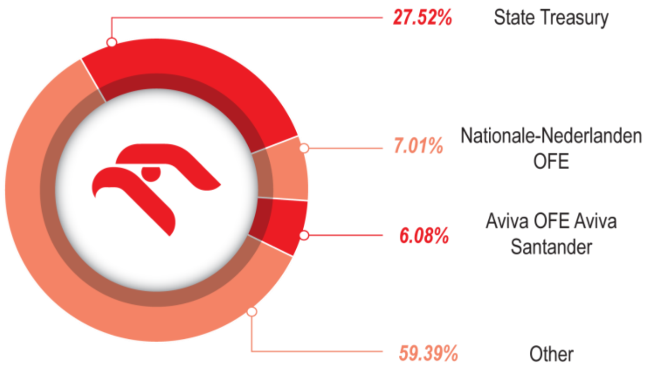
- **Maintenance shutdowns of production units at the ORLEN Group in 2020:**
  - **PKN ORLEN:** shutdown of DRW III, DRW VI, Hydrocracking, HOG, HON VI and V units, Hydrogen Generation I, Hydrogen Recovery, Olefins, PTA, Paraxylene, and CCGT Włocławek units.
  - **ORLEN Lietuva Group:** spring shutdown of the refinery in March 2020, including the process shutdown of the Visbreaking and Vacuum Flasher units, followed by an additional shutdown of the Vacuum Flasher unit in October 2020.
  - **Unipetrol Group:** regular maintenance of the Litvinov and Spolana refineries and spring shutdown of Kralupy refinery.
  - **Anwil:** Alternating shutdowns of lines A and B at the Fertilizers Complex and the autumn shutdown of the PVC Complex.
  - **BOP:** planned shutdown of PE2 and PE3 units.

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 2018.

5.1. PKN ORLEN'S EQUITY AND SHAREHOLDING STRUCTURE

DIAGRAM 57. Shareholding structure of PKN ORLEN. 1)



1) PKN ORLEN shareholding structure as at the date of authorization of the Management Board Report

- 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 2019, the ORLEN Group did not operate any employee stock option scheme.
- In 2019, PKN ORLEN did not buy back its own shares.
- As at 31 December 2019, members of the PKN ORLEN Management Board did not hold any shares of the Company.
- As at 31 December 2019, 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 and WIG-ESG general market indices and in the WIG-FUELS industry index.
In 2019, the blue-chip WIG20 index fell by (5.6)% while the all-cap WIG index rose by 0.2% year on year. The price of PKN ORLEN shares dropped by (20.6)% in the period. Given the payment of dividend and its subsequent reinvestment, the annual rate of return on investment in ORLEN shares was 17.9% in PLN and 17.1% in EUR. In 2019, 194,296,820 PKN ORLEN shares were traded on the main market, a decrease of (7.8)% on 2018.

TABLE 26. Key data regarding PKN ORLEN's shares.

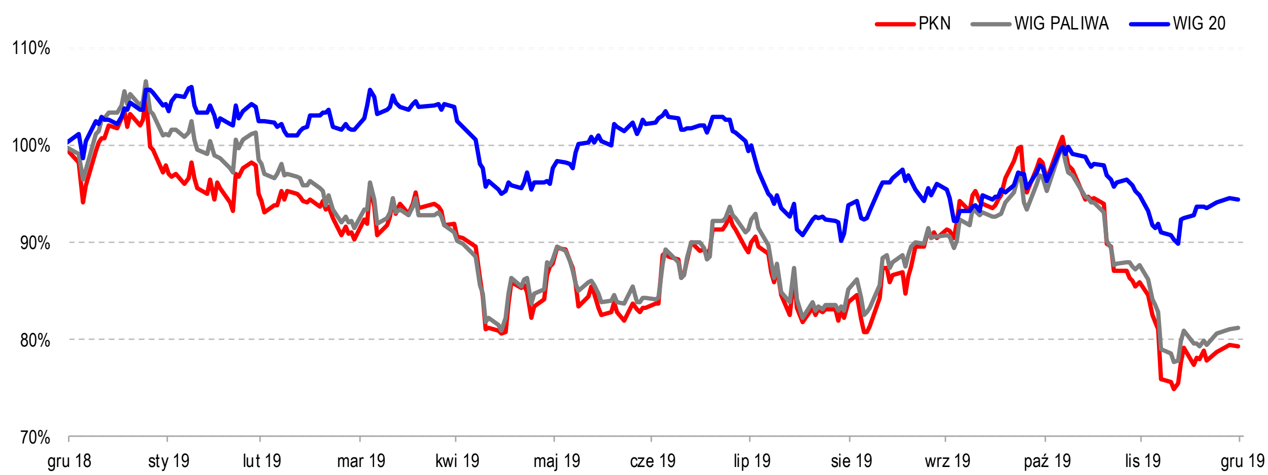
Key data	Unit	2019	2018	2017	change %
1	2	3	4	5	6=(3-4)/4
Net profit attributable to equity owners of the Parent Company	mln PLN	4 300	5 556	6 655	(22.6)%
Highest share price[1]	PLN	113.75	113.50	134.00	0.2%
Lowest share price[1]	PLN	80.98	80.76	81.18	0.3%
Share price at the year-end[1]	PLN	85.82	108.15	106.00	(20.6)%
Average price in the period[1]	PLN	97.40	94.83	109.37	2,7%
P/E[2] ratio average		9.7	7.3	7.0	32.9%
P/E[2] ratio at the end of the year		8.5	8.4	6.8	1.2%
Number of shares	Item	427 709 061	427 709 061	427 709 061	0.0%
Capitalisation at the year end	PLN mn	36 706	46 257	45 337	(20.6)%
Average daily trading value	PLN mn	76	81	91	(6.2)%
Average daily trading volume	Item	783 455	853 103	849 437	(8.2)%

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 58. Quotations of PKN ORLEN on WSE in 1999 – 2019.

Source: Own preparation based on the Warsaw Stock Exchange

DIAGRAM 59. Quotations of PKN ORLEN, WIG20 and WIG-FUELS on WSE in 2019[1)]



1) Percentage change of quotations of PKN ORLEN, WIG 20 in relation to the listing of 28 December 2018.
Source: Own preparation based on the Warsaw Stock Exchange.

5.3. DIVIDEND POLICY

The Company has implemented a dividend policy based on its ratios, financial condition and including expansion plans. The recommendation of profit distribution for PKN ORLEN for 2019 was presented in section 12.7.5 of Consolidated Financial Statement for 2019.

5.4. OPERATINONS

The favourable market climate driven by Poland's high GDP growth rate, low prices of fuel due to falling crude oil prices, and stable labour market conditions, fuelled PKN ORLEN's sales volume increase.

In 2019, the total sales volume (after elimination of intra-Group crude sales) was 19,270 thousand tonnes, an increase of 1.2% (y/y).

TABLE 27. Sales of PKN ORLEN in the Downstream and the Retail segments [in PLN million/thousands of tonnes].

Sales	2019		2018		2017		change %	
	Value	Volume	Value	Volume	Value	Value		
1	2	3	4	5	6	7	8=(2-4)/4	9=(3-5)/5
Downstream Segment	**66 781**	**13 383**	**66 434**	**13 339**	**53 410**	**12 312**	**0.5%**	**0.3%**
Light distillates 1)	3 990	1 609	4 171	1 668	3 378	1 525	(4.3%)	(3.5%)
Medium distillates 2)	19 184	7 179	18 687	7 136	14 048	6 416	2.7%	0.6%
Heavy fractions 3)	2 960	2 193	3 632	2 450	2 708	2 278	(18.5%)	(10.5%)
Monomers 4)	3 310	944	3 072	807	2 898	843	7.7%	17.0%
Aromas 5)	578	228	509	168	562	182	13.6%	35.6%
PTA	1 893	647	1 528	508	1 398	523	23.9%	27.3%
Other 6)	34 866	583	34 835	602	28 418	545	0.1%	(3.2%)
Retail Segment	**22 183**	**5 887**	**20 483**	**5 699**	**16 530**	**5 411**	**8.3%**	**3.3%**
Light distillates 1)	6 973	2 170	6 487	2 040	5 450	1 932	7.5%	6.4%
Medium distillates 2)	11 748	3 718	11 142	3 659	8 709	3 479	5.4%	1.6%
Other 7)	3 462	0	2 854	0	2 371	0	21.3%	-
Total	**88 964**	**19 270**	**86 917**	**19 038**	**69 940**	**17 723**	**2.4%**	**1.2%**

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 31,557 million, PLN 32,090 million in 2018 and PLN 26,388 million in 2017. Also includes revenues from the sale of the 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 17,467 thousand tonnes in 2019, 17,088 thousand tonnes in 2018 and 17,806 thousand tonnes in 2017.
7) Other (in value terms) - includes revenues from sales of non-fuel goods and services

In 2019, sales of PKN ORLEN's **Downstream segment** (after elimination of intra-Group sales of crude oil) increased by 0.3% (y/y), to 13,383 thousand tonnes.

Downstream sales growth was driven by higher sales of petrochemical products, mainly monomers, aromatics and PTA, which were attributable to higher availability of production units and the absence of the impact of the planned shutdown of the Olefin and PTA units of 2018.

Sales of refining products remained largely flat (y/y). Lower sales of heavy low-margin refining fractions were fully offset by higher sales of middle distillates (up 0.6% year on year), mainly on the back of higher sales of aviation fuel, which have been a rise for the past several years driven by the dynamic growth of the aviation services market in Poland. On the other hand, sales of diesel oil remained more or less flat year on year, while sales of light fuel oil declined due to mild weather.
The decline in sales of light distillates, mainly gasoline, was partly offset by a considerable 8.5% (y/y) increase in LPG volumes.
In 2019, the Downstream segment reported a positive effect of a change in the segment's sales structure as sales of heavy refining fractions fell by (257) thousand tonnes (y/y), which drove down the share of those fractions in the segment's total sales figure by (2) percentage points.

The continuing expansion of the service station network, including construction of new outlets with a strong potential in terms of sales volumes, modernisations and closing down of non-performing stations, as well as expansion of the non-fuel offering, led to a 3.3% (y/y) increase in fuel sales volumes in the **Retail segment**, to 5,887 thousand tonnes. Sales of all fuels increased, largely driven by higher fuel consumption in Poland.

For detailed description of sales trend and efficiency measures taken in the Retail segment in Poland, see section 3.2.2.4.

For a description of **the supply sources** for the Downstream and Retail segments, see sections 3.2.1.5. and 3.2.2.5.

In 2019, 2018, and 2017, 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 51,887 million, PLN 51,263 million, and PLN 41,886 million, respectively. The customers were PKN ORLEN's related parties, and the transactions involved mainly sale and purchase of refining and petrochemical products and services.

In 2019 and 2018, 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 13.7.2. of PKN ORLEN Financial Statements for 2019. For information on transactions between PKN ORLEN and related parties of the State Treasury, see section 13.7.3.
Summary of significant transactions in 2019 (above PLN 100 million) between the **Parent and its related parties** is presented in the table below.

TABLE 28. Significant transactions in the ORLEN Group in 2019 [PLN million].

Counterparty	Sales of the Parent Company	Purchases of the Parent Company
ORLEN Paliwa Sp. z o.o.	20 073	1 420
ORLEN Lietuva AB	17 368	1 896
RPA s.r.o.	14 484	1 484
BOP Sp. z o.o.	2 969	34
ORLEN Asfalt Sp. z o.o.	920	0
Anwil S.A.	610	80
ORLEN Oil Sp. z o.o.	285	86
ORLEN Południe S.A.	120	1 379
ORLEN Koltrans Sp. z o.o.	7	181
Orlen Serwis S.A.	6	149
ORLEN Projekt Sp. z o.o.	1	110

5.5. FINANCIAL RESULTS

For detailed information on the policies applied by PKN ORLEN S.A. in the preparation of full-year financial statements, see section 2 of the Financial Statement of PKN ORLEN for 2019

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

TABLE 29. Selected data of profit or loss and other comprehensive income.

Item, PLN million	2019	2018	2017	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Sales revenues	89 049	86 997	70 012	2 052	2.4%
Cost of sales	(79 603)	(78 781)	(62 106)	(822)	(1.0%)
Gross profit on sales	**9 446**	**8 216**	**7 906**	**1 230**	**15.0%**
Distribution expenses	(4 364)	(2 850)	(2 547)	(1 514)	(53.1%)
Administrative expenses	(934)	(809)	(799)	(125)	(15.5%)
Other operating income	775	431	449	344	79.8%
Other operating expenses	(860)	(354)	(222)	(506)	(142.9%)
(Loss)/reversal of loss due to impairment of financial instruments	(4)	(10)	0	6	60.0%
Profit from operations under LIFO increased by amortisation and depreciation (EBITDA LIFO) before impairment allowances1)	**5 972**	**5 025**	**5 332**	**947**	**18.8%**
Profit from operations under LIFO increased by amortisation and depreciation (EBITDA LIFO)	5 964	5 000	5 327	964	19.3%
Profit from operations increased by amortisation and depreciation (EBITDA)	5 818	5 989	6 028	(171)	(2.9%)
Profit/(Loss) from operations (EBIT)	**4 059**	**4 624**	**4 787**	**(565)**	**(12.2%)**
Financial income	2 567	3 275	3 793	(708)	(21.6%)
Financial costs	(1 001)	(1 641)	(1 533)	640	39.0%
Net financial revenues and expenses	**1 566**	**1 634**	**2 260**	**(68)**	**(4.2%)**
Profit/(Loss) before tax	**5 632**	**6 255**	**7 047**	**(623)**	**(10.0%)**
Income tax	(819)	(821)	(945)	2	0.2%
Net profit	**4 813**	**5 434**	**6 102**	**(621)**	**(11.4%)**

1) The net allowances for impairment of property, plant & equipment and intangible assets:
- *year 2019 in the amount of PLN (8) million – related mainly to downstream and retail segments,*
- *year 2018 in the amount of PLN (25) million – related mainly to downstream and retail segments as well as corporate functions,*
- *year 2017 in the amount of PLN (5) million – related mainly to downstream and retail segments.*

For the complete separate statement of profit or loss and other comprehensive income, see the Financial Statements of PKN ORLEN for 2019.

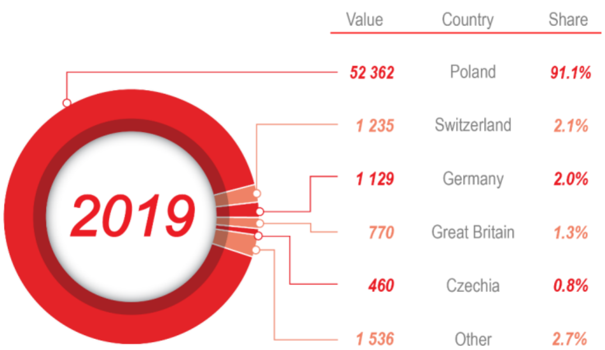
Revenue from sales

PKN ORLEN's revenue from sales amounted to PLN 89,049 million, an increase of 2.4% (y/y).

- Revenue of the **Downstream segment** increased by 1.5% (y/y) and was achieved despite of lower products' quotations (fuels' quotations) mainly as a result of higher sales of petrochemical products and middle distillates (sales volume). Higher fuel sales reflects the continued favourable market conditions (fuel consumption), including the effect of legislation enacted to curb the grey fuel market.
- Revenue of the **Retail segment** increased by 8.3% (y/y), as a result of higher sales volumes of fuels as well development of non-fuel sales. For a description of the retail market in Poland see section 3.2.2.4.
- Revenue of the **corporate functions** increased by 9.1% (y/y).

Further information on changes in sales volume by segments are presented in section 5.4.

DIAGRAM 60. PKN ORLEN revenues by countries [PLN million] 1)



1) Without crude oil sales

The remaining sales are attributable mainly to customers from Ireland, Hungary, Netherlands, Lithuania, Latvia and Estonia.

Data concerning revenues from contracts with customers by criterions and revenues by geographic market were presented in the Financial Statement of PKN ORLEN for 2019 in sections 10.1. and 10.3. respectively.

Operating costs by nature and functions

TABLE 30. Cost of goods sold in PKN ORLEN.

Item, PLN million	2019	2018	2017	structure 2019	structure 2018	structure 2017	change %
1	2	3	4	5	6	7	8=(2-3)/3
Materials and energy	(38 489)	(37 420)	(26 223)	45.2%	45.1%	39.6%	2.9%
Cost of merchandise and raw materials sold	(38 265)	(39 299)	(34 251)	45.0%	47.4%	51.8%	(2.6%)
External services	(2 785)	(2 729)	(2 478)	3.3%	3.3%	3.7%	2.1%
Employee benefits	(932)	(839)	(780)	1.1%	1.0%	1.2%	11.1%
Depreciation and amortisation	(1 759)	(1 365)	(1 241)	2.1%	1.6%	1.9%	28.9%
Taxes and charges	(2 420)	(1 092)	(971)	2.8%	1.3%	1.5%	121.6%
Other	(417)	(256)	(235)	0.5%	0.3%	0.3%	62.9%
Cost by nature	**(85 067)**	**(83 000)**	**(66 179)**	**100.0%**	**100.0%**	**100.0%**	**17.8%**
Change in inventories	46	364	500				(87.4%)
Cost of products and services for own use	120	196	227				(38.8%)
Operating cost	**(84 901)**	**(82 440)**	**(65 452)**				**3.0%**
Selling costs	4 364	2 850	2 547				53.1%
General and administrative costs	934	809	799				15.5%
Cost of goods sold	**(79 603)**	**(78 781)**	**(62 106)**				**1.0%**

Operating expenses increased by PLN (2,461) million (y/y) to PLN (84,901) million, mainly on the back of higher taxes and charges, which went up by PLN (1,328) million primarily due to the introduction of the emission charge in Poland as of January 2019. As a manufacturer and importer of motor fuels, the ORLEN Group becomes liable to pay the emission charge on the date when excise duty liability arises.

The main item of operating expenses were raw materials and consumables, mainly crude oil and other chemicals used in technological processes. In the reporting period, raw materials and consumables increased by PLN (1,069) million (despite lower crude oil prices), mainly due to higher oil throughput volumes (up by over 350 thousand tonnes) and a larger share of low-sulphur crudes in the crude slate.

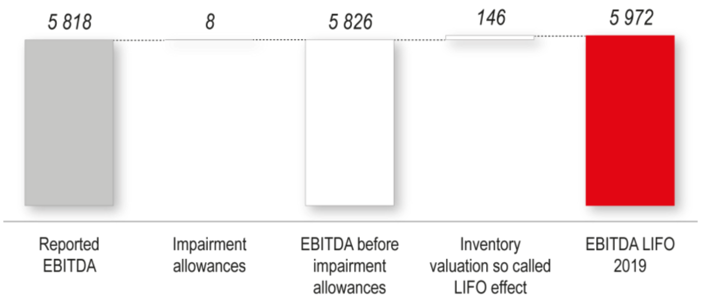
A higher output of Company's own products drove down the cost of merchandise and materials sold in 2019 by PLN (1,034) million.

Higher **distribution costs** were mainly attributable to the above-mentioned emission charge applicable as of the beginning of 2019, an increase in logistics costs on the back of higher fuel sales volumes (both wholesale and retail figures), and rising costs of commissions paid to service station operators.

Higher **administrative expenses** were due to rising salaries and higher workforce (cf. section 3.5).

Profit from operations according to inventory valuation under LIFO method[1] increased by depreciation & amortisation (EBITDA LIFO) before impairment allowances of non-current assets,

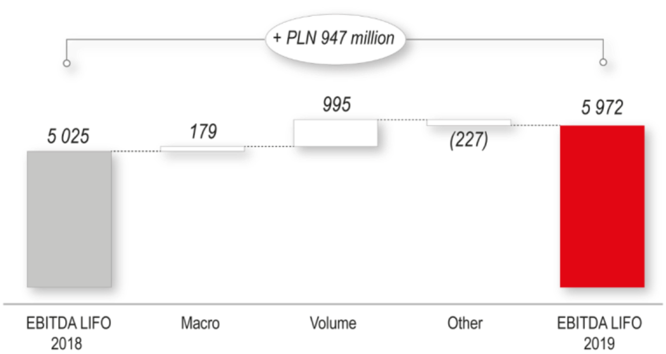
DIAGRAM 61. Reported EBITDA and EBITDA LIFO [PLN million].



- The PKN ORLEN's EBITDA in the amount of PLN 5,818 million in year 2019.
- Before accounting for the impairment allowances of non-current assets of PLN (8) million, the PKN ORLEN's EBITDA amounted to PLN 5,826 million.
- The impact of changes in crude oil prices on inventory valuation included in EBITDA amounted to PLN (146) million.
- As a **result the PKN ORLEN's EBITDA LIFO** before accounting for the impairment allowances of non-current assets for year 2019 amounted to **PLN 5,972 million**.

1) The definitions of LIFO method of inventories valuation is presented "Glossary of selected industry terms".

DIAGRAM 62. Factors affecting change of EBITDA LIFO (y/y) [PLN million].



PKN ORLEN's EBITDA LIFO before impairment losses on assets stood at PLN 5,972 million, up PLN 947 million (y/y).

- Positive macro effect of **PLN 179 million (y/y)**, driven mainly by favourable macro parameters in the power generation sector on the back of lower natural gas prices and higher electricity prices (y/y). Negative effect of macroeconomic volatility in the refining and petrochemicals segment, mainly due to lower Ural/Brent differential and shrinking margins on light distillates, heavy refining fractions, olefins and PTA, was offset by higher margins on middle distillates and the depreciation of the złoty against other currencies.
- A year-on-year increase in downstream and retail sales volumes and the segment's improved sales structure triggered a positive volume-related effect of **PLN 995 million (y/y).**
- The negative effect of other factors was **PLN (227) million (y/y)** and comprised primarily the negative effect of a change in net other income/(expenses) of PLN (179) million (y/y) (after elimination of the net effect of impairment losses on assets) concerning mainly shortages in materials in external warehouses in the amount of PLN (156) million, as well as other factors, including mainly the effect of higher fuel wholesale and retail margins combined with higher overheads and labour costs.

Net finance income/costs and net result

In 2019, net finance income was PLN 1,566 million and mainly included the following items:

- net reversal of impairment losses on shares of PLN 1,010 million, mainly at ORLEN Lietuva, in the amount of PLN 1,120 million,
- dividend income totalling PLN 470 million, received chiefly from ORLEN Deutschland, ORLEN Asfalt and Basell ORLEN Polyolefins,
- net settlement and measurement of financial instruments of PLN 244 million,
- PLN 86 million exchange gains on foreign currency loans and other items,
- net interest calculated using the effective interest rate and lease income totalling PLN (231) million.

After PLN (819) million in taxes, PKN ORLEN posted a net profit of PLN 4,813 million for 2019, down PLN (621) million (y/y).

PKN ORLEN's results by segments

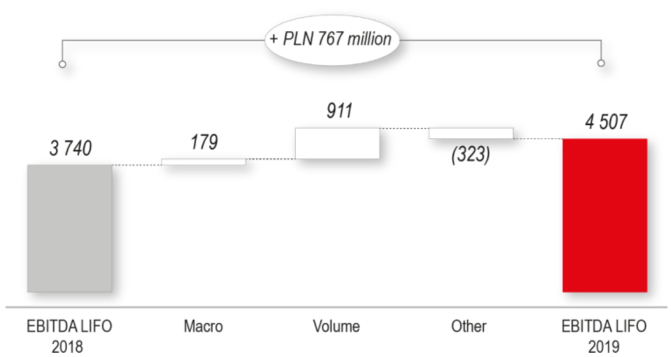
Downstream Segment

TABLE 31. Basic financial data of the Downstream segment.

Downstream Segment, PLN million	2019	2018	2017	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Segment revenues. including:	81 816	80 579	64 522	1 237	1.5%
Sales revenues from external customers	66 781	66 434	53 410	347	0.5%
Sales revenues from transactions with other segments	15 035	14 145	11 112	890	6.3%
Segment expenses	(78 676)	(77 042)	(60 649)	(1 634)	(2.1%)
Other operating income/expenses. net	(81)	182	269	(263)	-
(Loss)/reversal of loss due to impairment of financial instruments	0	4	0	(4)	-
Profit from operations under LIFO increased by depreciation and amortisation (EBITDA LIFO) before impairment allowances[1)]	**4 507**	**3 740**	**4 330**	**767**	**20.5%**
Profit from operations under LIFO increased by depreciation and amortisation (EBITDA LIFO)	4 483	3 735	4 328	748	20.0%
Profit from operations increased by depreciation and amortisation (EBITDA)	4 337	4 724	5 029	(387)	(8.2%)
Profit from operations under LIFO (EBIT LIFO)	**3 205**	**2 734**	**3 441**	**471**	**17.2%**
Profit from operations (EBIT)	3 059	3 723	4 142	(664)	(17.8%)
Increase in non-current assets	989	733	1 352	256	34.9%

1) The net allowances for impairment of property, plant & equipment and intangible assets:
- *year 2019 in the amount of PLN (24) million,*
- *year 2018 in the amount of PLN (5) million,*
- *year 2017 in the amount of PLN (2) million.*

DIAGRAM 63. Downstream Segment - Factors affecting change of EBITDA LIFO (y/y) [PLN million].



In 2019, EBITDA LIFO of PKN ORLEN's Downstream segment, before impairment of non-current assets, amounted to PLN 4,507 million and was higher by PLN 767 million (y/y).

- Positive macro effect of **PLN 179 million (y/y)**, driven mainly by favourable macro parameters in the power generation sector on the back of lower natural gas prices and higher electricity prices (y/y). Negative effect of macroeconomic volatility in the refining and petrochemicals segment, mainly due to lower Ural/Brent differential and shrinking margins on light distillates, heavy refining fractions, olefins and PTA, was offset by higher margins on middle distillates and the depreciation of the złoty against other currencies.
- An increase in sales of petrochemical products due to higher availability of production installations in 2019 as well as decreased share of heavy refinery fractions in total segments' sales caused a positive volume-related effect of **PLN 911 million (y/y).**
- The negative effect of other factors was **PLN (323) million (y/y)** and comprised primarily the negative effect of a change in net other income/(expenses) of PLN (244) million (y/y) (after elimination of the net effect of impairment losses on assets) concerning mainly shortages in materials in external warehouses in the amount of PLN (156) million and other factors, including mainly the effect of higher

fuel wholesale margins combined with higher overheads and labour costs.

The negative impact of changes in crude oil prices on inventory valuation amounted to PLN (146) million and as a result EBITDA of PKN ORLEN for 2019 amounted to PLN 4,337 million.

The segment's capital expenditures increased by PLN 256 million (y/y) to the level of PLN 989 million – the key capital expenditure projects are decribed in section 4.4.

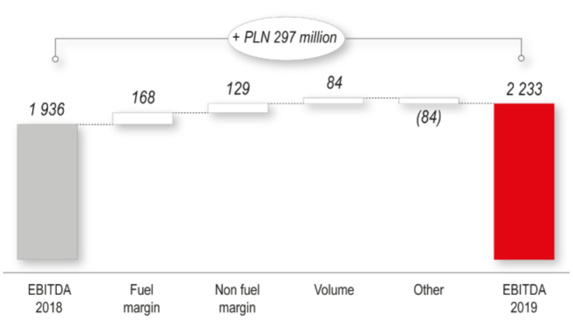
Retail Segment

TABLE 32. Basic financial data for the Retail segment.

Retail Segment, PLN million	2019	2018	2017	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Segment revenues, including:	22 183	20 483	16 530	1 700	8.3%
Sales revenues from external customers	22 183	20 483	16 530	1 700	8.3%
Sales revenues from transactions with other segments	0	0	0	0	-
Segment expenses	(20 282)	(18 811)	(15 251)	(1 471)	(7.8%)
Other operating income/expenses, net	(1)	(34)	(26)	33	97.1%
Profit from operations increased by depreciation and amortisation (EBITDA) before impairment allowances 1)	**2 233**	**1 936**	**1 521**	**297**	**15.3%**
Profit from operations increased by depreciation and amortisation (EBITDA)	2 256	1 921	1 518	335	17.4%
Profit from operations (EBIT)	**1 895**	**1 638**	**1 253**	**257**	**15.7%**
Increase in non-current assets	585	458	400	127	27.7%

1) The net allowances for impairment of property, plant & equipment and intangible assets:
- *year 2019 in the amount of PLN 23 million,*
- *year 2018 in the amount of PLN (15) million,*
- *year 2017 in the amount of PLN (3) million.*

DIAGRAM 64. Retail Segment – factors impact (y/y) [PLN million].



In 2019, EBITDA of PKN ORLEN's Retail segment, before impairment of non-current assets, reached the record level of PLN 2,233 million and was higher by PLN 297 million (y/y).

- Positive impact of fuel and non-fuel margins.
- Higher by over 3% (y/y) sales volume.
- The other factors include mainly increased costs of operations of fuel stations resulting from the higher sales volume.

After accounting for impairment of non-current assets of PLN 23 million, PKN ORLEN's EBITDA for year 2019 amounted to PLN 2,256 million.

The segment's capital expenditures increased by PLN 127 million (y/y) to the level of PLN 585 million – the key capital expenditure projects are decribed in section 4.4.

Corporate Functions

TABLE 33. Basic financial data for Corporate Functions

Corporate Functions, PLN million	2019	2018	2017	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Segment revenues, including:	180	165	162	15	9.1%
Sales revenues from external customers	85	80	72	5	6.3%
Sales revenues from transactions with other segments	95	85	90	10	11.8%
Segment expenses	(1 073)	(817)	(754)	(256)	(31.3%)
Other operating income/expenses, net	(3)	(71)	(17)	68	95.8%
Profit from operations increased by depreciation and amortisation (EBITDA) before impairment allowances 1)	**(768)**	**(651)**	**(520)**	**(117)**	**(18.0%)**
Profit from operations increased by depreciation and amortisation (EBITDA)	(775)	(656)	(520)	(119)	(18.1%)
Profit from operations (EBIT)	**(895)**	**(737)**	**(609)**	**(158)**	**(21.4%)**
Increase in non-current assets	337	167	159	170	101.8%

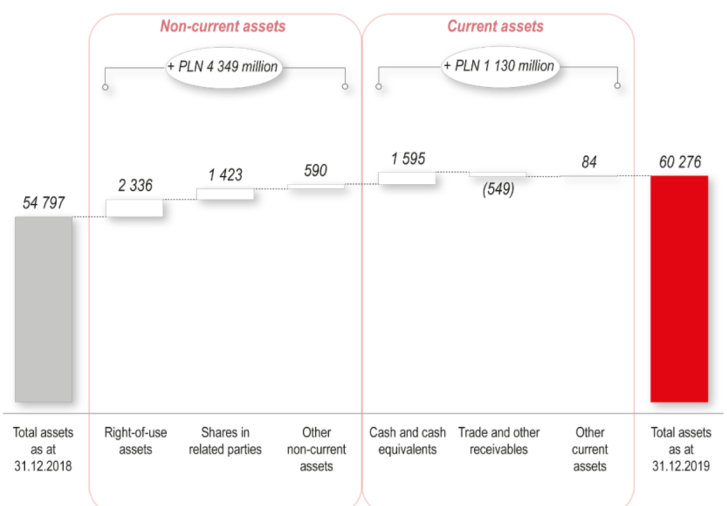
1) The net allowances for impairment of property, plant & equipment and intangible assets:
- *year 2019 in the amount of PLN (7) million,*
- *year 2018 in the amount of PLN (5) million,*
- *year 2017 in the amount of PLN 0 million.*

EBITDA of Corporate Functions decreased by PLN (119) million (y/y) mainly as an effect of an increase in overheads resulting from carried out investments programmers and costs of sponsorship and advertisement (Formula 1) as well as wage pressures from the labour market (y/y).

The segment's capital expenditure increased by PLN 170 million (y/y) and amounted to PLN 337 million and related mainly to IT projects.

5.5.2. Statement of financial position

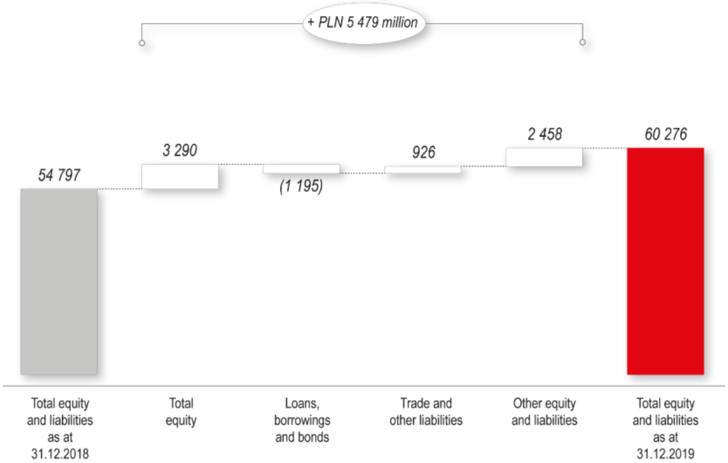
DIAGRAM 65. Selected items of statement of financial position – Assets [PLN million].



As at December 31st 2019, PKN ORLEN S.A.'s total assets grew by PLN 5,479 million compared with the end of 2018.

- The increase in **non-current assets** was mainly attributable to:
  - recognition of a right-of-use asset of **PLN 2,336 million** following the introduction of the new IFRS 16 standard effective as of January 1st 2019,
  - increase in the value of shares in related entities of **PLN 1,423 million,** following reversal of impairment losses on ORLEN Lietuva shares of PLN 1,120 million and equity contributions of PLN 357 million, mainly at Orlen Capital and ORLEN Upstream, less impairment losses of PLN (110) million at Orlen Capital,
  - increase in other items of **PLN 590 million**, including mainly loans advanced to Anwil, ORLEN Upstream, ORLEN Południe and ORLEN Oil and value of instruments headging cash flows.
- Increase in **current assets**, attributable primarily to:
  - higher cash and cash equivalents,
  - lower trade and other receivables.

DIAGRAM 66. Selected items of statement of financial position – Total equity and liabilities [PLN million].



- **Equity** as at December 31st 2019 stood at **PLN 34,924 million**, up **PLN 3,290 million** relative to the end of 2018, mainly on the back of:
  - recognition of the 2019 net profit of **PLN 4,813 million**,
  - payment of dividend from 2018 profit of **PLN (1,497) million**.
- As at December 31st 2019, the debt figure fell by **PLN (1,195) million** to PLN 8,568 million, due to repayment of borrowings and bonds of PLN (1,110) million, the effect of net exchange gains on remeasurement of borrowings denominated in foreign currencies and valuation of debt, and interest paid in the total amount of PLN (85) million.
- Higher trade payables and investment commitments as a result of increased purchases of crude oil at the end of 2019 by nearly 200 thousand tonnes and the security provided for potential claims by Unipetrol's non-controlling shareholders following the 2018 squeeze-out.
- Other liabilities include mainly lease liabilities of PLN 2,368 million following the implementation of the new MSSF 16 standard effective as of January 1st 2019

For the complete separate statement of financial position, see of the Financial Statements of PKN ORLEN for 2019.

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

Item	Unit	2019	2018	2017	change	change %
1	2	3	4	5	6=(3-4)	7=(3-4)/4
Sales revenue	PLN million	21 582	21 745	19 811	(163)	(0.7%)
Profit from operations increased by depreciation and amortisation (EBITDA)	**PLN million**	**938**	**2 079**	**2 408**	**(1 141)**	**(54.9%)**
Profit from operations increased by depreciation and amortisation (EBITDA) before impairment allowances[1]	PLN million	977	1 338	2 420	(361)	(27.0%)
Profit from operations under LIFO increased by depreciation and amortisation (EBITDA LIFO) before impairment allowances[1]	**PLN million**	**975**	**1 454**	**2 394**	**(479)**	**(32.9%)**
Profit from operations (EBIT)	PLN million	174	1 539	1 949	(1 365)	(88.7%)
Net profit	PLN million	105	1 406	1 403	(1 301)	(92.5%)
Equity capital	PLN million	9 867	9 811	8 123	56	0.6%
Total assets	PLN million	15 696	14 683	12 361	1 013	6.9%
Employment as at 31 December	employees	4 913	4 835	4 720	78	1.6%

1) Impairment allowances of non-current assets recognized in 2019, 2018 and, 2017 amounted to: PLN (39) million, PLN 741 million and PLN (12) 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 35. 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	2019	2018	2017	change	change %
1	2	3	4	5	6=(3-4)	7=(3-4)/4
Sales revenue	PLN million	19 676	20 093	17 042	(417)	(2.1%)
Profit from operations increased by depreciation and amortisation (EBITDA)	**PLN million**	**427**	**192**	**1 142**	**235**	**122.4%**
Profit from operations increased by depreciation and amortisation (EBITDA) before impairment allowances[1]	PLN million	426	192	1 143	234	121.9%
Profit from operations under LIFO increased by depreciation and amortisation (EBITDA LIFO) before impairment allowances[1]	**PLN million**	**419**	**201**	**1 074**	**218**	**108.5%**
Profit from operations (EBIT)	PLN million	276	101	1 071	175	173.3%
Net profit	PLN million	290	97	908	193	199.0%
Equity capital	PLN million	2 233	1 961	1 692	272	13.9%
Total assets	PLN million	4 078	3 688	3 994	390	10.6%
Employment as at 31 December	employees	1 429	1 631	1 612	(202)	(12.4%)

1) Impairment allowances of non-current assets recognized in 2019, 2018 and amounted to: PLN 1 million, PLN 0 million and PLN (1) 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 2019.

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

Item	Unit	2019	2018	2017	change	change %
1	2	3	4	5	6=(3-4)	7=(3-4)/4
Sales revenue	PLN million	2 234	2 345	2 413	(111)	(4.7%)
Profit from operations increased by depreciation and amortisation (EBITDA)	PLN million	**470**	**371**	**502**	**99**	**26.7%**
Profit from operations increased by depreciation and amortisation (EBITDA) before impairment allowances	PLN million	**470**	**371**	**502**	**99**	**26.7%**
Profit from operations (EBIT)	PLN million	325	255	409	70	27.5%
Net profit	PLN million	257	209	325	48	23.0%
Equity capital	PLN million	1 318	1 060	1 157	258	24.3%
Total assets	PLN million	2 199	1 521	1 619	678	44.6%
Employment as at 31 December	employees	1 364	1 323	1 268	41	3.1%

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 2019. ORLEN Deutschland GmbH carries out mostly activities related to retail sales of fuel activities in Germany.

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

Item	Unit	2019	2018	2017	change	change %
1	2	3	4	5	6=(3-4)	7=(3-4)/4
Sales revenue	PLN million	13 586	13 907	14 850	(321)	(2.3%)
Profit from operations increased by depreciation and amortisation (EBITDA)	PLN million	**457**	**537**	**285**	**(80)**	**(14.9%)**
Profit from operations increased by depreciation and amortisation (EBITDA) before impairment allowances[1]	PLN million	**457**	**537**	**286**	**(80)**	**(14.9%)**
Profit from operations (EBIT)	PLN million	283	425	180	(142)	(33.4%)
Net profit	PLN million	187	298	116	(111)	(37.2%)
Equity capital	PLN million	560	679	603	(119)	(17.5%)
Total assets	PLN million	2 800	1 756	1 691	1 044	59.5%
Employment as at 31 December	employees	167	160	155	7	4.4%

1) Impairment allowances of non-current assets in 2019, 2018 and 2017 amounted to: PLN 0 million, PLN 0 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 2019. The business activities of the Company include: exploration and recognition of hydrocarbons reserves, extraction of crude oil and natural gas.

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

Item	Unit	2019	2018	2017	change	change %
1	2	3	4	5	6=(3-4)	7=(3-4)/4
Sales revenue	PLN million	609	605	526	4	0.7%
Profit from operations increased by depreciation and amortisation (EBITDA)	PLN million	**166**	**292**	**154**	**(126)**	**(43.2%)**
Profit from operations increased by depreciation and amortisation (EBITDA) before impairment allowances[1]	PLN million	**297**	**310**	**294**	**(13)**	**(4.2%)**
Profit from operations (EBIT)	PLN million	(147)	(6)	(153)		
Net profit	PLN million	(150)	(91)	(30)	(59)	(64.8%)
Equity capital	PLN million	3 034	2 953	2 800	81	2.7%
Total assets	PLN million	4 572	4 334	3 949	238	5.5%
Employment as at 31 December	employees	135	147	148	(12)	(8.2%)

1) Impairment allowances of non-current assets recognized in 2019, 2018 and 2017amounted to: PLN (131) million, PLN (18) million and PLN (140) million respectively.

5.5.4. Statement of cash flows

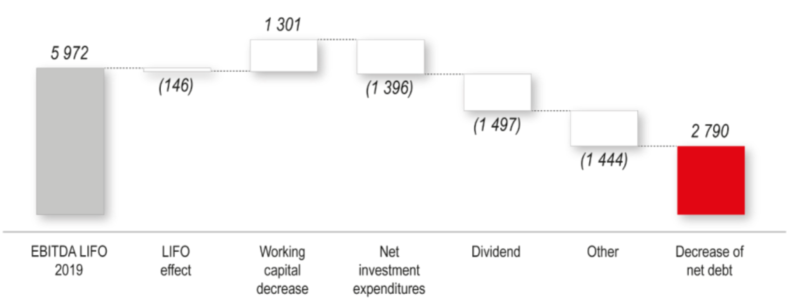
TABLE 39. Selected items of statement of cash flows.

Item, PLN million	2019	2018	2017	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Net cash from operating activities	**6 086**	**2 695**	**4 445**	**3 391**	**125.8%**
Change in working capital	1 301	(2 618)	(814)	**3 919**	**-**
Net cash (used in) investing activities	**(1 421)**	**(4 755)**	**(405)**	**3 334**	**70.1%**
Net cash from / (used in) financing activities	**(3 062)**	**16**	**(1 092)**	**(3 078)**	**-**
Net increase/(decrease) in cash and cash equivalents	**1 603**	**(2 044)**	**2 948**	**3 647**	**-**
Effect of exchange rate changes on cash and cash equivalents	(8)	28	(34)	(36)	-
Cash and cash equivalents, beginning of the period	3 461	5 477	2 563	(2 016)	(36.8%)
Cash and cash equivalents, end of the period	**5 056**	**3 461**	**5 477**	**1 595**	**46.1%**

In 2019, after taking into account revaluation of cash attributable to exchange differences, the cash balance increased by PLN 1,595 million (y/y), to PLN 5,056 million as at 31 December 2019.

For the complete separate statement of cash flows, see the Financial Statements of PKN ORLEN for 2019.

DIAGRAM 67. Free cash flow [PLN million].



Net debt declined by PLN (2,790) million relative to the end of 2018.

- EBITDA LIFO before impairment losses of PLN 5,972 million combined with a negative effect of higher crude prices on inventory valuation of PLN (146) million.
- Positive effect of a PLN 1,301 million decrease in net working capital – mainly attributable to a positive effect of net change in receivables and payables.
- Net expenditure on acquisition of property, plant and equipment, intangible assets and right-of-use assets of PLN (1,396) million.
- Dividends paid in the amount of PLN (1,497) million, i.e. PLN 3.5 per share.
- Other: mainly income tax paid in the amount of PLN (1,103) million, interest paid in the amount of PLN (297) million and lease liabilities paid in the amount of PLN (316) million, as well as dividends received in the amount of PLN 469 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 2019.

The change of PKN ORLEN results for 2019, relative to the data presented in Q42019 report issued on 30 January 2020 concerns mainly the reversal of part of impairment losses on ORLEN Lietuva shares in the amount of PLN 1,120 million, reversal of impairment losses of non-current assets in the Retail segment of PLN 45 million and shortages of materials in external warehouses of PLN (156) million.

Detailed information on changed items of the Statement of profit or loss and other comprehensive income and the Statement of financial position were presented in section 6 of the Financial Statements of PKN ORLEN for 2019.

5.6. DEBT AND FINANCIAL 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.

TABLE 40. Sources of financing.

Item, PLN million	2019	2018	2017	change	change %
1	2	3	4	5=(2-3)	6=(2-3)/3
Bank loans	2 130	2 151	0	(21)	(1.0%)
Borrowings	5 336	5 386	5 257	(50)	(0.9%)
Debt securities	1 102	2 226	2 031	(1 124)	(50.5%)
Financial indebtedness[1]	**8 568**	**9 763**	**7 288**	**(1 195)**	**(12.2%)**
By maturity:					
Non-current	8 222	8 641	6 736	(419)	(4.8%)
Current	346	1 122	552	(776)	(69.2%)

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 2019 amounted to PLN 3,512 million. In 2019 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 11.6.1 of the Financial Statements of PKN ORLEN for 2019.

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 2019, the total value of PKN ORLEN issued bonds amounted to PLN 1,102 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 2019 PKN ORLEN possessed off-balance liabilities arising out of the issued guarantees and sureties for the overall of PLN 14,592 million, which represents an increase by PLN 1,931 million in comparison to the end of 2018. In 2019 the amount included:

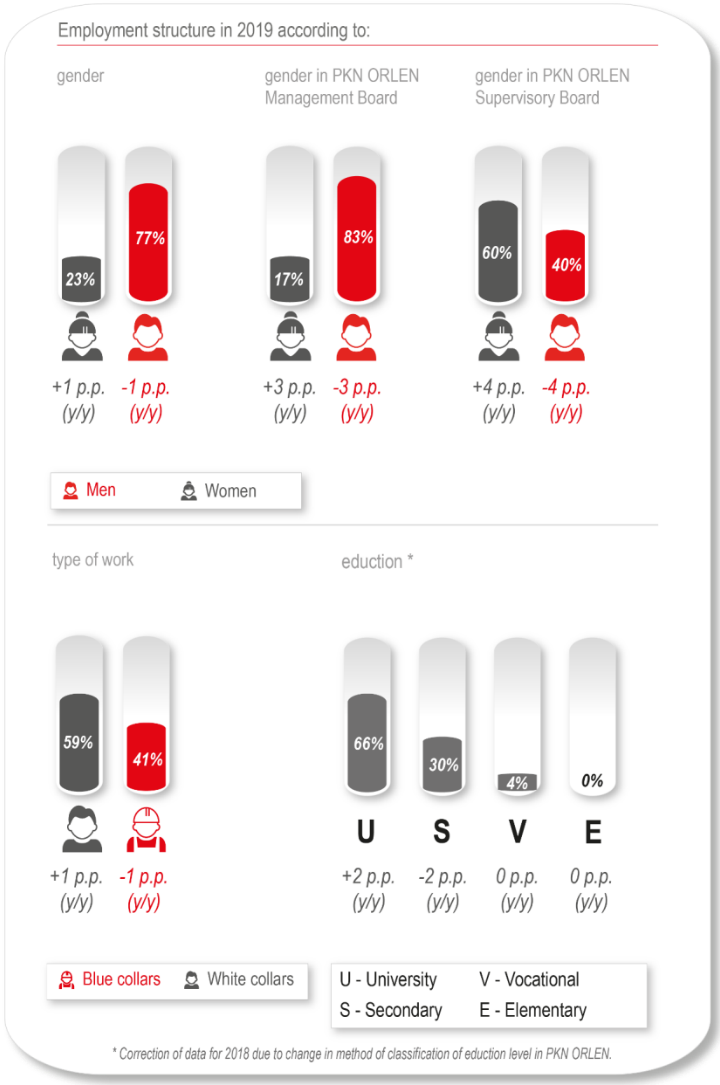
- sureties and guarantees issued to subsidiaries to the benefit of third parties of PLN 9,831 million, which related mainly to timely payment of liabilities by the subsidiaries
- securities for excise and excise duty on products and goods undergoing the procedure of suspended excise collection in the amount of PLN 2,391 million,
- guarantees concerning liabilities towards third parties issued in the course of normal business operations in the amount of PLN 2,370 million. The amount of PLN 2 billion is a bank guarantee for liabilities under the call issued by PKN ORLEN to subscribe for the sale of all shares of ENERGA S.A. Other guarantees concerned mainly: civil-law guarantees of contract performance and public-law guarantees resulting from generally applicable regulations secured regularity of business licensed in the liquid fuels sector and resulting from this activity tax and customs receivables, etc.

Additional information on sureties and guarantees are presented in section 12.5.4 of the Financial Statement of PKN ORLEN for 2019. Contingent liabilities were presented in section 13.5.2 of the Financial Statement of PKN ORLEN for 2019.

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 197 employees to 5,447 as at the end of 2019.

DIAGRAM 68. 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 BOARD MEMBERS

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 system include:

- a monthly fixed base salary (fixed 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.

Additional benefits for directors reporting to the PKN ORLEN Management Board 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, the right to participate in the Employee Pension Plan on the terms applicable at the Company, and the right to participate in the Employee Capital Plan subject to generally applicable laws.

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 annual bonuses

Members of PKN ORLEN's Management Board are entitled to an annual bonus (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 annual bonus depends 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 bonus payment 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 Management Board Member an annual bonus (variable pay) for a given financial year, specifying the bonus amount, or a resolution not to grant the annual bonus. Such resolution is the basis for payment of the annual bonus provided that the Company's consolidated financial statements for the financial year have been approved by the General Meeting and provided that the Management Board Member has been granted discharge in respect of his duties.

The Supervisory Board set the following six quantitative targets for all Members of the Management Board for 2019:

- Reported EBIT of the Group,
- EBITDA LIFO 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 assigned relevant bonus thresholds to these targets. The Supervisory Board also set two qualitative targets for each Member of the Management Board, associated with the Group's key challenges in a given 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 receive the annual bonus for 2019:

- 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 (Dz.U. of 2018, item 1182, as amended) at the Company's subsidiaries within the meaning of Art. 4.3 of the Act on Competition and Consumer Protection of February 16th 2007 (Dz.U. of 2017, item 229, as amended).

Rules for awarding bonuses to key management personnel of the ORLEN Group

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 achievement is assessed after the end of the year for which they were assigned.

Compensation for non-compete obligations and for termination of employment

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 50% or 100% of six times their monthly base pay, payable in six equal monthly instalments. The non-compete clauses come into force only after a Management Board Member had held their position for at least three or 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.

For more information on the terms of remuneration, conditions for granting annual bonuses, and non-competition agreements, see Section 6.8.

5.8.2. Remuneration of management and supervisory bodies

TABLE 41. Remuneration paid to the Company's Management Board Members fulfilling their function in 2019 and 2018 [PLN thousand].

Item	2019	2018
Daniel Obajtek [1)]	1 206	867
Wojciech Jasiński [2)]	-	83
Mirosław Kochalski [3)]	-	83
Armen Artwich [4)]	925	284
Patrycja Klarecka [5)]	921	448
Zbigniew Leszczyński	929	859
Krystian Pater [6)]	-	194
Wiesław Protasewicz [7)]	834	854
Michał Róg [4)]	975	304
Maria Sosnowska [8)]	-	83
Józef Węgrecki [9)]	952	686
Total:	**6 742**	**4 745**

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 Member of the Management Board since 1 September 2018
5) Remuneration for the period of holding the position of Member of the Management Board since 24 June 2018
6) Remuneration for the period of holding the position of Member of the Management Board to 22 March 2018
7) Remuneration for the period of holding the position of Member of the Management Board to 28 November 2019
8) Remuneration for the period of holding the position of Member of the Management Board to 5 February 2018
9) Remuneration for the period of holding the position of Member of the Management Board since 23 March 2018

TABLE 42. Bonuses potentially due to Management Board Members in function in the given year to be paid in the following year [PLN thousand].

Item	2019	2018
Daniel Obajtek 1)	913	766
Armen Artwich 2)	913	284
Patrycja Klarecka 3)	913	443
Zbigniew Leszczyński	913	853
Wiesław Protasewicz 4)	831	853
Michał Róg 2)	913	284
Józef Węgrecki 5)	913	661
Total:	**6 309**	**4 144**

1) Bonus potentially due for holding position for the period since 6 February 2018
2) Bonus potentially due for holding position for the period since 1 September 2018
3) Bonus potentially due for holding position for the period since 24 June 2018
4) Bonus potentially due for holding position for the period to 28 November 2019
5) Bonus potentially due for holding position for the period since 23 March 2018

TABLE 43. Remuneration and other benefits paid and due to former Management Board Members [PLN thousand].

Item	2019	2018
Wiesław Protasewicz 1)	228	-
Wojciech Jasiński 2)	-	320
Mirosław Kochalski 2)	-	427
Krystian Pater 2)	-	427
Total:	**228**	**1 174**

1) In 2019 severance paid.
2) In 2018 severance and non-competition compensation paid.

Remuneration of the Company's Management and Supervisory Board Members for holding functions in the Management or Supervisory Boards of subsidiaries, companies under joint control or associated companies (PLN thousand)

Members of PKN ORLEN Management Board who in 2019 and 2018 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.

TABLE 44. Remuneration of the Members of the Supervisory Board of PKN ORLEN [PLN thousand].

Item	2019	2018
Izabela Felczak-Poturnicka	133	124
Angelina Sarota [1)]	-	11
Agnieszka Biernat-Wiatrak [2)]	60	105
Mateusz Bochacik [3)]	15	117
Adrian Dworzyński [1)]	-	10
Barbara Jarzembowska [4)]	67	-
Andrzej Kapała [5)]	123	59
Michał Klimaszewski [4)]	67	59
Wojciech Kryński [6)]	55	114
Roman Kusz [7)]	21	10
Agnieszka Krzętowska [1)]	-	10
Radosław Kwaśnicki [6)]	55	114
Jadwiga Lesisz [8)]	122	277
Małgorzata Niezgoda [9)]	122	277
Anna Sakowicz-Kacz [4)]	67	113
Andrzej Szumański [4)]	67	-
Józef Węgrecki [10)]	-	101
Anna Wójcik [5)]	122	59
Total:	**1 096**	**1 214**

[1)] For the period of holding position to 2 February 2018
[2)] For the period of holding position since 2 February 2018 to 14 June 2019
[3)] For the period of holding position to 15 February 2019
[4)] For the period of holding position since 14 June 2019
[5)] For the period of holding position since 26 June 2018
[6)] For the period of holding position to 14 June 2019
[7)] For the period of holding position since 29 October 2019
[8)] 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
[9)] For the period of holding position since 5 January 2018
[10)] For the period of holding position since 5 February 2018 to 22 March 2018 delegated to temporarily perform duties of the Member of Management Board

Remuneration of key executive personnel of the ORLEN Group

TABLE 45. Remuneration of key executive personnel of the ORLEN Group [PLN thousand].

Item	2019	2018
Remuneration and other benefits of members of key executive personnel:		
- other key executive personnel of the Company	30 585	39 479
- key executive personnel of the subsidiaries of the ORLEN Group	155 118	139 128
Total:	**185 703**	**178 607**

6. CORPORATE GOVERNANCE STATEMENT

6.1. CORPORATE GOVERNANCE RULES

As a company listed on the Warsaw Stock Exchange ("WSE"), PKN ORLEN is required to comply with the corporate governance principles set forth in the Code of Best Practice for WSE Listed Companies 2016 ("Code of Best Practice") adopted by the WSE Supervisory Board (Resolution No. 26/1413/2015 of the WSE Supervisory Board of October 13th 2015) effective as of January 1st 2016. The Code of Best Practice is available on the WSE 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.

In 2019, PKN ORLEN complied with all principles contained in the Code of Best Practice. In line with the WSE guidelines, compliance with the individual recommendations contained in the Code of Best Practice is discussed in the relevant parts of this full-year Corporate Governance Statement.

Communication with the capital market

PKN ORLEN seeks to ensure easy and equal access to published information using various communication tools, including the following:

- The Investor Relations section of its corporate website, which provides financial and operating data relating to the Company's business as well as information about the Company's macro environment.
- The website of the 'ORLEN in Your Wallet' programme http://orlenwportfelu.pl/ containing details of the loyalty scheme for shareholders and a broad knowledge base of the capital market and investing.
- 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);
  - President of the Management Board's Twitter account(https://twitter.com/DanielObajtek);
  - Press Officer's Twitter account (https://twitter.com/RzecznikORLEN);
  - Corporate Facebook page (https://www.facebook.com/ORLEN.Official);
  - President of the Management Board's Facebook account (https://www.facebook.com/obajtekdaniel/); 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, with simultaneous interpretation 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 is ready and willing to provide any clarifications to its shareholders, investors, analysts and other capital market participants during group or one-on-one meetings, teleconferences, roadshows or site visits referred to above. Special presentation materials are prepared for these meetings, giving insight into the large and complex refining and petrochemical industry in which the Company operates.

Moreover, PKN ORLEN makes every effort to provide investors and analysts with financial information on its operations as soon as practicable. PKN ORLEN is among the companies that are the quickest to publish their financial results after the end of the reporting period. In 2019, the Company published its figures as soon as approximately 23 days after the closing of the reporting periods.

PKN ORLEN is also a dividend paying company. In 2019, for the seventh consecutive year it distributed its profits to shareholders by paying out its highest ever dividend of PLN 3.50 per share.

The Company is also developing the 'ORLEN IN YOUR WALLET' programme, including the Investment Academy. The programme, launched in 2018, is dedicated to retail investors. In 2019, three brokerage houses joined the programme, so it is already supported by five professional institutions. At the end of the year, there were more than 3,000 investors registered in the programme. Materials containing the educational part of the programme were published, first examinations in the Investment Academy were held, and another educational module, 'Investing in Practice', was launched. More than 60,000 people used the educational materials made available on the website.

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

PKN ORLEN actively prevents any untrue publications and comments which might have an adverse effect on the Company's image. The ORLEN Group has in place internal guidelines that streamline the rules of external communication, covering contacts with the media, participation of the Company's representatives in debates, conferences and discussion panels, as well as activities in the social media. These guidelines require a multi-stage, while also highly intuitive and consistent, verification of any information about the Company and its representatives before it is made public. In the case of communication activities relating to the Company's image, a strong focus is placed on quick response to potentially negative publications. The rules relating to the response are strictly defined in the guidelines, which guarantees that the Company's activities in this area are highly effective.

Any such response is coordinated by the Executive Director for Corporate Communication.

Corporate social responsibility activities of PKN ORLEN

PKN ORLEN's priority in each area of its operations is sustainable development, which we understand as care for future generations. This means that in building the ORLEN Group's position, social objectives are for us as important as business ones. We respect people and their rights. We use natural resources so as not to disturb environmental balance. We feel responsible for other members of the community in which we operate. Therefore, we engage in dialogue with them and support them in various fields of activity. 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 social 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. We focus our initiatives in this area on the city of Płock and the Płock region. The Company is engaged there in a number of social, educational, environmental and other projects, including, in particular, the OrlenInfo system, an innovative tool for communicating with the local community. OrlenInfo allows the Company to promptly report any events that occur at the Production Plant and announce projects undertaken for the inhabitants of Płock.

Directions of our CSR activities are defined in the CSR strategy, consistent with the ORLEN business strategy. Since 2019, the 'ORLEN Group's CSR Strategy until 2022' has been implemented, with the following areas of responsibility: Society, Environment, Employees, Customers, Trading Partners. 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. Moreover, in 2019 the following three priorities were defined for social initiatives: environmental protection (e.g. educational projects), promotion of safety (e.g. the 'ORLEN for Firefighters' programme), health protection and promotion (e.g. the 'Health City' campaign). The body that plays crucial role in pursuing the Company's CSR objectives is the ORLEN Foundation, established in 2001 to fulfil the social responsibility mission of its founder, PKN ORLEN. In 2019, its name was changed from 'ORLEN – DAR SERCA Foundation' to 'ORLEN Foundation' to achieve greater communication and image consistency.

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 engaged in the life of local communities, especially 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 277 projects of this type were run by the Company.

PKN ORLEN communicates its CSR initiatives via the Responsible Business section of its corporate website and its annual integrated report available online (https://www.orlen.pl/EN/CSR/Pages/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 recognition, measurement and disclosures in accordance with the International Financial Reporting Standards (IFRSs) as endorsed by the European Union,
- following the procedures for registering economic events in the financial and accounting system and monitoring compliance with the procedures,
- internal controls, including separation of duties, multi-stage data verification, accuracy reviews of data received and independent checks,
- applying 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 statements 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 issue opinions on 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 and accounting system. Security and availability of information contained in the financial and 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 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 2019–2021. 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 financial control, risk and compliance management processes. The performance of financial control tasks is supervised by the Chief Executive Officer, President of the Management Board. 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. An area subject to review is assessed primarily in terms of legal compliance, relevance, good management, reliability, organisational efficiency and correct operation. Such assessments are made with due regard for the interests of PKN ORLEN and the ORLEN Group companies. 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,
- The Management Systems and Enterprise Risk Department in which the Enterprise Risk Management Team and the Management Systems Team operate. The employees of the Enterprise Risk Management Team coordinate, 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 ORLEN Group companies. Their tasks are to support business areas in risk management during the implementation of project objectives by carrying out regular training sessions in risk identification, description and assessment, as well as workshops and consultations for project managers and persons involved in project work, thus helping minimise the amount of work and optimise the project value. As part of corporate risk management, the Company regularly defines and measures risks related to the achievement of strategic objectives. The Enterprise Risk Management Team prepares regular reports on risk management at PKN ORLEN and the ORLEN Group companies, which are then presented to the relevant Management Boards.
- Members of the Management Systems Team ensure maintenance and improvement of the Integrated Management System – compliance with ISO 9001, AQAP 2110, ISO 14001, PN-N-18001, ISO/IEC 27001, ZKP, ISCC, KZR INiG, ISO 50001 and HACCP. The systemic activities include supervision of documentation (documented information), supervision of equipment, supervision of products (process outputs), and development of a process approach based on risk and opportunity analysis. As part of the Integrated Management System, management reviews are conducted and reported to the PKN ORLEN Management Board, which take into account compliance assessment, among other factors. An internal audit system is in place to verify the correctness of operation of the Group's organisational units, suppliers, contractors, etc.
- The Regulatory Risk Management Department is responsible for monitoring legal regulations that may have an impact on the ORLEN Group and for undertaking lawful lobbying activities. It is also responsible for dialogue with market regulators and managing fuel licences issued by the President of the Energy Regulatory Office under the Energy Law. The Department also participates in the implementation of measures aimed at ensuring compliance with regulatory requirements (legal and regulatory advice) at the ORLEN Group.
- 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 2019 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.

TABELA 46. PKN ORLEN's shareholding structure as at January 1st 2019, December 31st 2019 and the date of authorisation of this report.

Shareholder	Number of shares and voting rights at the General Meeting (as at Jan 1 2019*)	Percentage of share capital and total voting rights at the General Meeting (as at Jan 1 2019*)	Number of shares and voting rights at the General Meeting (as at Dec 31 2019**)	Percentage of share capital and total voting rights at the General Meeting (as at Dec 31 2019**)	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	30,000,000	7.01%	32,544,000	7.61%	30,000,000	7.01%
Aviva OFE Aviva Santander	28,240,000	6.60%	25,000,000	5.85%	26,000,000	6.08%
Others	251,758,865	58.87%	252,454,865	59.02%	253,998,865	59.39%
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 26th 2018 and adjourned to July 17th 2018.*
*** According to information from the PKN ORLEN AGM convened for June 14th 2019.*
**** According to information from the PKN ORLEN AGM convened for March 5th 2020.*

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. In addition, one member of the PKN ORLEN Management Board is appointed and removed by the entity authorised to exercise the rights attached to the shares held by the State Treasury as long as the State Treasury holds at least one share in the Company.

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 ARTICLE 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.

On June 14th 2019, the Annual General Meeting approved amendments to the Company's Articles of Association. The amendments were entered in the National Court Register and information about the entry was published by the Company in a 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: https://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 materials presented at a General Meeting 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 cancelling 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 their voting rights at the General Meeting in person or by proxy.

In accordance with the Rules of Procedure for the General Meeting, a General Meeting may be cancelled 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: https://www.orlen.pl/EN/InvestorRelations/GeneralMeetings/Contact/Pages/default.aspx, or through email (at: walne.zgromadzenie@orlen.pl). They may send a notification of granting power of proxy in electronic form and the power of proxy document (or a power of proxy cancellation document), and they may send requests and documents to the Company, for instance requests to place a matter on the agenda of the General Meeting, draft resolutions for the General Meeting, etc. 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 Chair, 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 Meeting in 2019

In 2019, one General Meeting was held. It was the Annual General Meeting and it was held on June 14th 2019..

The Annual General Meeting:

- approved of the Directors' reports on the operations of the Company and the ORLEN Group as well as the financial statements for 2018;
- acknowledged the fulfilment of duties by all the Supervisory and Management Board Members;
- allocated the net profit for the 2018 financial year in the following manner:
  1) PLN 1,496,981,713.50 was allocated to be paid as dividend (PLN 3.5 per share),
  2) the balance of PLN 3,937,168,128.67 was allocated to the Company's statutory reserve funds,
- the previous term of office having expired, the General Meeting appointed nine persons to the Supervisory Board for a new term of office: Izabela Felczak-Poturnicka as Chair of the Supervisory Board and Barbara Jarzembowska, Andrzej Kapała, Michał Klimaszewski, Jadwiga Lesisz, Małgorzata Niezgoda, Anna Sakowicz-Kacz, Andrzej Szumański and Anna Wójcik;
- made further amendments to Resolution No. 4 of the Extraordinary General Meeting of January 24th 2017 on the rules of remuneration for members of the Management Board, and decided to adopt a consolidated text of the resolution incorporating all previous amendments;
- amended Resolution No. 5 of the Extraordinary General Meeting of the Company of January 24th 2017 determining the rules of remunerating members of the Supervisory Board.

The Annual General Meeting also passed resolutions to amend the Company's Articles of Association. The purpose of these amendments was to:

- enable the Supervisory Board members, in compliance with the Commercial Companies Code, to vote on resolutions of the Supervisory Board by casting their votes in writing through another member of the Supervisory Board;
- redact the provisions of Art. 8.2 of the Articles of Association by specifying that the right to appoint and remove one member of the Supervisory Board rests with the State Treasury, represented by the entity authorised to exercise the rights attached to the shares held by the State Treasury;
- change the powers of the Supervisory Board specified in Art. 8.11 and Art. 8.12 of the Articles of Association. The changes were required to implement the provisions of the Act on State Property Management in the Company's Articles of Association;
- specify that the Company's Management Board comprises five to nine members, who are appointed and removed by the Supervisory Board following a recruitment process, with the proviso that one member of the PKN ORLEN Management Board is appointed and removed by the entity authorised to

exercise the rights attached to the shares held by the State Treasury as long as the State Treasury holds at least one share in the Company. It was also determined what requirements candidates for members of the Company's Management Board should meet;
- specify that the Management Board must prepare and submit to the General Meeting and the Supervisory Board a report on entertainment expenses, legal costs, marketing costs, public relations and communication expenses, and management consultancy fees, as well as a report on application of best practices referred to in Art. 7.3 of the Act on State Property Management of December 16th 2016 to the extent they are applicable to the Company;
- define the rules for disposal of non-current assets in the Company's Articles of Association;
- require the Company's Management Board to take steps with a view to introducing into the Articles of Association of companies with respect to which the Company is the parent within the meaning of Art. 4.3 of the Act on Competition and Consumer Protection of February 16th 2007 the principles set out in Art. 17.1-4, Art. 17.6 and Art. 17.6a, taking into consideration the provisions of Art. 17.5, Art. 18.1, Art. 19.1-3, Art. 19.5 and Art. 22, of the Act on State Property Management of December 16th 2016 as well as the obligation to immediately remove any member of such company's supervisory body who does not meet the requirements set out in the Articles of Association.
- increase the maximum number of Supervisory Board members to ten persons, including the Chair.

The Annual General Meeting also resolved to repeal the General Meeting resolutions which implemented the provisions of the Act on State Property Management adopted as the amendments to the Company's Articles of Association listed above.

General Meeting in 2020

On March 5th 2020, an Extraordinary General Meeting of PKN ORLEN S.A. was held. It changed the composition of the Company's Supervisory Board and set the number of its members at ten. The Extraordinary General Meeting also removed Ms Małgorzata Niezgoda from the Supervisory Board and appointed Mr Wojciech Jasiński and Mr Dominik Kaczmarski to the Board. Mr Wojciech Jasiński was appointed Chair of the Supervisory Board.

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. In their operations PKN ORLEN's management and supervisory bodies also comply with 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. Management Board

Composition of PKN ORLEN Management Board and division of remits

TABLE 47. Composition of PKN ORLEN Management Board as at January 1st 2019.

Name and surname	Position held on PKN ORLEN Management Board
Daniel Obajtek	CEO, President of the Management Board
Armen Konrad Artwich	Member of the Management Board, Corporate Affairs
Zbigniew Leszczyński	Member of the Management Board, Development
Patrycja Klarecka	Member of the Management Board, Retail Sales
Wiesław Protasewicz	Member of the Management Board, Finance
Michał Róg	Member of the Management Board, Wholesale and International Trade
Józef Węgrecki	Member of the Management Board, Operations

Changes on the Management Board during the previous financial year

At its meeting on November 28th 2019, the PKN ORLEN Supervisory Board removed Wiesław Protasewicz from the Management Board, with effect from November 28th 2019.

TABLE 48. Composition of PKN ORLEN Management Board as at December 31st 2019.

Name and surname	Position held on PKN ORLEN Management Board	Remit
Daniel Obajtek	President of the Management Board Chief Executive Officer	strategy and investor relations, human resources, sports marketing, sponsorship and events, corporate communication, management office, control and security, audit, financial control, legal, relations with external stakeholders, trade in crude oil and natural gas;
Armen Konrad Artwich	Member of the Management Board, Corporate Affairs	administration, environmental protection, corporate group, risk and compliance management, and supervision of the financial division: business controlling, financial management, planning and reporting, taxes;
Patrycja Klarecka	Member of the Management Board, Retail Sales	IT, marketing, retail, innovation, infrastructure and information security supervision;
Zbigniew Leszczyński	Member of the Management Board, Development	procurement, capital investments, development and technology, technical matters;
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, water and wastewater management, occupational health and safety.

Changes on the Management Board as at the date of authorisation of this report for issue

At its meeting on January 30th 2020, the Supervisory Board of PKN ORLEN appointed Jan Szewczak as Member of the Management Board for Finance and Adam Burak as Member of the Management Board for Communications and Marketing, with effect from February 3rd 2020.

TABLE 49. 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, management board office, control and security, audit, financial control, legal, oil and gas trade;
Armen Konrad Artwich	Member of the Management Board, Corporate Affairs	administration, environmental protection, corporate group, risk management and compliance management;
Adam Burak	Member of the Management Board for Communications and Marketing	corporate communication, marketing, sports marketing, sponsorship and events;
Patrycja Klarecka	Member of the Management Board, Retail Sales	IT, retail, innovation, relations with external stakeholders, infrastructure and information security supervision;
Zbigniew Leszczyński	Member of the Management Board, Development	procurement, capital investments, development and technology, technical matters;
Michał Róg	Member of the Management Board, Wholesale and International Trade	wholesale of refining products, trade in petrochemical products, logistics, supply chain management;
Jan Szewczak	Member of the Management Board, Finance	finance management, financial risk management, business controlling, taxes;
Józef Węgrecki	Member of the	refining production, petrochemical production, power generation, production efficiency and

	Management Board, Operations	optimisation, water and wastewater management, occupational health and safety.

The current division of remits between Members of the PKN ORLEN Management Board is also available on the Company's website https://www.orlen.pl/EN/Company/ManagmentBoard/AreasOfRespo sibility/Pages/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 PKN ORLEN Management Board is appointed and removed by the entity authorised to exercise the rights attached to the shares held by the State Treasury as long as the State Treasury holds at least one share in the Company.

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 https://www.orlen.pl/EN/Company/Pages/CorporateBylaws.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".

The Rules of Procedure for the Management Board also provide for the possibility of Management Board resolutions being adopted 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 following activities undertaken in the ordinary course of management also require resolutions of the Management Board:

- incurring liabilities in legal transactions involving trade in crude oil or hydrocarbon raw materials used to produce fuels in a refinery, excluding biocomponents and fuel additives if the transaction volume exceeds 165,000 tonnes of crude oil or 165,000 tonnes of hydrocarbon raw materials used to produce fuels in a refinery, excluding biocomponents and fuel additives;
- incurring liabilities in legal transactions involving natural gas trading, trading capacity in natural gas transmission, distribution and storage grids/networks in Poland or abroad, and trading in natural gas storage capacities in Poland and abroad if the transaction volume exceeds 100m Nm^3;
- incurring liabilities in legal transactions involving the acquisition of biocomponents and biofuels, including raw materials for the production of biocomponents and biofuels, if the transaction value exceeds PLN 200,000,000 (two hundred million złoty);
- incurring liabilities in legal transactions involving trade in fuels, within the meaning of the Company's Articles of Association, other than those referred to in paragraph 6 Section 1),Section 2) and Section 3) if the transaction value exceeds PLN 200,000,000 (two hundred million złoty);
- incurring liabilities in legal transactions involving sale or purchase of refining products in international trade if the transaction volume exceeds 90,000 tonnes, excluding heavy fuel oil;
- incurring liabilities in legal transactions involving participation in a public procurement/tender procedure for contract award (including participation in negotiations concerning the subject matter of the contract) in the area of wholesale trade in refining products and fleet cards if the transaction value exceeds PLN 200,000,000 (two hundred million złoty);
- incurring liabilities in legal transactions involving trade in energy, property rights under energy origin certificates and energy efficiency certificates, guarantees of origin and documents confirming their issue, the related system services and energy ranges, as well as all activities related to switching electricity suppliers if the transaction volume exceeds 300 GWh;
- incurring liabilities in legal transactions involving participation in tender procedures (including those subject to the Public Procurement Law) relating to trading in (separately or jointly) energy, energy-related services or products (including participation in negotiations and other factual and legal acts related to the subject matter of the contract) and any activities related to switching electricity suppliers if the transaction volume exceeds 300 GWh.

The Management Board is obliged to provide regular and exhaustive information to the Supervisory Board on all matters of importance and risks connected with the business of PKN ORLEN, as well as the manner of managing such risk.

6.7.2. Supervisory Board

TABLE 50. Composition of PKN ORLEN Supervisory Board as at January 1st 2019.

Name and surname	Position held on PKN ORLEN Supervisory Board
Izabela Felczak-Poturnicka	Chair of the Supervisory Board
Radosław L. Kwaśnicki	Deputy Chair 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.
On March 20th 2019, the Supervisory Board appointed Ms Anna Wójcik, Member of the Supervisory Board, as Secretary of the Supervisory Board.
On June 14th 2019, Mr Radosław L. Kwaśnicki, Deputy Chairman of the Supervisory Board, resigned as Member of the Supervisory Board of PKN ORLEN S.A.
On June 14th 2019, the Annual General Meeting of PKN ORLEN appointed the following persons to the Supervisory Board for a new term of office: Izabela Felczak-Poturnicka, Chair of the Supervisory Board; Supervisory Board members: Małgorzata Niezgoda, Andrzej Kapała, Jadwiga Lesisz, Anna Wójcik, Andrzej Szumański, Barbara Jarzembowska, Anna Sakowicz-Kacz, and Michał Klimaszewski.
On June 27th 2019, the Supervisory Board appointed its members Mr Andrzej Szumański and Ms Anna Wójcik as, respectively, Deputy Chair and Secretary of the Supervisory Board.
On October 29th 2019, 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 Roman Kusz to the PKN ORLEN Supervisory Board.
In 2019, the PKN ORLEN Supervisory Board held 15 minuted meetings and passed 193 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.

As at December 31st 2019, the Supervisory Board consisted of six woman and four men. The age structure of Supervisory Board members: 40−49 years: 6 members, 50−60 years: 1 member, over 60 years: 3 members.

The General Meeting of the Company appointed the Supervisory Board for a new term of office on June 14th 2019. The current term of office of the Supervisory Board ends on the date of the PKN ORLEN General Meeting approving the Company's financial statements for the financial year 2021.
The Supervisory Board of the current term is composed of Members with educational background in law, economics and finance (including a law professor) and diverse professional experience, who completed specialist courses and training programmes.
The qualifications of individual Members of the Supervisory Board are described in the first section of the Directors' report on the operations of the ORLEN Group in 2019 and on the corporate website at
https://www.orlen.pl/EN/Company/SupervisoryBoard/Pages/default.aspx

In 2019, there were six independent Members on the Supervisory Board.

TABLE 51. Composition of PKN ORLEN Supervisory Board as at December 31st 2019

Name and surname	Position held on PKN ORLEN Supervisory Board
Izabela Felczak-Poturnicka	Chair of the Supervisory Board
Andrzej Szumański	Deputy Chair of the Supervisory Board (Independent Member of the Supervisory Board)
Anna Wójcik	Secretary of the Supervisory Board
Barbara Jarzembowska	Member of the Supervisory Board (Independent Member of the Supervisory Board)
Andrzej Kapała	Member of the Supervisory Board (Independent Member of the Supervisory Board)
Michał Klimaszewski	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
Roman Kusz	Member of the Supervisory Board (Independent Member of the Supervisory Board)
Anna Sakowicz-Kacz	Member of the Supervisory Board (Independent Member of the Supervisory Board)

Ms Izabela Felczak-Poturnicka resigned from her position as Chair of the Supervisory Board with effect from January 16th 2020.
On March 5th 2020, an Extraordinary General Meeting of PKN ORLEN S.A. removed Ms Małgorzata Niezgoda from the Supervisory Board and appointed Mr Wojciech Jasiński and Mr Dominik Kaczmarski to the Board. Mr Wojciech Jasiński was also appointed Chair of the Supervisory Board.

TABLE 52. 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
Wojciech Jasiński	Chair of the Supervisory Board
Andrzej Szumański	Deputy Chair of the Supervisory Board (Independent Member of the Supervisory Board)
Anna Wójcik	Secretary of the Supervisory Board
Barbara Jarzembowska	Member of the Supervisory Board (Independent Member of the Supervisory Board)
Andrzej Kapała	Member of the Supervisory Board (Independent Member of the Supervisory Board)
Dominik Kaczmarski	Member of the Supervisory Board
Michał Klimaszewski	Member of the Supervisory Board (Independent Member of the Supervisory Board)
Jadwiga Lesisz	Member of the Supervisory Board
Roman Kusz	Member of the Supervisory Board (Independent Member of the Supervisory Board)
Anna Sakowicz-Kacz	Member of the Supervisory Board (Independent Member of the Supervisory Board)

Operating procedures of the Supervisory Board

PKN ORLEN's Supervisory Board is composed of six to ten 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 Chair of the Supervisory Board, whereas the Deputy Chair 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 corporate website:
https://www.orlen.pl/EN/Company/Pages/CorporateBylaws.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.

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 2019

TABLE 53. Composition of PKN ORLEN Supervisory Board Committees as at January 1st 2019

Name and surname	Position held on PKN ORLEN Supervisory Board Committee
Audit Committee	
Wojciech Kryński	Committee Chair, Independent Member of the Supervisory Board
Radosław L. Kwaśnicki	Committee Member, Independent Member of the Supervisory Board
Izabela Felczak-Poturnicka	Committee Member
Jadwiga Lesisz	Committee Member, Independent Member of the Supervisory Board
Andrzej Kapała	Committee Member, Independent Member of the Supervisory Board
Strategy and Development Committee	
Radosław L. Kwaśnicki	Committee Chair, Independent Member of the Supervisory Board
Izabela Felczak-Poturnicka	Committee Member
Małgorzata Niezgoda	Committee Member

Agnieszka Biernat-Wiatrak	Committee Member, Independent Member of the Supervisory Board
Andrzej Kapała	Committee Member, Independent Member of the Supervisory Board
Nomination and Remuneration Committee	
Małgorzata Niezgoda	Committee Chair
Mateusz Bochacik	Committee Member, Independent Member of the Supervisory Board
Wojciech Kryński	Committee Member, Independent Member of the Supervisory Board
Jadwiga Lesisz	Committee Member, Independent Member of the Supervisory Board
Anna Wójcik	Committee Member
Corporate Governance Committee	
Agnieszka Biernat-Wiatrak	Committee Chair
Mateusz Bochacik	Committee Member, Independent Member of the Supervisory Board
Radosław L. Kwaśnicki	Committee Member, Independent Member of the Supervisory Board
Corporate Social Responsibility Committee	
Jadwiga Lesisz	Committee Chair, Independent Member of the Supervisory Board
Radosław L. Kwaśnicki	Committee Member, Independent Member of the Supervisory Board
Izabela Felczak-Poturnicka	Committee Member
Anna Wójcik	Committee Member

TABLE 54. Composition of PKN ORLEN Supervisory Board Committees as at December 31st 2019

Name and surname	Position held on PKN ORLEN Supervisory Board Committee
Audit Committee	
Andrzej Kapała	Committee Chair from June 27th 2019, Independent Member of the Supervisory Board
Barbara Jarzembowska	Committee Member from June 27th 2019, Independent Member of the Supervisory Board
Izabela Felczak-Poturnicka	Committee Member
Jadwiga Lesisz	Committee Member
Michał Klimaszewski	Committee Member from July 18th 2019, Independent Member of the Supervisory Board
Strategy and Development Committee	
Michał Klimaszewski	Committee Chair from June 27th 2019, Independent Member of the Supervisory Board
Izabela Felczak-Poturnicka	Committee Member
Małgorzata Niezgoda	Committee Member
Andrzej Kapała	Committee Member, Independent Member of the Supervisory Board
Anna Sakowicz-Kacz	Committee Member from June 27th 2019, Independent Member of the Supervisory Board
Nomination and Remuneration Committee	
Małgorzata Niezgoda	Committee Chair
Andrzej Szumański	Committee Member from July 18th 2019, Independent Member of the Supervisory Board
Anna Sakowicz-Kacz	Committee Member from June 27th 2019, Independent Member of the Supervisory Board
Michał Klimaszewski	Committee Member from June 27th 2019, Independent Member of the Supervisory Board
Anna Wójcik	Committee Member
Corporate Governance Committee	
Andrzej Szumański	Committee Chair from June 27th 2019, Independent Member of the Supervisory Board
Izabela Felczak-Poturnicka	Committee Member
Andrzej Kapała	Committee Member from June 27th 2019, Independent Member of the Supervisory Board

Barbara Jarzembowska	Committee Member from June 27th 2019, Independent Member of the Supervisory Board
Roman Kusz	Committee Member from November 28th 2019, Independent Member of the Supervisory Board
Corporate Social Responsibility Committee	
Jadwiga Lesisz	Committee Chair
Izabela Felczak-Poturnicka	Committee Member
Anna Wójcik	Committee Member from July 19th 2018
Michał Klimaszewski	Committee Member from June 27th 2019, Independent Member of the Supervisory Board
Roman Kusz	Committee Member from November 28th 2019, Independent Member of the Supervisory Board

TABLE 55. 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	
Andrzej Kapała	Committee Chair from June 27th 2019, Independent Member of the Supervisory Board
Barbara Jarzembowska	Committee Member from June 27th 2019, Independent Member of the Supervisory Board
Jadwiga Lesisz	Committee Member
Michał Klimaszewski	Committee Member from July 18th 2019, Independent Member of the Supervisory Board
Strategy and Development Committee	
Michał Klimaszewski	Committee Member from June 27th 2019, Independent Member of the Supervisory Board
Andrzej Kapała	Committee Member, Independent Member of the Supervisory Board
Anna Sakowicz-Kacz	Committee Member from June 27th 2019, Independent Member of the Supervisory Board
Nomination and Remuneration Committee	
Andrzej Szumański	Committee Member from July 18th 2019, Independent Member of the Supervisory Board
Anna Sakowicz-Kacz	Committee Member from June 27th 2019, Independent Member of the Supervisory Board
Michał Klimaszewski	Committee Member from June 27th 2019, Independent Member of the Supervisory Board
Anna Wójcik	Committee Member
Corporate Governance Committee	
Andrzej Szumański	Committee Chair from June 27th 2019, Independent Member of the Supervisory Board
Andrzej Kapała	Committee Member from June 27th 2019, Independent Member of the Supervisory Board
Barbara Jarzembowska	Committee Member from June 27th 2019, Independent Member of the Supervisory Board
Roman Kusz	Committee Member from November 28th 2019, Independent Member of the Supervisory Board
Corporate Social Responsibility Committee	
Jadwiga Lesisz	Committee Chair
Anna Wójcik	Committee Member from July 19th 2018
Michał Klimaszewski	Committee Member from June 27th 2019, Independent Member of the Supervisory Board
Roman Kusz	Committee Member from November 28th 2019, Independent Member of the Supervisory Board

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 Chair, 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 2019 and on the corporate website at
ttps://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.

In 2019, the Audit Committee held 10 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.

Also, permitted non-audit assurance services were provided to PKN ORLEN and selected Group companies in 2019 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 service – confirmation of calculation of the electricity use intensity (EUI) indicator for PKN ORLEN,
- assurance service – confirmation of calculation of the electricity use intensity (EUI) indicator for Anwil S.A. and IKS Solino S.A.,
- assurance service – review of a report on solvency and financial condition 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 by the Warsaw Stock Exchange and statements of compliance with the best practices referred to in Art. 7.3 of the Act on State Property Management, 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 2019, the Corporate Governance Committee held five 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 2019, the Strategy and Development Committee held ten 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 Chair of the Supervisory Board. At least one member of the Nomination and Remuneration Committee should have knowledge of and experience in remuneration policy.

In 2019, the Nomination and Remuneration Committee held eight 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 2019, the Corporate Social Responsibility Committee held four 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 system 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.

Additional benefits for directors reporting to the PKN ORLEN Management Board 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, the right to participate in the Employee Pension Plan on the terms applicable at the Company, and the right to participate in the Employee Capital Plan subject to generally applicable laws.

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 annual bonuses

Members of PKN ORLEN's Management Board are entitled to an annual bonus (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 annual bonus depends 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 bonus payment 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 Management Board Member an annual bonus (variable pay) for a given financial year, specifying the amount of the bonus, or a resolution not to grant the annual bonus. Such resolution is the basis for payment of the annual bonus provided that the Company's consolidated financial statements for the financial year have been approved by the General Meeting and provided that the Management Board Member has been granted discharge in respect of his duties.

The Supervisory Board set the following six quantitative targets for all Members of the Management Board for 2019:

- reported EBIT of the Group,
- EBITDA LIFO 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 annual bonus for 2019:

- 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 (Dz.U. of 2018, item 1182, as amended) within the Company's subsidiaries within the meaning of Art. 4.3 of the Act on Competition and Consumer Protection of February 16th 2007 (Dz.U. of 2017, item 229, as amended).

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 achievement 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 who in 2019 served on the Management or Supervisory Boards of subsidiaries, jointly controlled entities and associates of the ORLEN Group did not receive any remuneration for such service.

Provisions of contracts with Members of the Management Board regarding non-competition and termination

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 50% or 100% of six times their monthly base pay, payable in six equal monthly instalments. The non-compete clauses come into force only after a Management Board Member had held their position for at least three or 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,
- Policy for Supporting Employees in Difficult Personal Circumstances;
- Separate internal organisational document on the Family Friendly Employer project.

Objectives of the diversity management include:

- equal treatment in employment and non-discrimination,
- respect for diversity,
- management of cultural differences,
- readiness to employ people facing social exclusion or threatened with marginalisation on the labour market, facilitating their employment in ORLEN Group Companies and thus increasing the employment rate of the disabled,
- 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 people in a difficult life situation,
- 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.
- signing a declaration of cooperation between the State Fund for Rehabilitation of Persons with Disabilities and PKN ORLEN, which initiated activities aimed at employing people with disabilities in the Group. As a result of these activities, PKN ORLEN joined the "Work and Integration" Programme. In addition to PKN ORLEN S.A., seven Group companies joined the Programme: ANWIL S.A., ORLEN CUK Sp. z o.o., ORLEN Eko Sp. z o.o., ORLEN KolTrans S.A., ORLEN Ochrona Sp. z o.o., ORLEN Paliwa Sp. z o.o. Gas Primary Logistics Branch, and ORLEN Południe S.A.

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 2019, the Management Board consisted of one woman and five men, while the Supervisory Board consisted of six 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: one person. The age structure of

Supervisory Board Members was as follows: 40−49 years: 6 members, 50−60 years: 1 member, over 60 years: 3 members.

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 2019**. This report will be published in a separate document (combining the report of the Company and the ORLEN Group) on the website https://www.orlen.pl/EN/Pages/default.aspx on the day of publication of the Annual Report of the ORLEN Group for 2019.

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 Franchisee 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 website: 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
NET FINANCIAL GEARING	net debt / equity x 100%

8. APPROVAL OF THE STATEMENT OF THE MANAGEMENT BOARD REPORT ON THE OPERATIONS OF THE ORLEN GROUP AND PKN ORLEN

The Management Board of PKN ORLEN herby declares that the foregoing Management Board Report on the operations of the ORLEN Group and PKN ORLEN for year 2019 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 18 March 2020.

……………………..…………..
Daniel Obajtek
President of the Board

Signature Not Verified
Dokument podpisany przez
Daniel Obajtek; PKN Orlen S.A.
Data: 2020.03.18 14:05:24 CET

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Armen Artwich
Member of the Board

Signature Not Verified
Dokument podpisany przez ARMEN KONRAD ARTWICH; POLSKI KONCERN NAFTOWY ORLEN S.A.
Data: 2020.03.18 14:15:53 CET

……………………..…………..
Adam Burak
Member of the Board

Signature Not Verified
Dokument podpisany przez Adam Wojciech Burak
Data: 2020.03.18 15:55:07 CET

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Patrycja Klarecka
Member of the Board

Signature Not Verified
Dokument podpisany przez
Patrycja Klarecka
Data: 2020.03.18 16:26:55 CET

……………………..…………..
Zbigniew Leszczyński
Member of the Board

Signature Not Verified
Dokument podpisany przez ZBIGNIEW MARIUSZ LESZCZYŃSKI; POLSKI KONCERN NAFTOWY ORLEN S.A.
Data: 2020.03.18 16:15:53 CET

……………………..…………..
Michał Róg
Member of the Board

Signature Not Verified
Dokument podpisany przez MICHAŁ MAREK RÓG; POLSKI KONCERN NAFTOWY ORLEN S.A.
Data: 2020.03.18 15:00:53 CET

……………………..…………..
Jan Szewczak
Member of the Board

Signature Not Verified
Dokument podpisany przez Jan Włodzimierz Szewczak
Data: 2020.03.18 13:44:26 CET

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Józef Węgrecki
Member of the Board

Signature Not Verified
Dokument podpisany przez Józef Węgrecki
Data: 2020.03.18 14:41:49 CET