2022

Non-financial Statement

of the ORLEN Group and PKN ORLEN S.A.
for 2022

Sustainability Report

Table of contents

1. Letter from CEO **4**

2. Information on this Report **9**

Reporting principles, structure and methodology 11

Material reporting aspects 14

3. Business model **17**

ORLEN Group and PKN ORLEN S.A. 20

Organisation and development policy 27

Key products and brands 30

ORLEN Group Strategy until 2030 32

ORLEN Group Sustainable Development Strategy for 2021–2023 40

Our stakeholders 44

Tax transparency 45

Anti-competitive behavior 47

4. EU Taxonomy **49**

Regulatory framework 50

Consolidated disclosures of the ORLEN Group 51

Key performance indicators and relevant accounting principles 55

5. Society **71**

Management of the social area 74

Key performance indicators 79

Due diligence procedures 82

Material risks and management approaches 117

6. Employee matters and respect for human rights **121**

Management of the employee matters and human rights area 124

Key performance indicators 137

Due diligence procedures 151

Material risks and management approaches 168

7. Environment and climate **173**

Management of the environment and climate area 178

Key performance indicators 186

Due diligence procedures 210

Management of environmental and climate risks 227

8. Occupational health and safety **239**

Occupational health and safety management 242

Key performance indicators 245

Due diligence procedures 255

9. Process safety **267**

Process safety management and policies in place 269

Due diligence procedures 273

Number of process safety events, by business activity 278

Material risks and management approaches 281

10. Counteracting corruption and bribery **285**

Management of anti-corruption and anti-bribery 288

Key performance indicators 295

Due diligence procedures 298

Material risks and management approaches 302

11. Authorisation of the Non-financial Statement Report of the ORLEN Group and PKN ORLEN S.A. for 2022 ..... **305**

Daniel Obajtek
President of the Management Board
Chief Executive Officer

Letter from the President of the Management Board

Ladies and Gentlemen,

last year went down in history as the time when Russia launched its full-scale war on Ukraine. The event has left a profound mark on the whole international community, but also on global economy. The energy crisis and disrupted supply chains that were its immediate fallout were hardly conducive to the success of business strategies conceived in times of peace. Unless, as in the case of PKN ORLEN, such strategies factored in and effectively addressed the risks that materialised last year. For this reason, despite the ongoing war, challenging macroeconomic climate and unprecedented volatility on the energy markets, we were successfully pursuing our plan to strengthen and develop the ORLEN Group.

In 2022, we finally turned our multi-utility vision into reality, having completed the mergers with LOTOS and PGNiG. This marked the establishment of Central Europe's largest energy group, ranking among top 150 companies in the world by revenue and serving more than 100 million customers. We now have a headcount of nearly 65 thousand employees and our revenue for the 12 months of 2022 reached PLN 278bn. The market value of nearly PLN 73bn has secured us a place among the top ten European energy brands. In 2022 alone, we spent PLN 19.7bn on projects seeking to permanently improve our energy security and independence, including through development of renewable energy. In 2023, expenditure on such projects will double to PLN 36bn.

As Central Europe's largest company, we are well placed to face up to major business challenges. The merger with LOTOS strengthened our ties with Saudi Aramco, the world's largest oil producer and global leader of the petrochemical industry. One effect of this cooperation is an oil supply contract we have signed, covering as much as 45% of the ORLEN Group's overall demand. We also successfully completed the process of diversifying our gas supply sources, which had been under way for over seven years. We focused on attracting reliable trade partners to reshape the mix of energy supply sources for Poland, while ensuring the highest possible level of energy and fuel security for the entire region. These measures, consistently pursued amid the energy crisis, have delivered the desired outcome, as – for the first time ever – the entire volume of oil and gas consumed in Poland comes from non-Russian sources. LNG and pipeline supplies from new directions (Norway and Lithuania) launched last year already account for more than a half of our gas imports. In 2022, a quarter of the imported volume arrived in liquefied form from the United States.

Following the string of business combinations, we have emerged as a strong and financially stable group, driving the green transition of Poland's economy. We are working towards an ambitious plan to develop renewable energy and alternative fuels. In line with our Hydrogen Strategy announced in 2022, we launched in Trzebinia the first of the envisaged hydrogen hubs, based on which we will be rolling out a distribution network for this green fuel, and we also built our first hydrogen refuelling stations. We can see the potential of hydrogen especially in public transport, so we engaged with many local governments and municipal transport companies that will be able to receive our hydrogen supplies. In addition, we launched the Mazovian Hydrogen Valley as a place where new hydrogen technologies will be developed and implemented and where the sector's future personnel will be trained. We already took a major step in that direction with the launch of Poland's first Hydrogen Academy in March 2023, where students are involved in work on groundbreaking innovations on the European scale.

We also made further progress on our Baltic Power project. The offshore wind farms developed as part of the project will ultimately be capable of powering millions of Polish homes for a quarter of a century. Although the project is scheduled for completion in 2026, it is already driving further investments. The main ones include Poland's first installation terminal to be built in Świnoujście and a port in Łeba, which will be used as a base for turbine maintenance vessels. This confirms that our offshore wind farms can provide a growth stimulus to the whole region.

We are also investing in biofuels. Besides biogas and biomethane, we are developing the production of second generation bio additives, which will not compete with food production. A project will be carried out at the ORLEN Group to build a facility for producing bioethanol from cereal straw. The green project, located at ORLEN Południe's Jedlicze plant, will be the first such facility in Poland and the second one in Europe, and its annual capacity will reach 25 thousand tonnes of bioethanol. In parallel, a pilot plant is being built in Głąbowo to enable production of over 7 million cubic metres of biomethane annually, which will then be converted into fuel, bioLNG. Such amount of green gas fuel will translate into a tangible reduction of carbon dioxide emissions from heavy goods transport.

The crisis that has swept through the European energy market, exacerbated by the war in Ukraine, has underscored the need to further diversify not only the supply directions of energy feedstocks and fuels, but also the energy mix itself. Therefore, in addition to

our investments in offshore and onshore wind power and solar photovoltaic projects, we will develop generation capacities based on the innovative technology of small modular reactors (SMR). At the beginning of last year, having secured clearance from the Polish anti-trust authority, we established ORLEN Synthos Green Energy, the company that will be responsible for developing and commercialising in Poland one of the most efficient, cost effective and safe power generation technologies.

The energy transition requires bold and swift action, but moving down that path we must also keep in mind the need to ensure continuous energy security. This is why, while reinforcing our commitment to the climate neutrality goal, we remain focused on the development and sustainable use of fossil energy sources. This ambitious and evolutionary approach has found its expression in our updated ORLEN2030 strategy. The amount we intend to spend to deliver the strategy objectives is PLN 320m, of which PLN 140bn has been earmarked for green projects. The remainder will be spent on projects designed to strengthen the guarantees of uninterrupted energy supplies to support the region's economy and develop our traditional business segments, based on increasingly efficient and environmentally friendly technologies.

We also pursue our business goals and enhance our brand recognition through sponsorship. In the past year, we entrenched our position as Poland's largest sponsor of sports. We currently support to more than 90 individual athletes, 70 sports clubs, 11 associations and 2 committees. Beneficiaries of our outreach efforts include some 60 thousand children and young people.

In our corporate social responsibility activities, we focus on projects that primarily support local communities. We also offered our assistance to Ukrainian war refugees. In addition, we consistently engage in initiatives intended to improve road safety, raise environmental awareness, protect the environment, and promote health and healthcare. These initiatives included the Comprehensive Programme for the Prevention, Diagnostics and Treatment of Cancers and Respiratory System Diseases for Residents of the City and County of Płock, a pioneering project in Poland. An essential role in delivering the goals of our charitable giving policy is played by the ORLEN Foundation. In 2022, it led important projects for local communities, including 'ORLEN for Firefighters', 'My Place on Earth', 'We Keep Watch! We Remember!', 'Health for Płock', and 'Safe Eagle Nestlings'.

Ahead of us is another year, bringing with it new challenges and plans, of which we will keep you informed. I encourage you to read the Non-Financial Report of the ORLEN Group and PKN ORLEN S.A. for 2022, where you will find a wide-ranging yet detailed account of the ORLEN Group's activities and initiatives last year.

Daniel Obajtek
President of the Management Board,
Chief Executive Officer

02

Information on this Report

The GRI Standards disclosures discussed in this section:

GRI 2-4 Restatements of information

GRI 3-1 Process of determining material topics

GRI 3-2 List of material topics

GRI 2-22 The previous section entitled 'Letter from CEO' contains a discussion of GRI 2-22 Statement on sustainable development strategy.

1. Reporting principles, structure and methodology

This Non-Financial Report (the "Report") includes data pertaining to the Polski Koncern Naftowy ORLEN Group (the "ORLEN Group") and Polski Koncern Naftowy ORLEN S.A. ("PKN ORLEN", the "Company") for 2022.

This Report has been prepared in accordance with:

■ **Art. 49b.1 and Art. 55.2b-e of the Polish Accounting Act of September 29th 1994, as amended,** which implements the guidelines of Directive 2014/95/EU of the European Parliament and of the Council of October 22nd 2014 on disclosure of non-financial and diversity information.

■ **EU Taxonomy regulations:**

- Regulation (EU) 2020/852 of the European Parliament and of the Council of June 18th 2020 on the establishment of a framework to facilitate sustainable investment and amending Regulation (EU) 2019/2088 has introduced the obligation to include in the Non-Financial Report of the ORLEN Group and PKN ORLEN S.A. for 2022 information on how and to what extent their activities qualify as environmentally sustainable.

- The technical screening criteria for determining whether a given economic activity qualifies as environmentally sustainable are set out in Commission Delegated Regulation (EU) 2021/2139 of June 4th 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by establishing the technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to climate change mitigation or climate change adaptation and for determining whether that economic activity causes no significant harm to any of the other environmental objectives, and in Commission Delegated Regulation (EU) 2022/1214 of March 9th 2022 amending Delegated Regulation (EU) 2021/2139 as regards economic activities in certain energy sectors and Delegated Regulation (EU) 2021/2178 as regards specific public disclosures for those economic activities.

- The disclosure obligations have been further specified in Commission Delegated Regulation (EU) 2021/2178 of July 6th 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by specifying the content and presentation of information to be disclosed by undertakings subject to Articles 19a or 29a of Directive 2013/34/EU concerning environmentally sustainable economic activities, and specifying the methodology to comply with that disclosure obligation.

■ **GRI Standards 2021, which also include GRI 11 sector-specific disclosures: Oil and Gas Sector 2021.** The latest version of the standard for ESG and sustainability reporting, effective for reports or other materials published on or after January 1st 2023.

The disclosures addressed in this Report are listed at the beginning of each section.

The scope of information contained in this Report takes into account the expectations resulting from **international ESG ratings**. PKN ORLEN also takes steps to improve its compliance with the non-mandatory **recommendations of the European Commission (EC Communication 2019/C 209/01) and of the Task Force on Climate-related Financial Disclosures (TCFD) regarding information on climate issues.** This document presents activities supporting the delivery of the **UN Sustainable Development Goals 2030.**

The business model, non-financial key performance indicators, policies and procedures as well as potential risks and risk management methods are discussed in this Report for the entire ORLEN Group and for PKN ORLEN. This Report presents activities carried out by the ORLEN Group and PKN ORLEN in 2022.

The previous report, for 2021, was published in April 2022. Non-Financial Reports are issued on an annual basis and are continually evolving, to reflect changes within the ORLEN Group and in its environment.

There have been significant changes relative to the previous Report resulting from the acquisition by PKN ORLEN in 2022 of the following entities:

- on August 1st 2022 – the former LOTOS Group
- on November 2nd 2022 – the former PGNiG Group

The amounts and numbers presented in this Report are accompanied by comments stating whether they include or exclude data of the acquired entities.

Some aspects of the non-financial activities are presented using the examples of selected ORLEN Group companies whose business scope is of key significance to the Group.

GRI 2-4

Restatements of information

Restatements of information for 2021 were made with respect to certain energy-related disclosures.

A survey of the ORLEN Group internal and external stakeholders' opinions on sustainable development and corporate social responsibility was held at the beginning of 2023. The project involved, among other things, a revision of the reported aspects and the stakeholder map. Stakeholder consultations consisted in conducting a survey (online survey method) and individual interviews with representatives of the ORLEN Group key and important stakeholders

The purpose was to probe stakeholders' opinions on the ORLEN Group's impact on sustainability and their expectations towards the organisation regarding ESG aspects, and to identify material environmental, social and governance topics that the Company should consider when planning its sustainable development agenda.

The stakeholder survey fulfils the obligation of engaging stakeholders in the materiality assessment process according to the GRI Standards of reporting.

The survey was carried out in accordance with the international AccountAbility Stakeholder Engagement Standard – AA1000SES, providing the rules for stakeholder relations management.

Preparation of this Report included the following stages:

■ Confirmation of significant business and sustainability topics relevant to the ORLEN Group and PKN ORLEN and their materiality, and confirmation of the stakeholder map through consultations and a survey held in the course of internal and external consultations at the beginning of 2023.

■ Collection of data showing the implementation of policies, strategies and objectives of corporate social responsibility, as well as the due diligence procedures and risk management policies and how they are put into effect at the ORLEN Group and PKN ORLEN.

■ Compilation of this Report of the ORLEN Group and PKN ORLEN for 2022 based on data collected in accordance with Art. 49b and Art. 55.2b-e of the Accounting Act of September 29th 1994 (Dz. U. of 2021, item 217); the EU Taxonomy regulations and GRI Standards, with the incorporation of conclusions and expectations resulting from international ESG ratings, and reference to the recommendations of the Task Force on Climate-related Financial Disclosures.

A detailed description of all aspects of the ORLEN Group's financial and non-financial activities will be presented in 2023 in the online ORLEN Group Integrated Report for 2022. External assurance of this Report will be based on the ISAE 3000 standard.

2. Material reporting aspects

GRI 3-1

Process of determining material topics

GRI 3-2

List of material topics

Both external and internal stakeholders were involved in the process of selecting material aspects to be reported by the ORLEN Group. The process of defining material reporting aspects at the ORLEN Group included the following activities:

Identification

Representatives of the ORLEN Group and its stakeholders took part in an opinion survey carried out in early 2023 through an online questionnaire and a series of in-depth expert interviews with selected stakeholders. The dialogue was conducted based on the GRI Standards and the AA1000SES international stakeholder engagement standard. The consultations concerned priority directions for sustainable and responsible business, as well as expectations as to disclosures relating to the Company's operations and their social and economic impacts, including determination of their materiality. The survey involved employees of the ORLEN Group and representatives of industry organisations and institutions, the investor community, academics, as well as social and business partners. The stakeholder survey was preceded by an internal review of material reporting aspects, which referred, among other things, to the GRI sector-specific guidelines.

Prioritisation

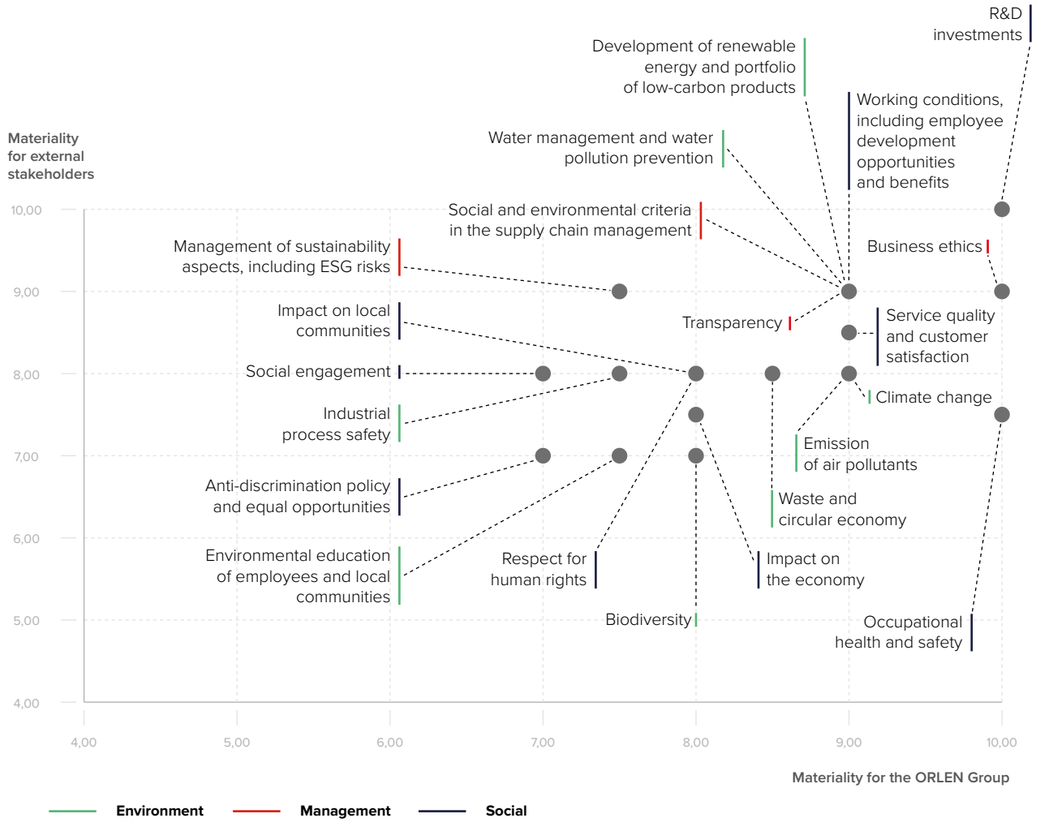
The stakeholder survey confirmed the economic, social and environmental topics which should be reported. Stakeholders also voiced their opinions on the type of Green Deal-related information they considered most relevant and the Sustainable Development Goals 2030 which should be pursued by PKN ORLEN considering its business profile.

Validation

Stakeholders participating in the survey indicated the most relevant topics to report on, which were finally validated in the course of internal discussions at the ORLEN Group. The survey led to the determination of their materiality to the ORLEN Group and its stakeholders.

As a result, the final list of the ORLEN Group's material reporting aspects was prepared, specifying their materiality for the ORLEN Group and its external stakeholders, as shown in the figure below. The following aspects have been included in this Report and will be discussed in detail in the ORLEN Group Integrated Report for 2022.

Material ESG reporting topics for 2022



03

Business model

The largest fuel and energy group in Central Europe

ORLEN Group among top 150 companies in the world by revenue

Over 100 million customers of the ORLEN Group

GRI Standards 2021 indicators described in this section:

- GRI 2-1 Organizational details
- GRI 2-6 Activities, value chain and other business relationships
- GRI 11.19.1 Management of material topic: anti-competitive behavior
- GRI 11.19.2 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices

1. ORLEN Group and PKN ORLEN

GRI 2-1

Organizational details

GRI 2-6

Activities, value chain and other business relationships

Polski Koncern Naftowy ORLEN S.A. ("PKN ORLEN", the "Parent", the Company") was established on September 7th 1999 as a result of the merger of Petrochemia Płock S.A. ("Petrochemia Płock"), a producer of refining and petrochemical products in Poland, and Centrala Produktów Naftowych CPN S.A. ("CPN"), a distributor of motor fuels in Poland. Prior to the merger, Petrochemia Płock and CPN were owned by the Polish State Treasury, Nafta Polska S.A. ("Nafta Polska") and employees of the merged companies. PKN ORLEN shares were listed on the Warsaw Stock Exchange on November 26th 1999. On April 12th 2000, the Company changed its name from Polski Koncern Naftowy S.A. to PKN ORLEN.

In 2022, PKN ORLEN closed its mergers with the PGNiG Group (in November) and with the LOTOS Group (three months earlier), which marked the establishment of Central Europe's largest energy group ranking among top 150 companies in the world by revenue and serving more than 100 million customers. Over the fourth quarter of 2022, PKN ORLEN was successfully implementing the merger remedies agreed with the European Commission as a condition to its acquisition of Grupa LOTOS. For example, it finalised a series of transactions with Saudi Aramco, of which an integral part was an agreement on crude oil supplies to the entire combined ORLEN Group, not only in Poland, but across the region. PKN ORLEN, Saudi Aramco and its subsidiary SABIC also signed a memorandum of understanding to cooperate on a potential petrochemical project in Gdańsk. Some of the merger remedies were implemented in the retail segment. The ORLEN Group acquired and began to rebrand 79 fuel stations in Hungary, previously branded as Lukoil. The Group will additionally purchase 103 fuel stations located in Slovakia and Hungary by mid-2024. In the fourth quarter of 2022, the ORLEN Group also launched a process of rebranding and integrating LOTOS service stations into its Polish network.

Polski Koncern Naftowy Orlen S.A. ("PKN ORLEN", the "Parent", the "Company"), together with companies forming the Polski Koncern Naftowy ORLEN Group (the "ORLEN Group", the "Group"), is one of the largest and most modern multi-utility groups in Central Europe. The Group also has operations in Malta, Sweden, Hungary, Cyprus, Estonia, Switzerland, the United Kingdom, the United Arab Emirates, Libya, Pakistan, the Netherlands, Belgium, Austria, France, Croatia, Ireland, Colombia, Tanzania, Mozambique, Ukraine, Latvia, and China.

The ORLEN Group's core business consists in **electricity generation, distribution and trading, crude oil processing, production of fuels, petrochemicals and chemicals, wholesale and retail sale of the Group's fuel products, as well as storage, marketing and distribution of gaseous and liquid fuels. The Group operates in the areas of exploration, appraisal, production and import of hydrocarbons.**

ORLEN Group companies provide **a variety of services:** crude oil and fuel storage, transport, maintenance and repair, laboratory, security, design, administrative, courier, press distribution, insurance, financial, and media (newspapers and Internet website) services.

The Group was also engaged in continued projects to harness **renewable energy sources, including development of an offshore wind farm.** A strategic decision was made to build an offshore installation terminal for offshore wind farms in Poland, the first such installation on Poland's territorial sea. The terminal will be located in the Port of Świnoujście and will be one of the most advanced facilities of this kind in Europe. The joint venture project between the ORLEN Group and Northland Power will use 76 state-of-the-art 15 MW turbines from Vestas, whose components will be manufactured at the supplier's new plant in Szczecin. The turbine manufacturing plant, to be manned by a staff of 700, is scheduled for completion in 2024, while the ORLEN Group's installation terminal at the Port of Świnoujście will commence operations in 2025.

At the end of 2022, the ORLEN Group also completed a project to construct one of Poland's largest **solar PV farms**, located near Wielbark (Province of Olsztyn). The 62 MW solar farm will generate clean energy sufficient to power more than 30 thousand households. At the same time, work is under way to build another solar farm, with a capacity of 65 MW, in Przykona (Province of Poznań), with the construction scheduled to start in the middle of 2023.

The Group is also investing in **biogas and biomethane production**, building Poland's first green biogas plant to make a real contribution to reducing CO_2 emissions from heavy goods transport. The pilot plant being built in Głąbowo (Province of Olsztyn) will produce over 7 million cubic metres of biomethane annually, which will then be converted into fuel, bioLNG. This volume allows a truck to travel 22 million kilometres.

The ORLEN Group is also successful in its **upstream oil and gas activities**. In December 2022, PGNiG Upstream Norway and LOTOS Exploration & Production Norge were awarded interests in four exploration licences on the Norwegian Continental Shelf. Together with the latest awards, the ORLEN Group now holds 98 licences in Norway.

Despite allocating billions of złoty to new investments, the Group managed to reduce its debt by PLN 7.2bn (q/q) and PLN 14.6bn (y/y), with the ratio of net debt to EBITDA at (-) 0.08x. In view of PKN ORLEN's successful merger with Grupa LOTOS and PGNiG and stable financial position, the Company was assigned the highest rating ever. Moody's Investors Service upgraded PKN ORLEN's rating to A3, while Fitch Ratings upgraded PKN ORLEN's Long-Term Issuer Default Rating (IDR) by two notches, to BBB+. Given its sound financial footing and steady implementation of business objectives across all areas of operations, on October 3rd 2022 PKN ORLEN paid dividend for 2021 in the amount of PLN 3.5 per share, that is at a level consistent with the Group's strategy.

We are embarking on the transformation process with a strong asset base and sound financial position

Results

PLN 278bn
revenue

PLN 30.9bn
operating cash flow

64,494
number of employees
as at December 31st 2022

PLN 46.9bn
EBITDA LIFO

PLN 19.7bn
capital expenditure

PLN 33.6bn
net profit

PLN 1.5bn (PLN 3.50 per share)
dividend for 2021

Financial security

(-) 0.08
net debt / EBITDA

BBB +
Fitch rating

Issue of PLN 2bn
worth of bonds linked to ESG rating

A3
Moody's rating

Issue of EUR 500m
worth of green Eurobonds

EUR 180m
credit facility agreement with the European Investment Bank for sustainability projects

Strong asset base

7 refineries
in Poland, the Czech Republic and Lithuania, integrated with petrochemical operations

5.1 GW
of installed power generation capacity

More than 100 markets
the Group's operations focus on Central Europe, Norway, Canada and the Middle East

Some 3,100 service stations
in Poland, Germany, the Czech Republic, Slovakia, Lithuania and Hungary

191,000 boe/day
of oil and gas production in Poland, Norway, Canada, Pakistan and Lithuania

0.7 GW
of existing onshore RES electricity capacity and a portfolio of new assets

We are a leading multi-utility player in Central Europe

REFINING

PLN 24.6bn
LIFO-based EBITDA

30.5 million tonnes
sales volume

7 refineries
in Poland, the Czech Republic and Lithuania, with total capacities of more than 45 million tonnes of oil annually – leading position in the region

nearly 3,900 km
of product and feedstock pipelines, over 3,200 km of gas pipelines

94%
capacity utilisation

ca. 0.3 million tonnes
biofuel production

ca. 81%
ORLEN Group's white product yield

PLN 4.3bn
capital expenditure

PETROCHEMICALS

PLN 3.4bn
LIFO-based EBITDA

ca. 83%
PTA production capacity utilisation

Largest petrochemical company
in Central and Eastern Europe and the only one with fully integrated paraxylene and PTA production units

5.0 million tonnes
Sales volume

40 petrochemical products,
marketed in over 60 countries

Over 76%
ORLEN Group's olefin capacity utilisation

PLN 5.1bn
capital expenditure

ENERGY

PLN 4.1bn
EBITDA

Conventional and renewable sources
electricity and heat generation

A major electricity distributor in Poland,
with a 195,000 km long network covering approximately 1/4 of the country

5,1 GW
total installed electrical capacity at the ORLEN Group

13,5 GW
Total installed thermal capacity at the ORLEN Group

Over 0.7 GW
installed electricity capacity at the ORLEN Group from renewable energy sources

Nearly 0.1 GW
of installed thermal capacity at the ORLEN Group from renewable energy sources

PLN 4.4bn
capital expenditure

RETAIL

PLN 2.8bn
EBITDA

Nearly 3,100
service stations across Poland, Germany, Czech Republic, Lithuania, Hungary and Slovakia

Nearly 2,400
food and beverage outlets: Stop Cafe, Stop Cafe Bistro and Star Connect

598
number of EV charging stati

800
RUCH outlets

16.1%
ORLEN Group's share in the fuel marke

Over 15 million
service station customers in the region

9.4 million tonnes
sales volume

PLN 1.4bn
capital expenditure

UPSTREAM

PLN 7.6bn
EBITDA

ca. 1,280 mboe
of 2P reserves in Canada, Poland, Norway, Pakistan and Lithuania

ca. 191 thousand boe/d (Q4 2022)
of average hydrocarbon production in Canada, Poland, Norway, Pakistan and Lithuania

0.8 million tonnes
sales volume

PLN 2.2bn
capital expenditure

GAS

PLN (-) 1.9bn
EBITDA

Over 3.2 bcm
of natural gas storage capacities

ca. 14 bcm
of natural gas imports to Poland (including LNG)

58 LNG deliveries
(5.8 bcm after regasification)

Over 200,000 km
of gas distribution networks (including connections)

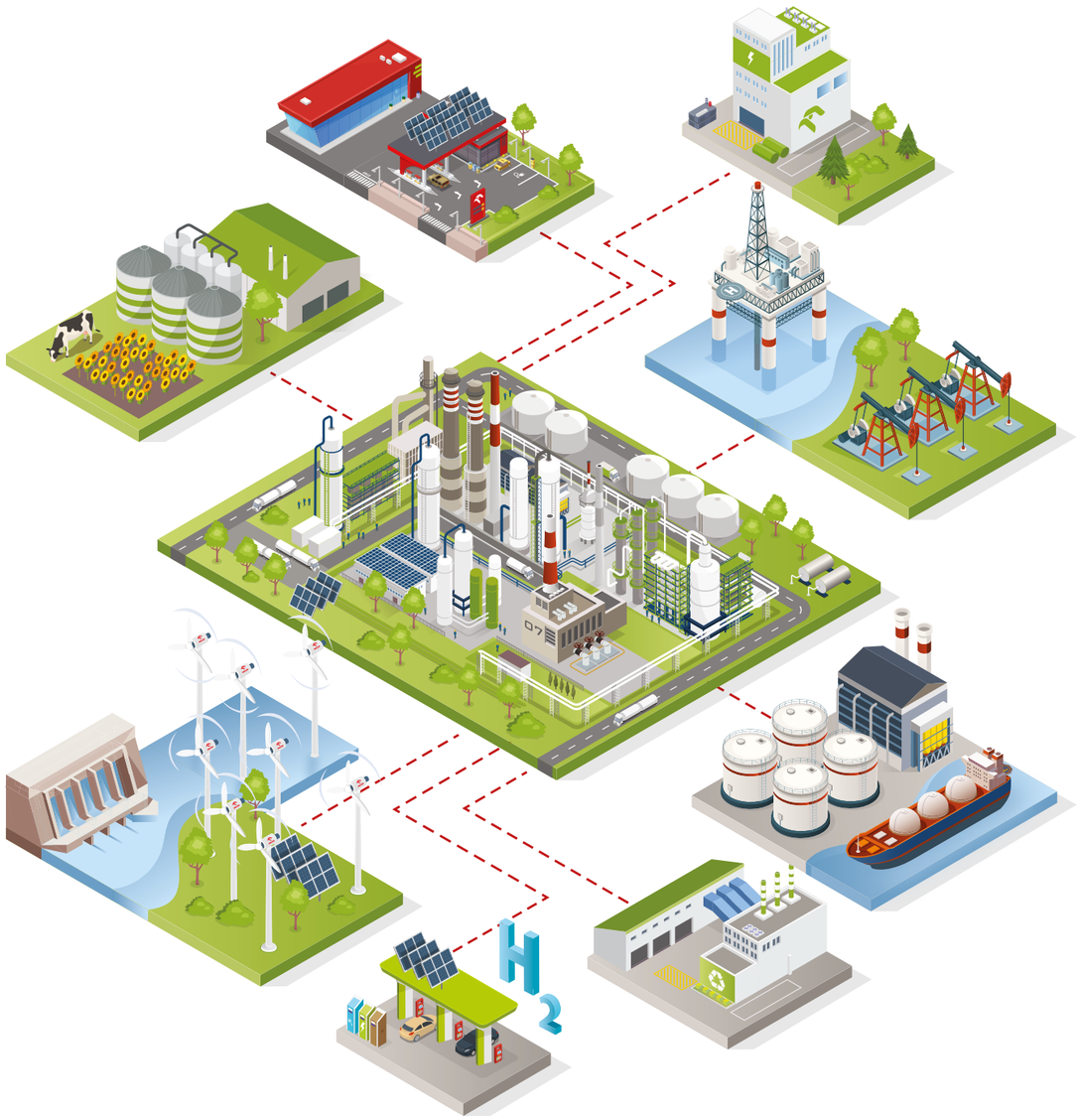
Over 11.3 bcm
of natural gas distribution

0.2 million tonnes,
0,1 million GWh,
4,7 million m³
sales volume

PLN 1.8bn
capital expenditure

SCHEME 1 | Business model of the ORLEN Group

The ORLEN Group's Strategy updated in February 2023 assumes synergies in excess of PLN 10bn to be achieved from the mergers and acquisitions completed in 2022.



2. Organisation and development policy

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

- hydrocarbon exploration, appraisal and production, and import of natural gas;
- power generation (electricity and heat), refining and petrochemical activities including crude oil processing and manufacturing of refining, petrochemical and chemical products and semi-finished products, biofuels and oils;
- trading: transmission, distribution and trading of electricity and heat, wholesale and retail sale of fuel products, petrochemicals, chemicals and other products, sale and distribution of gas and liquid fuels;
- services: crude oil, fuel and gaseous fuel storage, transport, maintenance and repair, laboratory, security, design, administrative, courier, press distribution, insurance, financial, and media (newspapers and Internet website) services.

For management purposes, the ORLEN Group's business is divided into six operating segments:

- Refining – production and wholesale of refining products, production and marketing of oils and auxiliary production;
- Petrochemicals – production and wholesale of petrochemicals, production and marketing of chemicals, and auxiliary production;
- Energy – generation, distribution and sale of electricity and heat, electricity trading;
- Retail – mainly operations conducted at service stations and the operations of the RUCH Group;
- Upstream – operating activities related to the exploration for and production of mineral resources carried out through the ORLEN Upstream Group, LOTOS Upstream Group, and LOTOS Petrobaltic Group;
- Gas – a new operating segment identified following the merger;
- with the PGNiG Group in Q4 2022; it includes natural gas exploration and production, distribution and trading;

Corporate Functions – management, administrative and other activities not allocated to any of the identified operating segments.

As at December 31st 2022, the Polish State Treasury held 49.9% of shares in the ORLEN Group Parent, PKN ORLEN.

As at December 31st 2022, the ORLEN Group comprised 181 companies: the Parent and 180 companies controlled by PKN ORLEN.

SCHEME 2 | Allocation of the Parent and the ORLEN Group companies to operating segments and corporate functions as at December 31st 2022

PKN ORLEN as the Group's Parent is a multi-segment organisation, appropriately allocated to all operating segments and corporate functions.

ORLEN GROUP - CONSOLIDATION DIAGRAM as at December 31st 2022

REFINING

ORLEN Lietuva Group	100%
ORLEN Asfalt Group	100%
ORLEN Południe Group	100%
ORLEN Unipetrol Group	100%
ORLEN Oil Sp. z o.o.	100%
IKS SOLINO S.A.	100%
ORLEN Paliwa Sp. z o.o.	100%
ORLEN Aviation Sp. z o.o.	100%
ORLEN Transport Sp. z o.o.	100%
ORLEN KolTrans S.A.	100%
ORLEN International Trading (SUZHOU) Co., Ltd.	100%
ORLEN Serwis Group	100%
ORLEN Eko Group	100%
Kopalnia Soli Lubień Sp. z o.o.	100%
LOTOS Oil Sp. z o.o.	100%
Rafineria Gdańska Sp. z o.o.	70%
LOTOS Kolej Sp z o.o.	100%
LOTOS Serwis Sp z o.o.	100%
LOTOS SPV 3 Sp z o.o.	100%
LOTOS SPV 4 Sp z o.o.	100%
LOTOS SPV 6 Sp z o.o.	100%
ORLEN Trading Switzerland GmbH	100%

ENERGY

ENERGA Group	90,92%
ORLEN Południe Group	100%
ANWIL S.A.	100%
ORLEN Lietuva Group	100%
ORLEN Unipetrol Group	100%
ORLEN Neptun I Group	100%
ORLEN Wind 3 Group	100%
ORLEN Energia Sp. z o.o.	100%
LOTOS Green H2 Sp. z o.o.	100%
PGNiG TERMIKA Group	100%
SOLGEN Sp z o.o.	60%

UPSTREAM

ORLEN Upstream Group	100%
LOTOS Upstream Group	100%
LOTOS Petrobaltic Group	99,99%
Exalo Drilling Group	100%
GEOFIZYKA Toruń S.A.	100%
PGNiG Technologie S.A.	100%
PGNiG Upstream North Africa B.V.	100%
PGNiG Upstream Norway A.S.	100%
PGNiG SPV 7 Sp. z o.o.	100%
LLC „Karpatgazvydobuvannya"	85%

RETAIL

ORLEN Unipetrol Group	100%
ORLEN Deutschland Group	100%
ORLEN Centrum Serwisowe Sp. z o.o.	100%
ORLEN Budonafty Sp. z o.o.	100%
AB ORLEN Baltics Retail	100%
RUCH Group	65%
LOTOS SPV 5 Sp. z o.o.	100%

PETROCHEMICALS

ORLEN Unipetrol Group	100%
ORLEN Lietuva Group	100%
ANWIL .A.	100%
ORLEN Olefiny Sp. z o.o.	100%

GAS

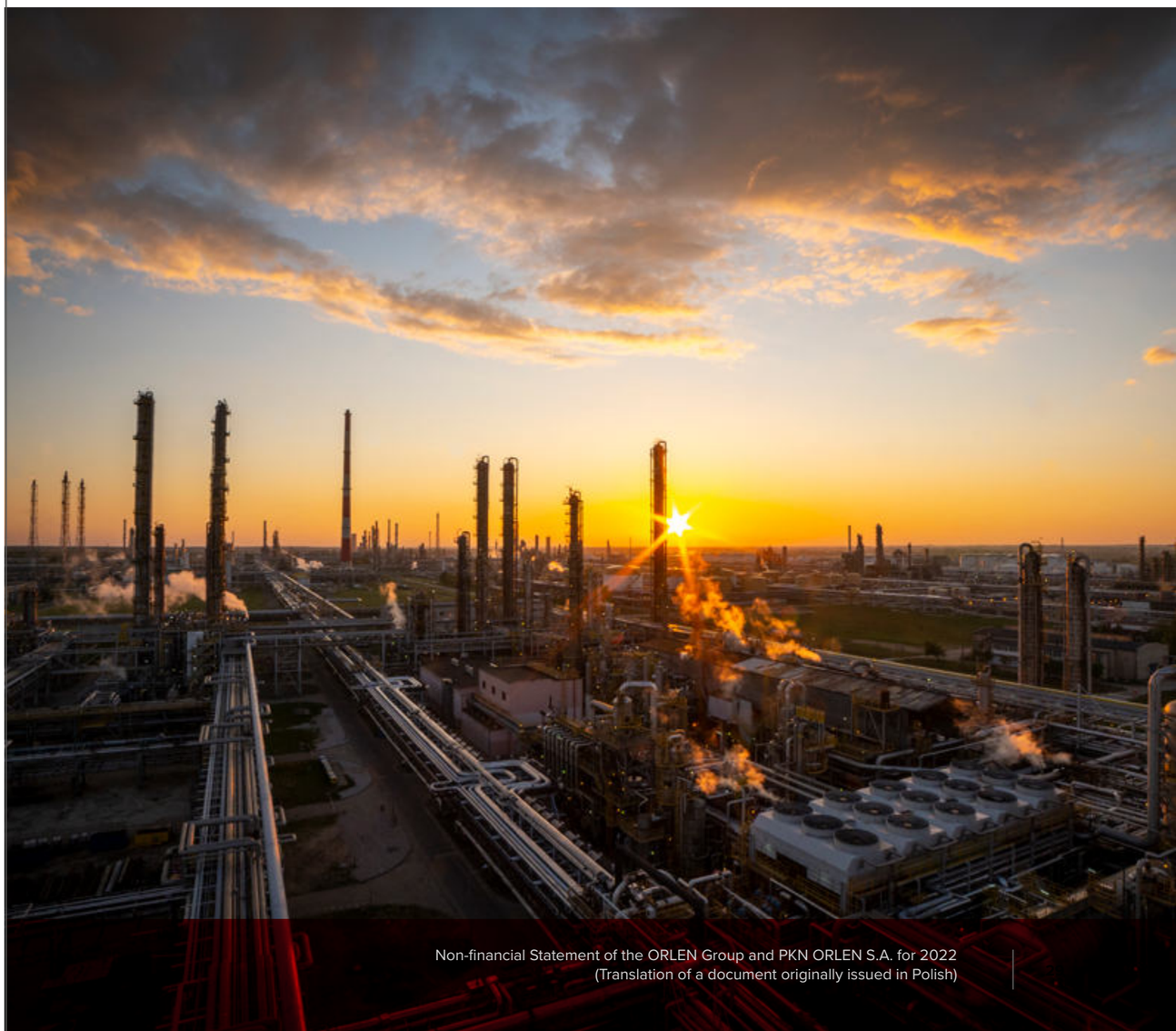
Polska Spółka Gazownictwa Group	90,92%
Gas Storage Poland Group	100%
PGNiG Supply & Trading GmbH Group	100%
PGNiG Obrót Detaliczny Sp. z o.o.	100%
PGNiG SPV 6 Sp. z o.o.	100%
PGNiG Upstream Polska Sp. z o.o.	100%
PGNiG SPV 9 Sp. z o.o.	100%
PGNiG SPV 10 Sp. z o.o.	100%
PGNiG GAZOPROJEKTS S.A.	95,17%
GAS -TRADING Group	79,58%
Polski Gaz Towarzystwo Ubezpieczeń Wzajemnych Group	60%

CORPORATE FUNCTIONS

ORLEN Laboratorium S.A.	100%
Grupa ORLEN Centrum Usług Korporacyjnych	100%
ORLEN Unipetrol Group	100%
ORLEN Holding Malta Group	100%
ORLEN Capital AB	100%
ORLEN Usługi Finansowe	100%
Sigma BIS S.A.	66%
ORLEN Lietuva Group	100%
ORLEN Administracja Sp. z o.o.	100%
Polska Press Group	90,92%
ORLEN Projekt S.A.	100%
LOTOS Straż Sp. z o.o.	100%
LOTOS Ochrona Sp. z o.o.	100%
LOTOS Lab Sp. z o.o.	100%
ORLEN Neptun I Group	100%
ORLEN Ochrona Group	100%
PGNiG Serwis Group	100%
PGNiG Ventures Sp. z o.o.	100%
ORLEN VC Sp. z o.o.	100%

COMPANIES NOT FULLY CONSOLIDATED DUE TO IMMATERIALITY

According to the ORLEN Group's Strategy updated in February 2023, the key goal of the combined ORLEN Group is to ensure stable supplies of energy, fuel and gas from green sources. On the path to this goal we will primarily invest in renewable energy generation, hydrocarbon production and green projects, including biogas and biofuels. We will also develop hydrogen technologies, modern petrochemical assets and safe nuclear power generation. The Group's fast growth and investments will be a driving engine for Poland's economy, contributing to the modernisation of the energy and fuel industries and creating new jobs. Projects implemented under the strategy will also effectively address global trends and challenges, mainly in such areas as energy security and climate change. Implementation of the ORLEN2030 strategy will bring us closer to achieving our long-term objective of becoming carbon neutral by 2050.
It will make ORLEN a leading multi-utility player in the region with a strong asset portfolio.



3. Main products and brands

Service stations

ORLEN, BENZINA, star, BLISKA, BAQ JAKOŚĆ GRUPY ORLEN

Fuels and services available at service stations

verva, efecta ORLEN, ORLEN w ruchu, ORLEN paczka, stop cafe, o! SHOP ORLEN, ORLEN DRIVE

Loyalty programmes enabling non-cash purchases at ORLEN service stations

mikro FLOTA, FLOTA, open DRIVE, Pay

Other commercial brands

petrygo, ekoterm ORLEN, Platinum ORLEN OIL, CANWIL, QGAZ NOWA JAKOŚĆ LPG, orbiton

VITAY loyalty scheme

CLUB VITAY

Fuel products

Motor gasoline, diesel oil, fuel oil, liquefied gas, biofuels, bunker fuels, aviation fuels, heating oil, hydrogen, LNG

Oils

Base oils, engine oils, gear oils, hydraulic oils, oils for agriculture, industrial oils

Other refinery products

Slack wax, waxes, paraffins, lubricants, naphtha, alkylate, isomerate, reformate, solvents, sulfur, technical-grade glycerine, coke and plasticizers

Industrial gases

Oxygen, nitrogen, helium

Bitumens

Road, industrial, modified and multigrade bitumens

Olefins

Ethylene, propylene

Polymers

Polyethylene, polypropylene, polyvinyl chloride (PVC), PVC granulates, PVC compounds

Artificial fertilizers

Ammonium nitrate, calcium nitrate with magnesium, calcium nitrate with sulfur

Chemical products

Liquid ammonia, soda lye, caustic soda, sodium hypochlorite, gypsum

Salt-based products

Iodised salt, pickling salt, salt pellets, salt briquettes, industrial-grade sodium chloride, animal feed salt, waste salt, industrial-grade brine, table salt, salt dust, salt separated

Other petrochemical products

Petrochemicals (acetone, process butadiene, ethyl tert-butyl ether, process phenol, glycols, terephthalic acid (PTA), liquefied ethylene oxide, petrollent), aromatic hydrocarbons (paraxylene, benzene, toluene, benzene-toluene fraction), raffinate, plasticizers

Other

Brake fluids, car service fluids, PVC sheets, car care products and chemicals, prepaid fuel cards, LPG and AD-Blue flow meters, service station control and metering systems

Energy products

Electricity, heat, natural gas (including LNG), oil

4. Strategy of the ORLEN Group until 2030

Strategic objectives until 2030

The updated ORLEN Group's Strategy 2030 was published after the completion of mergers with the Energa Group, Grupa LOTOS and PGNiG, A process that created a European multi-utility group with diversified revenue streams and sufficient resources to lead the energy transition in the region. The updated strategy assumes maximising value in the segments and business areas in which ORLEN already enjoys a strong strategic position, major capital expenditure projects in new growth areas (such as renewable energy), and investing in the future by exploring new promising areas. The current strategy sets more ambitious green targets for decarbonisation and installed renewable energy capacity, which align with ORLEN's ambitions as the region's energy transition leader, reflect global trends, and put the Group on a path to achieve carbon neutrality by 2050.

Our 2030 aspirations

In response to trends and challenges facing the energy sector, the ORLEN Group intends to become the leader of the energy transition in Central Europe. In 2030, the ORLEN Group will be:

- a leading player in Europe with a presence along the value chain and cumulative EBITDA in excess of PLN 400 billion in 2023–2030;
- a leader of the energy transition in the region, with more than 9 GW of installed renewable energy capacity;
- a provider of integrated services for customers that meets their fuel, energy and convenience shopping needs, relying on existing and new channels and on digital technologies;
- a responsible corporate citizen investing in sustainable development, energy transition, decarbonisation, recycling and community initiatives;
- a stable source of value creation stemming from a responsible financial policy and a focus on maximising returns on investments combined with efforts to maintain a stable balance sheet.

We have aligned our strategy with the new market context

New asset configuration within the Group

- **Integration with Grupa LOTOS, PGNiG and Energa** opens up new growth opportunities
- **Support for the energy transition** through coordinated transformation of a broad group of assets

Long-term trends

- **New regulations,** including Fit for 55, REPowerEU, RED III and extended EU Taxonomy; rising prices of emission allowances (EUAs)
- **New funding opportunities** (e.g., sustainable financing) with a change in the availability of capital

Geopolitical changes and economic cycles

- **War in Ukraine** and constraints on energy and commodity flows
- **Disruptions on fuel and commodity (crude oil, gas) markets;** price volatility of energy and commodities

New business opportunities

- **Petrochemicals:** including advanced recycling
- **Low-carbon fuels:** biofuels and synthetic fuels
- **Electric mobility:** EV charging infrastructure
- **Renewable hydrogen** in transport, industry and energy generation

Strategic logic behind ORLEN Group's growth

By 2030, we plan to spend a total of PLN 320 billion on investment projects. The Group's growth is based on a diversified portfolio of investments in its existing and future business areas.

- Maximising value in the segments and business areas in which the ORLEN Group already has a strong strategic position: refining, gas-fired power generation, conventional power generation, gas distribution, fuel retail and oil production. These strategic directions will account for approximately 35% of total capex.

  The key investment directions in this strategic field will be:

  - Refining: emissions reduction through the use of carbon capture, utilisation and storage (CCUS) technologies and energy efficiency projects;
  - Gas-fired power generation: expansion of CCGT units to balance the Polish electric power system and replace high-emission coal-fired power plants and CHP plants;
  - Gas distribution network: extension of gas source connections (including biogas and biomethane plants).

- Strategic development. Most of the capital expenditure will be allocated to segments that align with the Company's strategic ambitions. Around PLN 180–200 billion will be spent on new prospective growth areas, including mainly renewable energy and advanced petrochemicals.

  The key investment directions in this strategic field will be:

  - Petrochemicals: increasing the share of advanced and speciality products in the product portfolio, including through projects implemented with international partners and growth of the share of olefins;
  - Renewable energy: implementation of onshore wind power, solar PV and hydropower projects;
  - Biogas: Expansion of the biogas and biomethane plants portfolio;
  - Electric mobility: expanding the EV charging network to 10 thousand points in Poland, the Czech Republic and Germany.

- Investing in the future. Growth directions where the ORLEN Group plans to strategically position itself to prepare for market challenges expected to have a major impact after 2030: hydrogen technologies, synthetic fuels, CCUS (for own needs and as a service for third-party clients), SMR, recycling.

  The key investment directions in this strategic field are:

  - Hydrogen technologies: development of renewable hydrogen production and distribution assets;
  - Synthetic fuels: construction of assets for the production of synthetic fuels;
  - SMR: construction of a 300 MW small nuclear reactor.

Strategic growth directions for the orlen group's business segments

Under the new strategy, the ORLEN Group's growth is based on key pillars of business segment management.

New energy: investment in renewable generation capacities as the main growth area.
Looking ahead, a key area of focus for the ORLEN Group over the next decade will be new energy, with a particular emphasis on renewables. By 2030, we aim to have more than 9 GW of installed renewable capacities in onshore and offshore wind farms and solar photovoltaic projects, both in Poland and abroad. By 2030, we expect to be a major biogas producer in Central Europe with an annual output of 1 bcm of biogas.

Petrochemicals: petrochemical capacity expansion, specialty products and recycling.
Expansion of the existing portfolio and entry into new business areas will help entrench our position as a leading petrochemical producer in Central Europe. We intend to take steps to maximise petrochemical yields (from cracking, FCC, etc.). We will ramp up our capacities in olefins and other base products. We will also solidify our position in polymers – a business line with attractive growth potential – by extending the value chain and entering into compounding and concentrates. Concurrently, the share of specialty high-margin products in the Group's portfolio will grow from 16% to approximately 25%. Recycling and biomaterials will be new branches of the petrochemical segment. By 2030, we will expand our recycling capacities (mainly in plastics) up to 0.3 million tonnes. Additionally, we plans to implement advanced circular economy technologies.

Refining: maintaining the position of a leading regional refiner with major investment into biofuels.
Until 2030, refining will remain an important segment of our business. Its transformation will be driven by energy efficiency improvements and increased crude conversion rates. Expansion of the biofuel output will be another vital driver. Within the coming decade, the Group will emerge as the region's leading producer of biofuels, with an annual capacity of 3 million tonnes (FAME, HVO).

Retail: expansion of the retail network and non-fuel segment.
Our strategic vision is to vigorously develop the Group's retail arm, based on the network expansion and significant additions to the retail offering. By 2030, the number of the ORLEN Group's service stations operating throughout the region will be at least 3.5 thousand. We intend to support the development of electric mobility, including by building at least 10 thousand EV charging points by the end of the decade. Our broad, integrated offering, including electricity, natural gas and liquid fuels, will keep attracting new customer groups.

Upstream: sustainable portfolio growth, with a focus on natural gas assets.
To ensure energy security for Poland, our strategy involves continuing exploration efforts and maintaining stable levels of gas production in Poland, while also investing increased production in Norway. This strategy will result in a significant increase in gas output volumes, from 8 bcm to 12 bcm.

Gas trading: We are committed to guaranteeing the security of natural gas supply to Poland (LNG deliveries and supply by pipelines) by maintaining a diversified range of supply sources. We will seek to maximise value from other activities, e.g. by strengthening the trading function to optimise sales margins.

Conventional power and networks: supporting stable electricity and gas supplies in Poland; investing in power generation sources and network upgrades and expansion.
In an effort to reduce the carbon footprint of power and heat generation while ensuring the continuity of energy supply, we will develop a range of CCGT units to balance the Polish electric power system and replace high-emission coal-fired power plants and CHP plants. We also intend to enter into partnerships to develop and operate small modular reactors (SMR) as another potential source of zero-carbon electricity and heat. To enable the energy transition, we will upgrade and expand the electricity and gas distribution network.

Sustainable development of the ORLEN Group:
The ORLEN Group's Strategy 2030 sets the long-term objective of achieving a net zero carbon footprint by 2050. By 2030, we intend to reduce CO_2 emissions by 25% (absolute emission volumes in Refining, Petrochemicals and Upstream), CO_2/MWh emissions in the Energy segment by 40%, and net carbon intensity (NCI – emissions intensity of energy products sold, measured as gCO_2e/MJ for all emission scopes) by 15%. The ORLEN Group intends to spend PLN 120 billion on green investments in the following areas:

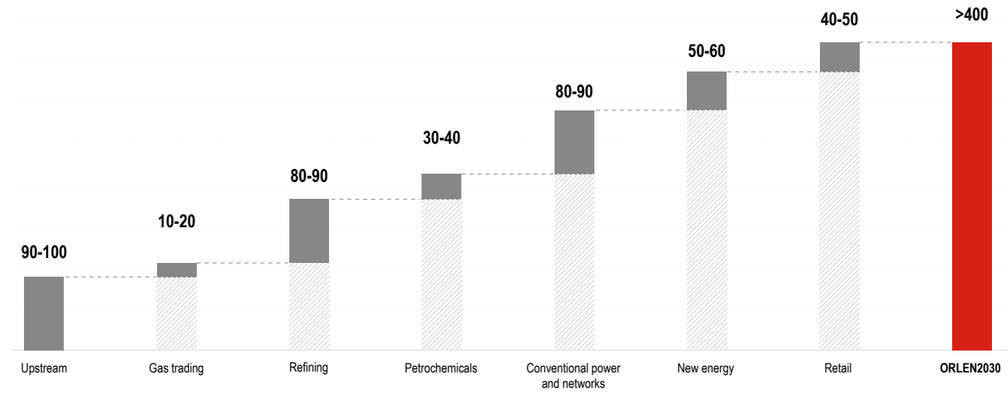
- Development of renewable power generation;
- Expansion of biogas and biomethane capacities;
- Electric mobility;
- Expansion of biofuel and biomaterial capacities;
- Development of recycling capabilities;
- Development of hydrogen capabilities.

Major R&D and digital transformation projects:
Pursuit of our strategic objectives will also require changes within the organisation. Over the next decade, we will spend approximately PLN 3 billion on research, development and innovation as a key area of the necessary transformation. Another essential element will be the digital transformation, driving efficiency gains in production and distribution, helping mitigate the environmental footprint and strengthening customer relations. We will put in place a new management model, tailored to the scale of the Group's operations and taking into account the ongoing acquisition processes. We will be an organisation relying on knowledge and versatile competences, investing in talent and human capital.

Further growth from stable financial foundations:
The strategy is also designed to ensure stable financial foundations for our business. Our value is built by profitable investment projects, sustainable funding sources, and a robust balance sheet. Having capped our net debt/EBITDA ratio at 2.5x, we will align the Group's CAPEX plans with its current financing capabilities. We will rely on a balanced mix of funding sources with current cash flows supported by an additional debt capacity. We also use alternative funding sources, such as project finance, EU funding for innovation and energy transition projects, and engaging with external partners who co-fund selected projects. Initiatives aligned directly with the Group's carbon neutrality goal are partly financed with green and sustainable bonds issued on the European capital market.

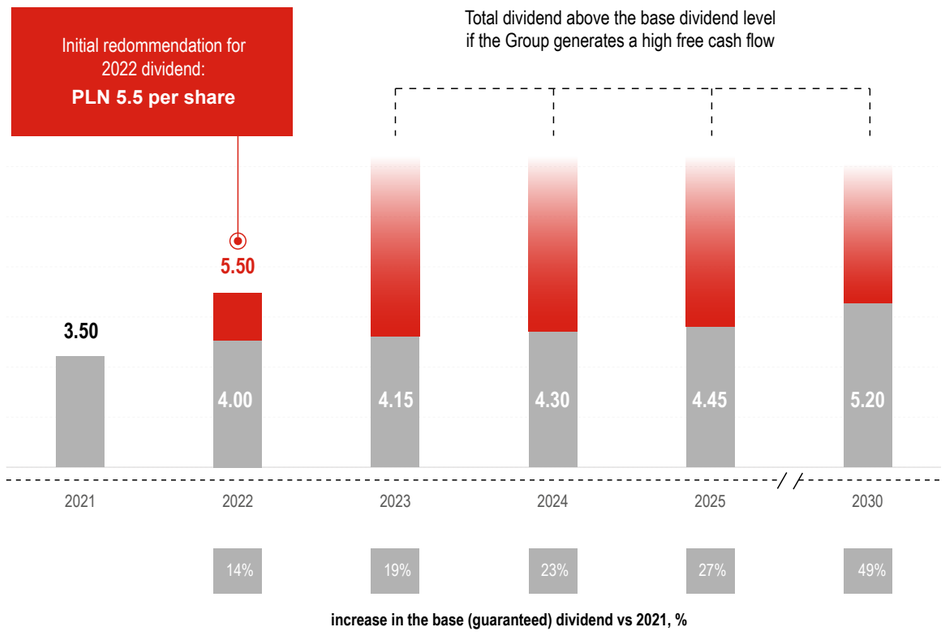
The financial effect of the strategy will be delivery of cumulative EBITDA of around PLN 400 billion by 2030. The key contributors will be Upstream, Refining, and Conventional Power and Networks (cumulative EBTIDA of PLN 80-90 billion for each), as well as the New Energy segment (PLN 50-60 billion).

CHART 1 | Cumulative EBITDA in 2023–2030 after implementation of the strategy by business area [PLN billion]



The strategy provides for guaranteed base dividend of PLN 4 per share, to be progressively increased by PLN 0,15 each year. The final dividend amount will depend on the Group's performance. It is expected to be set at 40% of the adjusted free cash flow (operating cash flow minus investing cash flow), but no less than the base dividend.

CHART 2 | Dividends [PLN per share]



Summary of strategy implementation in 2022

The key theme in 2022 was the outbreak of war in Ukraine, driving a decline in the supply of natural gas, coal, crude oil and fuels, and pushing up the prices. Refining margins rose to record high levels.

In 2022, the ORLEN Group consolidated its leading position in the region by finalising the acquisition of the LOTOS and PGNiG Groups. Successful implementation of the merger processes and the strong financial foundations of the Group have been recognised by the rating agencies Fitch and Moody's, which raised the Group's credit ratings to their highest ever levels: A3 with a stable outlook (Moody's), and BBB+ with a stable outlook (Fitch).

In 2022, the ORLEN Group reported full-year revenue of PLN 278 billion and record-high LIFO-based EBITDA of PLN 46,9 billion.

With this level of profit and a secure financial position, we were able to double our capital expenditures. In 2022, the Group spent PLN 19.7 billion on investment projects, which included: construction of a visbreaking unit in Płock, a hydrocracking unit in Lithuania, a 2G bioethanol unit at ORLEN Południe and an HVO unit in Płock, expansion of the olefins production capacity in Płock and the fertilisers production capacity at ANWIL, upgrades of the existing assets and connection of new customers in the Energa Group, construction of CCGT units in Ostrołęka and Grudziądz, development of a wind farm project in the Baltic Sea, and launch of new alternative refuelling points.

The new ORLEN Group is larger, stronger and fully diversified. In accordance with the updated Strategy to 2030, published in February 2023, the Group has greater capacity for investment and sharing profits with the shareholders. The new dividend policy provides for annual dividend distributions at 40% of the free cash flow, but no less than the guaranteed dividend of PLN 4.00 per share for 2022, to be increased progressively each year by PLN 0.15 to PLN 5.20 in 2030. The recommended dividend for 2022 is the highest on record, at PLN 5.50 per share.

In 2023, PKN ORLEN was awarded the title of Top Employer Polska for the 12th consecutive time.

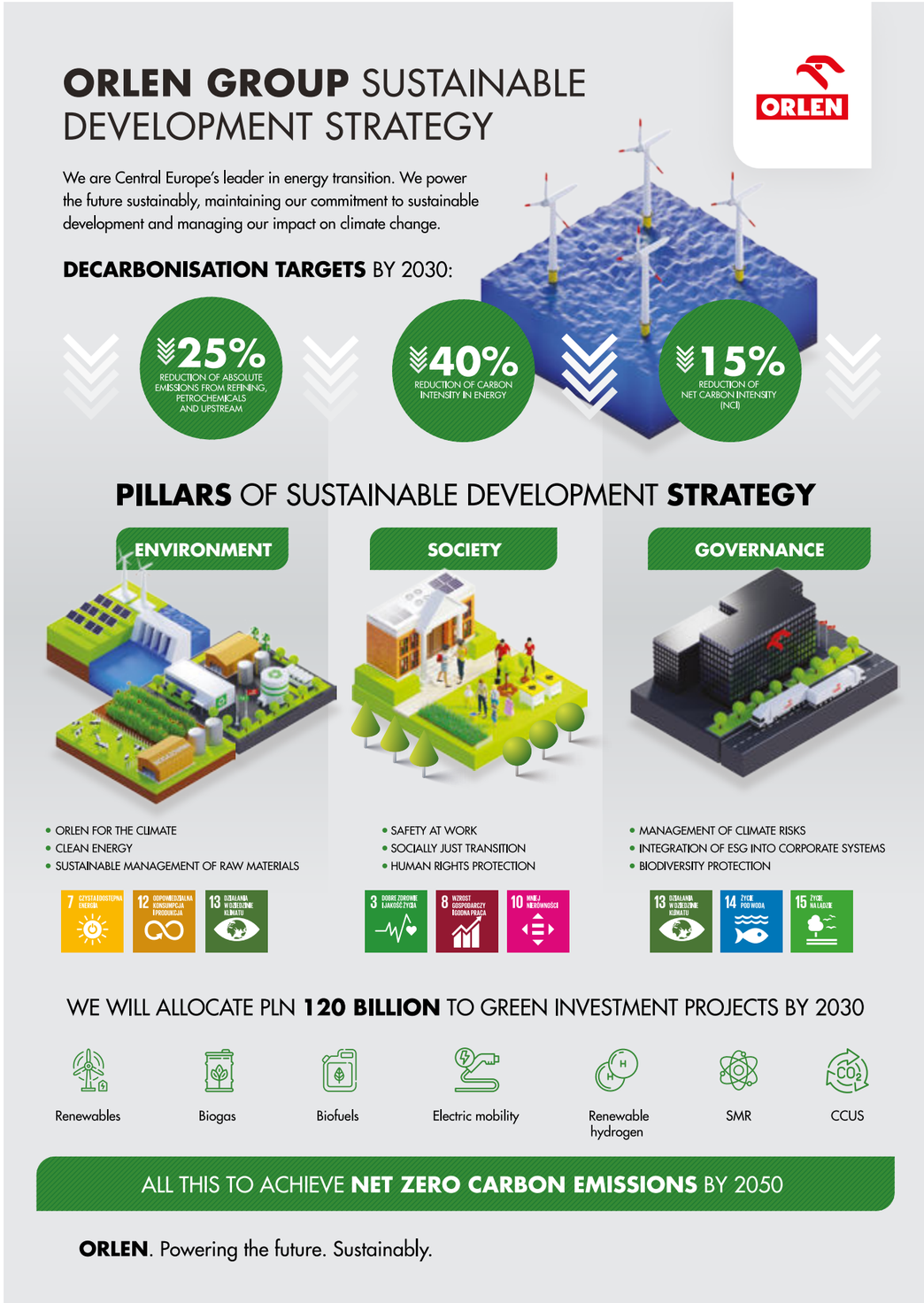
TABLE 1 | Summary of strategy implementation in 2022

		Initial 2019	Progress in 2022
Refining	• Refining capacity, PLNm (y/y)	~36	**~42**
	• Biofuel production capacity (million tonnes/year)	~0,3	**~0,3+**
Petrochemicals	• Share of speciality products in the portfolio (%)	~16	**~21**
	• Plastics recycling capacity (thousand tonnes)	0	**~30**
Energy	• Installed renewable capacity (GW)	>0,5	**~0,7**
	• Installed gas-fired capacity (GWe)	>1,1	**~1,7**
Retail	• Non-fuel margin growth (2019 = 100)	100	**137**
	• Share of foreign locations in the total number of service stations (%)	~37	**~38**
Gas production and trading	• Daily hydrocarbon production (thousand boe)	18	**~191**
	• Share of gas in total production (%)	n.a.	**74**

5. ORLEN Group Sustainable Development Strategy for 2021–2023

The ORLEN Group Sustainable Development Strategy has been **integrated with the ORLEN Group Business Strategy until 2030 and its decarbonisation strategy until 2050.** The three documents aim to support an ambitious business agenda for the next decade, strengthen the Group's financial performance and build long-term value for all stakeholders. An integrated approach makes it possible to capture opportunities created by the evolving environment, and to build value stemming from socially fair energy transition of the Group. PKN ORLEN takes responsibility for shaping the ecosystems in which it operates, and sees the transformation of Central and Eastern Europe's energy system as a paramount duty in the face of the climate challenge.

The Sustainable Development Strategy is one of the cornerstones to the implementation of the ORLEN Group's 2030 Strategy, which addresses its ESG and CSR goals in more breadth and detail, providing a robust management system for sustainability and opening up green finance opportunities. Building on the experience of successful stakeholder dialogue and ambitious CSR efforts, ORLEN's renewed approach gives equal weight to social, environmental and governance needs.



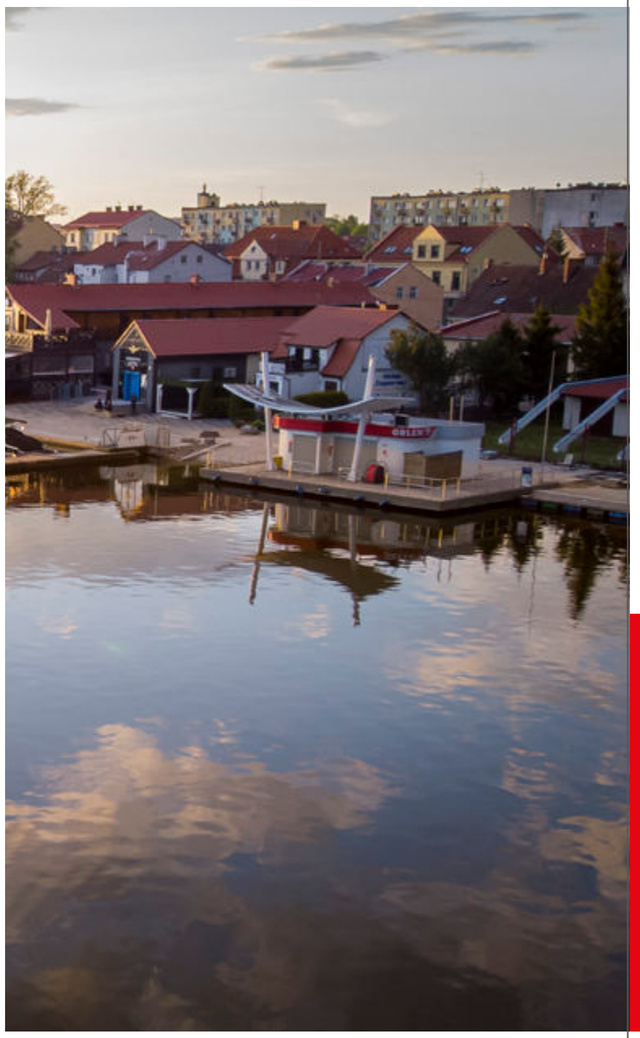
The ORLEN Group Sustainable Development Strategy focuses on ESG (Environmental, Social, and Governance) management, as well as six strategic pillars.

E – the Environmental area - focuses on climate, climate risk management and effective implementation of raw material management practices.

S – in the Social area - the focus is on local communities as a point of reference inspiring the Group's CSR initiatives. In cooperating with our suppliers, we are going to use ORLEN's influence to promote sustainability principles in value chains. The goal is to extend our responsibility for the entire product life cycle – including the raw materials used, product development, production and use and end-of-life recycling. ORLEN seeks to engage its customers and promote responsible consumption patterns.

G – the Governance area - focuses on developing solutions to facilitate implementation of ESG principles in PKN ORLEN's management systems, appropriate and transparent reporting, ethics and organisational values. The objectives resulting from the sustainability agenda and ESG principles, set down in the ORLEN Group Sustainable Development Strategy and decarbonisation strategy, are incorporated into the MBO system for managers reporting directly to the management boards of ORLEN Group companies. Performance against the objectives affects the salary levels.

PKN ORLEN's Sustainable Development Strategy gives priority to the **achievement of ambitious goals outlined in the Paris Agreement, the 2030 UN Agenda and the European Green Deal.** The Group is turning challenges posed by climate change into new opportunities. The actions planned will enable the Group to develop sustainably as a modern, low-carbon and resource-efficient business organisation. Renewable energy sources, electric mobility, recycling, biofuels, hydrogen and a commitment to climate neutrality are the ORLEN Group's response for mitigating and adapting to global climate change.



Progress in delivery of the Sustainable Development Strategy in 2022

SCHEME 3 | Strategic sustainable development directions and initiatives for 2021–2023

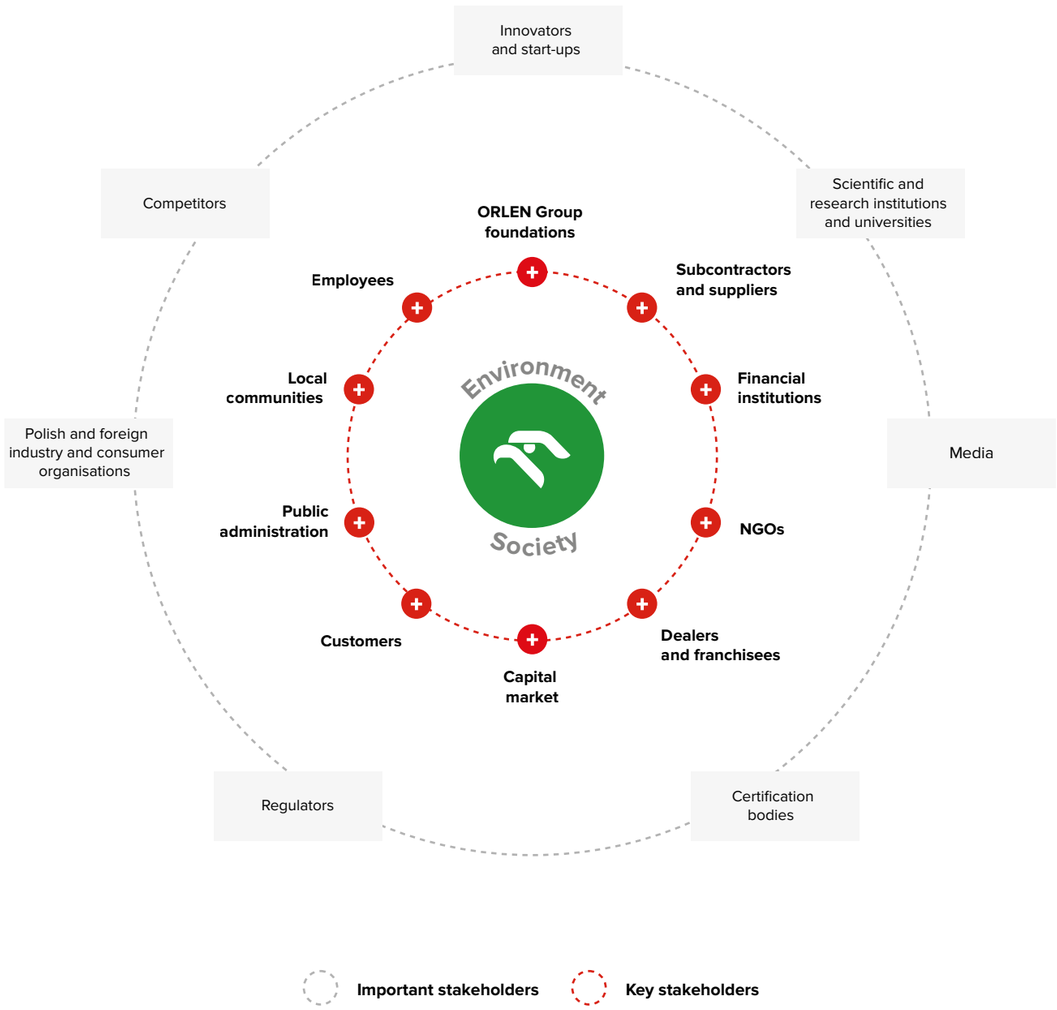
	STRATEGIC DIRECTIONS	INITIATIVES		
ENVIRONMENT	**ORLEN for the climate**	Addition of new emissions indicators	Biodiversity policy	Development of an approach to GHG Scope 3 (CO_2) emissions
	Sustainable management of raw materials	Optimisation of water management	Building eco-friendly non-fuel offering for customers of ORLEN service stations	Eco-friendly promotional or merchandising items
SOCIAL	**Sustainable supply chain**	Procurement policy taking into account ESG criteria	Sustainable investment policy	
	Corporate social responsibility	Development and involvement of local communities	Update of documents related to ethics and respect for human rights	Building social, consumer and environmental awareness
GOVERNANCE	**Environmental aspects in risk management**	Development of a climate policy	Integrating climate risks into the risk management system	Scenario analysis of business model resilience to climate change – in relation to the Paris Agreement
	Integrating ESG into corporate governance systems	Reinforcing ESG governance, including MBOs, responsibility and objectives, in particular with respect to climate change	Increasing transparency of ESG information policy and working on ESG ratings, developing non-financial reporting	

Initiative implemented Initiative in progress

6. Stakeholder map

Responsibility and dialogue are the underlying principles of the ORLEN Group's stakeholder relations. The Group seeks to build them on integrity, transparency, mutual respect and professionalism. To ensure the highest quality of stakeholder relations, the frequency and methods of communication are tailored to the characteristics and current expectations of each stakeholder group. A number of such activities are discussed in this Report. Relevance of the ORLEN Group's stakeholder map was confirmed with parties involved in the stakeholder dialogue (an online survey and interviews), carried out in February 2023. The group of key stakeholders was expanded to include 'Financial institutions'.

SCHEME 4 | ORLEN Group stakeholder map



7. Tax transparency

It is PKN ORLEN's ambition to set standards for the discharge of obligations relating to public dues and other public obligations under Art. 84 of the Polish Constitution.

PKN ORLEN has prepared a tax strategy, which is consistent with the ORLEN Group's business strategy until 2030. Implementation of the tax strategy means ensuring that all obligations imposed by tax laws are fulfilled correctly and on time, so that the Company contributes to providing public funds to enable or support important social initiatives. With this in mind, PKN ORLEN has introduced increased standards for the performance of tax obligations.

Tax security is the core value for PKN ORLEN in the performance of the tax function.

PKN ORLEN has internal structures, infrastructure and technological solutions as well as a system of division of powers and responsibilities enabling proper performance of the tax function. It has put in place uniform high-standard rules for the application of tax laws, including procedures for internal communication and approval of decisions on tax matters.

A number of internal procedures have been introduced to identify and mitigate tax risks.

The PKN ORLEN's employees who are in charge of particular activities related to the tax function have extensive knowledge of tax matters and appropriate qualifications. In order to ensure proper tax risk management, the Tax Office operating within the Company's internal structures analyses tax consequences of PKN ORLEN's projects and activities and is involved in the process of decision making on planned and executed transactions at the earliest possible stage.

In the case of particularly complex issues or issues with respect to which there are differing rulings of courts or other competent authorities, the Company uses expert opinions and studies prepared by independent experts from reputable tax consultancies.

Internal functional audits are held at the Company to examine correctness of application of tax laws by PKN ORLEN's organisational units, and the Company's tax settlements are verified in the course of audits performed by independent specialised entities, including statutory auditors.

PKN ORLEN is an active participant of public life. The Company engages in initiatives promoting development and improvement of tax laws in Poland, delivers opinions on proposed legislation, takes part in social consultations in legislative processes, and submits proposals on tax law areas that require regulation.

The Company monitors amendments to the tax laws on an ongoing basis and implements the required changes in the organisation of its business processes and documentation of business transactions resulting from legal regulations and interpretations issued by tax authorities.

To ensure and maintain the highest level of tax security, the Company uses dedicated IT solutions supporting multi-level review of not only the economic transactions but also their tax consequences. The tax reporting process is automated and is based on records relevant to each type of tax liabilities. Tax returns and tax information are filed with the tax authorities in an automated manner with the use of IT tools that guarantee full control of the process.

PKN ORLEN fulfils a number of tax obligations in Poland, in particular with respect to the following taxes:

- Corporate income tax (including withholding tax);
- Value added tax;
- Excise tax, fuel charge, emission charge, stocks charge;
- Personal income tax;
- Property tax;
- Retail tax;
- Agricultural tax;
- Forest tax;
- Vehicle tax;
- Tax on transactions under civil law (transfer tax) and stamp duty.

PKN ORLEN has been **one of the largest corporate income taxpayers in Poland at least since 2012,** that is since individual data of CIT taxpayers has been available to the public on the Ministry of Finance website. **For the years 2012–2021, i.e. periods which have already been reported to the tax authorities, the Company paid a total of over PLN 5bn in income tax in Poland.**

According to information provided by the Ministry of Finance, PKN ORLEN ranked first among the largest individual corporate income taxpayers for 2021.

The highest standards of due diligence and tax reporting enhance the Company's tax transparency, strengthen its credibility in the market, and build trust with external customers.

The Company does not engage in any activities aimed at tax optimisation or tax evasion, nor does it take any actions which may increase the tax risk or expose the state budget or local municipality budgets to the risk of an illegitimate decrease in amounts of public dues. PKN ORLEN does not have any tax arrears, and all of its tax obligations are fulfilled in a timely manner and with due diligence.

8. Anti-competitive behaviour

GRI 11.14.1

Management of material topic: anti-competitive behaviour

GRI 11.15.1

Total number of legal actions for anti-competitive behaviour, anti-trust, and monopoly practices and their outcomes

Respect for the principles of fair competition is viewed by PKN ORLEN as one of the cornerstones of its business. The Company is **committed to operate in compliance with the competition and consumer protection laws in every country where its business is present.** In order to ensure that this priority is implemented in practice, and in view of the multiplicity of markets in which the ORLEN Group operates and its market shares, PKN ORLEN has implemented a policy of compliance with the competition law, having the status of a Group-wide standard, compliance with which is the responsibility of employees and individual companies of the ORLEN Group. For the compliance programme to be effective, formal legal coordination mechanisms have been in place at the ORLEN Group to monitor and manage anti-trust risks, covering potential or ongoing judicial and administrative proceedings, as well as a legal review path for activities subject to assessment under the anti-trust regulations and appropriate whistleblowing channels for suspected violations in this area. These procedures are applied with due regard to the principles of unbundling. In addition, PKN ORLEN is enhancing the awareness of anti-trust rules among its staff through a number of soft measures, in particular by providing them with relevant training and information disseminated via internal communication channels.

TABELA 3 | Total number of legal actions for anti-competitive behaviour, anti-trust, and monopoly practices and their outcomes

Number of legal actions pending (not completed) during the reporting period regarding anti-competitive behaviour and violations of anti-trust and monopoly legislation in which the organisation has been identified as a participant – **2**	• PKN ORLEN and an ORLEN Group company are participants of anti-trust proceedings instigated by the President of the Polish Office of Competition and Consumer Protection (UOKiK) concerning competition restricting practices on the market of heat generation and the market of retail sales of heat via a district heating network covering the capital city of Warsaw, involving VEW, VEP, PGNiG Termika and former PGNiG S.A. By way of decision No. DOK-5/2020 dated December 3rd 2020, the President of the Office of Competition and Consumer Protection stated that certain practices of VEW, VEP, PGNiG Termika and PGNiG S.A. restricted competition on the market of heat generation and the market of retail sales of heat via a district heating network covering the capital city of Warsaw. The President of UOKiK granted the Company's leniency application and decided not to impose any fine on PGNiG S.A. (PKN ORLEN) and PGNiG Termika. Other participants, including VEW and VEP, filed an appeal against the decision with the Court of Competition and Consumer Protection. The case is pending. • In addition, in 2022, a case was pending before the Supreme Court initiated by PKN ORLEN's cassation complaint (filed by former PGNiG S.A.) against the judgment of the Court of Appeals, dated October 10th 2019, concerning a fine for an abuse of its dominant position on the domestic wholesale market of natural gas, and further the judgment. The cassation complaint had been admitted for examination. The proceedings concerning the alleged practice are related to the President of UOKiK's decision No. DOK-2/2012 of July 5th 2012. The fine was paid in full by former PGNiG S.A. in previous years.
Number of completed legal actions, including any decisions or judgments – **1**	In 2022, the Court of Appeals issued a judgment of April 21st 2022 closing the case related to the President of UOKiK's decision No. DOK-12/2014 dated December 30th 2014 concerning Rafineria Nafty Jedlicze S.A. (currently ORLEN Południe S.A.) and, as the judgment of the Court of First Instance became final, so did the decision of the President of UOKiK imposing a fine on ORLEN Południe S.A. The fine was paid in full.

04

EU Taxonomy

1. Regulatory framework

Regulation (EU) 2020/852 of the European Parliament and of the Council of June 18th 2020 on the establishment of a framework to facilitate sustainable investment and amending Regulation (EU) 2019/2088 ("Regulation 2020/852") has introduced the obligation to include in the Non-Financial Report of the ORLEN Group and PKN ORLEN S.A. for 2022 information on how and to what extent their activities qualify as environmentally sustainable

The technical screening criteria for determining whether a given economic activity qualifies as environmentally sustainable are set out in *Commission Delegated Regulation (EU) 2021/2139 of June 4th 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by establishing the technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to climate change mitigation or climate change adaptation and for determining whether that economic activity causes no significant harm to any of the other environmental objectives* ("Regulation 2021/2139"), and in *Commission Delegated Regulation (EU) 2022/1214 of March 9th 2022 amending Delegated Regulation (EU) 2021/2139 as regards economic activities in certain energy sectors and Delegated Regulation (EU) 2021/2178 as regards specific public disclosures for those economic activities* ("Regulation 2022/1214")[1].

The disclosure obligations have been further specified in *Commission Delegated Regulation (EU) 2021/2178 of July 6th 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by specifying the content and presentation of information to be disclosed by undertakings subject to Articles 19a or 29a of Directive 2013/34/EU concerning environmentally sustainable economic. activities, and specifying the methodology to comply with that disclosure obligation* ("Regulation 2021/2178").[2].

[1] Regulation 2021/2139 and Regulation 2022/1214 are jointly referred to as the "Technical Screening Criteria"

[2] Regulation 2020/852, Regulation 2021/2139, Regulation 2022/1214 and Regulation 2021/2178 are jointly referred to as the "Taxonomy"

2. Consolidated disclosures of the ORLEN Group

In this section, PKN ORLEN, being a non-financial parent undertaking, presents disclosures pertaining to the ORLEN Group in accordance with the Taxonomy requirements. In its disclosures for 2021, the Company was obliged to present the proportion of the ORLEN Group's Taxonomy-eligible economic activities. **The disclosures for 2022 for the first time fulfil the obligation to present the extent to which the ORLEN Group's economic activities are environmentally sustainable, i.e. contribute substantially to at least one of the environmental objectives set out in Regulation 2020/852, do no harm to the other environmental objectives, are conducted in compliance with minimum safeguards, and meet the requirements of the Technical Screening Criteria. The obligation requires, in particular, indication of the percentage of turnover derived from sale of products or provision of services associated with the ORLEN Group's environmentally sustainable ("Taxonomy-aligned") activities and the percentage of capital expenditure (CapEx) and operating expenditure (OpEx) corresponding to assets or processes associated with environmentally sustainable economic activities** ("key performance indicators", "key indicators", "KPIs").

The list of Taxonomy-eligible activities will be expanded by the European Union. At present, work is under way on the Technical Screening Criteria for the next four environmental objectives, namely sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention and control, protection and restoration of biodiversity and ecosystems, which may result in more environmental objectives being contributed to by the ORLEN Group's existing Taxonomy-eligible activities or in more ORLEN Group's activities qualifying as Taxonomy-eligible.

2.1. Determination of Taxonomy-eligible economic activities

In accordance with Regulation 2021/2178, an economic activity described in relevant delegated acts qualifies as Taxonomy-eligible irrespective of whether that economic activity meets any or all of the Technical Screening Criteria.

The ORLEN Group has determined which of its activities qualify as Taxonomy-eligible and Taxonomy-non-eligible based on the description of activities contained in the Technical Screening Criteria, and using the NACE codes provided there as ancillary information.

The ORLEN Group's economic activities that qualify as Taxonomy-eligible are associated primarily with the environmental objective of climate change mitigation. The activities listed at the end of this section of the Report are associated with the ORLEN Group's revenue generating activities, and activities in which capital expenditure or operating expenditure is incurred.

Activities with which no revenues and no capital or operating expenditures are associated are not subject to the disclosure obligations. Also, early-stage research and development projects do not constitute Taxonomy-eligible activities.

The ORLEN Group has not qualified as Taxonomy-eligible its activities related directly to refining processes and based on fossil fuels, as the Taxonomy does not cover activities related to the production and sale of fuels. In the ORLEN Group's opinion, processes related directly to the production of fuels are not subject to disclosure either, as such activities make no contribution and do not have the potential to make a contribution to any of the environmental objectives, as specified in the Taxonomy. Examples include assets associated with integrated hydrogen installations, as well as other facilities and assets used for refining processes.

2.2. Determination of Taxonomy alignment of Taxonomy-eligible economic activities

The process of determining the Taxonomy alignment of Taxonomy-eligible economic activities of the ORLEN Group consisted in examining the satisfaction of criteria of contributing substantially to climate change mitigation, and then, once the activities meeting the substantial contribution criteria were identified, reviewing the satisfaction of doing no significant environmental harm ("DNSH") criteria against the other environmental objectives. At the same time, an assessment of the ORLEN Group's compliance with so-called minimum safeguards was performed to determine whether the ORLEN Group has procedures in place to ensure compliance with the OECD Guidelines for Multinational Enterprises, the United Nations Guidelines on Business and Human Rights (including the principles and rights established as part of the eight fundamental conventions of the International Labor Organization's Declaration on Fundamental Principles and Rights at Work), as well as the principles and rights set forth in the International Bill of Rights.

For some Taxonomy-eligible activities, such as new gas-fired power plant projects, it has not been possible at the current stage to document their alignment with the Technical Screening Criteria, so such activities are disclosed as Taxonomy-eligible but not Taxonomy-aligned, which may change in the future.

2.2.1. Substantial contribution

The Taxonomy has established various substantial contribution criteria for eligible activities. In its analysis, the ORLEN Group assessed satisfaction of the criteria established for each such activity. Below is an explanation how satisfaction of these criteria was assessed for each activity:

- As regards the following activities: *4.1. Electricity generation using solar photovoltaic technology, 4.3. Electricity generation from wind power, 4.10. Storage of electricity, 6.15. Infrastructure enabling low-carbon road transport and public transport, 7.6. Installation, maintenance and repair of renewable energy technologies,* Regulation 2021/2139 has not introduced substantial contribution criteria, as the very conduct of such activities suffices for them to qualify. Hence, the ORLEN Group's activities such as:
  - electricity generation using solar photovoltaic technology (4.1),
  - electricity generation from wind power (4.3),
  - pumped-storage power plant and energy storage systems in the form of lithium-ion and lead-acid batteries (4.10),
  - electric vehicle charging infrastructure and hydrogen refuelling points (6.15),
  - installation of solar PV systems (7.6),

  make a substantial contribution to climate change mitigation.
- As regards activity 3.14. Manufacture of organic basic chemicals, Regulation 2021/2139 has established GHG emission limits for the substantial contribution criterion. The Group's activities associated with the production of organic chemicals as part of the Olefins III complex (3.14) satisfy this criterion.
- As regards activity *4.13. Manufacture of biogas and biofuels for use in transport and of bioliquids*, Regulation 2021/2139 has established a number of substantial contribution criteria, including GHG emission limits. Some of the ORLEN Group's projects associated with the production of advanced biofuels satisfy the substantial contribution criteria.
- Provisions of the Taxonomy regarding compliance with the substantial contribution criteria of activity *4.9 Transmission and distribution of electricity* are not clearly formulated and require interpretation. The ORLEN Group has interpreted the substantial contribution criteria in respect of point 4.9 of Regulation 2021/2139 in light of the requirements under Article 3 and Article 10 of Regulation 2020/852, which stipulate that substantial contribution to climate change mitigation is made by activities associated, among other things, with the distribution of energy from renewable sources. On this basis, the ORLEN Group has assumed that the portion of revenue, capital expenditure and operating expenditure that is associated with the distribution of electricity from renewable sources is Taxonomy-aligned (information on the adopted allocation key is provided in the section concerning the key performance indicators and relevant accounting principles).

  In addition, as regards activity associated with the distribution of electricity, Regulation 2021/2139 specifies which infrastructure components can be considered aligned. Infrastructure directly associated with renewable energy sources (i.e. connections and network extensions), electric infrastructure for the electrification of transport, metering infrastructure and the installation of transmission and distribution transformers satisfy the substantial contribution criteria and so the key performance indicators for activity 4.9 include these infrastructure components.

  Given that some companies active in the energy sector have disclosed all their electricity distribution activities as Taxonomy-aligned, the European Commission should issue a relevant interpretation to ensure the comparability of sector disclosures. Such interpretation could affect the scope of future disclosures.
- As regards activity *4.15. District heating/cooling distribution,* Regulation 2021/2139 has introduced several alternative criteria. Some of the ORLEN Group's heat distributionactivities meet the definition of an efficient district heating system and satisfy the substantial contribution criteria.
- As regards activity *4.8. Electricity generation from bioenergy*, the Regulation has established different requirements for assessing substantial contribution depending on the total thermal input of an installation. Activities meeting these criteria include electricity generating installations with a total rated thermal input below 2 MW and using gaseous biomass fuels.

2.2.2. Compliance with the DNSH criteria

The DNSH criteria are designed to ensure that economic activities do no significant harm to the other environmental objectives. The combination of the substantial contribution and DNSH criteria is aimed at ensuring that contribution to one of the environmental objectives of the Taxonomy is not made at the expense of other environmental objectives.

The DNSH criteria for activities contributing to climate change mitigation include specific requirements

relating to climate change adaptation, sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention and control, and protection and restoration of biodiversity and ecosystems. The DNSH criteria vary from activity to activity (except for those DNSH criteria that apply to climate change adaptation, where the assessment approach is substantially the same for all activities).

The ORLEN Group has analysed compliance with the DNSH criteria for all economic activities meeting the substantial contribution criteria. The analysis included an assessment of the location where a given economic activity is carried out, the specificities of the economic activity concerned and the applicable DNSH criteria. Hence, some activities satisfying the substantial contribution criteria, such as hydropower plants put into operation decades ago, were not considered Taxonomy-aligned as it was impossible to confirm their compliance with the DNSH criteria.

2.2.3. Compliance with minimum safeguards

The assessment of the ORLEN Group's compliance with minimum safeguards was made on the basis of recommendations contained in the Final Report on Minimum Safeguards, prepared by the Platform On Sustainable Finance, an advisory body to the European Commission (the "Platform"), taking into account the ORLEN Group's procedures and processes. The assessment was made in relation to four core topics, i.e. human rights, corruption and bribery, fair competition and taxation.

Adherence to the standards of responsible conduct is embedded in the ORLEN Group's organisational culture. The standards find their reflection in a number of internal procedures and processes. The Group's main policies for this area include the ORLEN Group Code of Ethics, ORLEN Group Supplier Code of Conduct and ORLEN Group Human Rights Policy, implemented in 2022.

The ORLEN Group's due diligence activities are constantly developed and implemented in a way facilitating their integration, which is particularly important given the acquisitions of the LOTOS Group and PGNiG Group completed in 2022.

In its recommendation concerning assessment of compliance with the minimum safeguards, the Platform refers to violations identified for individual topics. During the period under review, a final judgment in anti-trust proceedings was issued against one of the subsidiaries, but it relates to behaviour from more than five years ago which, in the Company's opinion, can in no way affect the assessment of compliance in 2022. Other than that, no notifications were found in the registers of the OECD's National Contact Point or the Business and Human Rights Resource Centre (BHRRC).

For detailed information on the core topics for which compliance with minimum safeguards should be defined, see the dedicated sections of the Non-Financial Report of the ORLEN Group and PKN ORLEN S.A. for 2022 (s. 45, 47, 121, 285).

3. Key performance indicators and relevant accounting principles

Key performance indicators have been calculated in accordance with the guidelines set out in Regulation 2021/2178.

In order to calculate the proportion of turnover, capital expenditure (CapEx) or operating expenditure (OpEx) that is associated with environmentally sustainable activities, the same accounting principles were applied as those used to prepare the ORLEN Group's consolidated full-year financial statements. The calculation of the key performance indicators for the Group took into account the relevant consolidation eliminations applied in the preparation of the financial statements. The presentation of KPIs excludes intra-group sales and turnover resulting from own consumption. It should be noted that no portion of revenue, capital expenditure or operating expenditure was double counted. The ORLEN Group also operates outside Poland. All its activities were assessed in the same way as the activities carried out in Poland.

In the case of the electricity distribution activity (activity 4.9), the energy balance was used to determine the ratio of renewable electricity fed into the grid and distributed and, based on this ratio, it was determined what proportion of revenue, capital expenditure and operating expenditure is associated with the Taxonomy-aligned activity. The key performance indicators for activity 4.9 additionally include the infrastructure components indicated in point 4.9 of Regulation 2021/2139.

Turnover KPI

The turnover KPI was determined by dividing net revenue from sale of products or provision of services associated with Taxonomy-aligned economic activities of the ORLEN Group by the ORLEN Group's consolidated revenue. The Parent of the ORLEN Group supervised the process of preparing the key performance indicators, and verified financial data related to the environmentally sustainable activities in order to avoid double allocation of any amount to the KPIs.

The basis for calculating the turnover KPI was the ORLEN Group's consolidated revenue for 2022 disclosed in the consolidated financial statements under Revenue, described in Notes 13.1, 13.2 and 13.3.

The turnover KPI was calculated using financial data on external sales of products and services associated with environmentally sustainable economic activities.

The Company does not present a breakdown of the numerator of the turnover KPI into lease revenue and other revenue as 98.5% of the ORLEN Group's revenue is derived from contracts with customers.

CapEx KPI

The CapEx KPI was calculated by dividing total capital expenditure associated with environmentally sustainable economic activities by total capital expenditure of the ORLEN Group.

With regard to capital expenditure, the basis for calculating the KPI was the ORLEN Group's capital expenditure including an increase in property, plant and equipment, intangible assets, investment property and right-of-use assets, together with capitalisation of borrowing costs, and decrease due to liquidated damages received or receivable for delayed contract performance, recognised in the consolidated financial statements for 2022 and described in Note 11 Revenue, expenses, financial results, increase in non-current assets.

The difference between the amount of capital expenditure disclosed in the consolidated financial statements of the ORLEN Group and the denominator of the CapEx KPI results from including in the denominator property rights acquired (for details, see Note 14.2.2 Property rights), and an increase in

property, plant and equipment, intangible assets and other non-current assets on the acquisition of new companies (excluding goodwill) as at the date of acquiring control (for details, see Note 7.3 Accounting for acquisitions of shares under IFRS 3 Business Combinations).

The ORLEN Group does not include in the denominator of CapEx KPI property rights received free of charge or goodwill, which is not defined as an intangible asset under IAS 38.

Where the same items of property, plant and equipment or intangible assets were also used to produce products or services associated with Taxonomy-eligible economic activities, the capital expenditure was disaggregated. In calculating the amount of capital expenditure (the numerator of the KPI for the relevant activity), the utilisation rate of the assets was taken into account. When an asset was used for different Taxonomy-eligible economic activities, the capital expenditure amounts were allocated to the numerator only once.

The CapEx KPI reflects capital expenditure incurred under a plan (the "CapEx Plan") aimed to expand Taxonomy-eligible economic activities or upgrade Taxonomy-eligible economic activities to render them Taxonomy-aligned. Details of capital expenditure included in the numerator of the CapEx KPI, including capital expenditure incurred as part of the CapEx Plan, are shown in Table 2.

TABLE 2 I Quantitative breakdown at economic activity aggregated level of amounts included in the CapEx numerator into the categories identified at the ORLEN Group as defined by Regulation 2021/2178.

Taxonomy-aligned economic activity (no)	"Increase in property, plant and equipment (PLNm)[1]	"Other increase (PLNm)[2]	**"Total CapEx for Taxonomy-aligned economic activities (PLNm)"**	"Including increase from business combinations (PLNm)"	"Including increase under the CapEx Plan (PLNm)"	"Total capital expenditure under the CapEx Plan (PLNm)"	Date when projects implemented under the CapEx Plan are to become Taxonomy-aligned
3.14	3,505,10	0,00	**3,505,10**	0,00	3,505,10	9,230,95	2024
4.1	57,63	0,00	**57,63**	0,24	40,55	300,90	2023
4.3	6,51	0,00	**6,51**	0,00	0,00	nd.	nd.
4.8	36,48	0,00	**36,48**	0,00	36,48	152,59	2024
4.9	263,10	523,62	**786,72**	0,00	nd.	nd.	nd.
4.10	2,79	0,00	**2,79**	0,00	nd.	nd.	nd.
4.13	351,94	0,00	**351,94**	0,00	351,94	1 249,68	2024
4.15	2,77	0,00	**2,77**	0,00	0,00	nd.	nd.
6.15	49,74	2,73	**52,47**	0,82	47,82	169,37	2024
7.6	2,13	0,38	**2,51**	2,17	0,00	nd.	nd.
Razem	4,278,18	526,73	**4,804,92**	3,23	3,981,87	11,103,50	

[1] uwzględnia środki trwałe w budowie

[2] brak możliwości podziału ilościowego nakładów inwestycyjnych związanych z częścią CapEx dla działalności 4.9, dla której zastosowano klucz alokacji

OpEx KPI

The OpEx KPI was calculated by dividing total operating expenditure associated with Taxonomy-aligned economic activities by total operating expenditure.

With respect to operating expenditure, the basis for calculating the KPI was the ORLEN Group's operating expenditure, which includes direct non-capitalised costs related to research and development, building renovation activities, short-term leases, maintenance and repairs, and any other direct costs related to the day-to-day operation of property, plant and equipment. In calculating direct costs related to the day-to-day operation of property, plant and equipment, maintenance costs were taken into account, in particular cost of maintenance and repair of machinery, maintenance materials cost, and IT cost dedicated to plant maintenance and service cost. The OpEx amount includes the cost of maintenance and repair services provided also within the ORLEN I

Group. Details of operating expenses included in the numerator of the OpEx KPI are presented in Table 3.

TABLE 3 I Quantitative breakdown of amounts included in operating expenditure

	Costs and expenses
Research and development	0,00
Building renovation measures	0,38
Non-capitalised leases	2,27
Maintenance and repair	102,20
Other	0,11
Total OpEx for Taxonomy-aligned economic activities	**104,96**

Additional disclosures

Additionally, the ORLEN Group has joint ventures accounted for with the equity method, such as Basell ORLEN Polyolefins Sp. z o.o. and Baltic Power Sp. z o.o. The CapEx KPI does not include capital expenditures of PLN 73.3m incurred by the ORLEN Group in 2022 on the development of a project to construct a wind farm of Baltic Power Sp. z o.o. Disclosures on additional KPIs related to investments accounted for with the equity method are not required.

The presentation of Tables 4–11 fulfils the obligation to disclose key performance indicators, taking into account the requirements of Regulation 2021/2178 and Regulation 2022/1214.

TABLE 4 | Proportion of turnover from products or services associated with Taxonomy-aligned economic activities

				Substantial contribution criteria						'Do no significant harm' criteria										
Economic activity (1)	Code(s) (2)	Total absolute turnover (3) PLNm	Part of turnover (4) %	Climate change mitigation (5) %	Climate change adaptation (6) %	Water and marine resources (7) %	Circular economy (8) %	Pollution (9) %	Biodiversity and ecosystems (10) %	Climate change mitigation (11) Y/N	Climate change adaptation (12) Y/N	Water and marine resources (13) Y/N	Circular economy (14) Y/N	Pollution (15) Y/N	Biodiversity (16) Y/N	Minimum safeguards (17) Y/N	Proportion of Taxonomy-aligned turnover, year N (18) %	Proportion of Taxonomy-aligned CapEx, year N-1 (19) %	Category (enabling activities) (20) E	Category (transitional activities) (21) Y
A. TAXONOMY-ELIGIBLE ECONOMIC ACTIVITIES																				
A.1. Environmentally sustainable (Taxonomy-aligned) activities																				
Electricity generation using solar photovoltaic technology	4.1	20,09	0,01%	100%	0%	–	–	–	–	–	T	–	T	–	T	T	0,0%	–	–	–
Electricity generation from wind power	4.3	416,57	0,15%	100%	0%	–	–	–	–	–	T	T	T	–	T	T	0,2%	–	–	–
Transmission and distribution of electricity	4.9	1 739,04	0,63%	100%	0%	–	–	–	–	–	T	–	T	T	T	T	0,6%	–	E	–
Storage of electricity	4.10	142,16	0,05%	100%	0%	–	–	–	–	–	T	T	T	–	T	T	0,1%	–	E	–
District heating/cooling distribution	4.15	18,66	0,01%	100%	0%	–	–	–	–	–	T	T	–	T	T	T	0,0%	–	–	–
Infrastructure enabling low-carbon road transport and public transport	6.15	3,79	0,00%	100%	0%	–	–	–	–	–	T	T	T	T	T	T	0,0%	–	E	–
Installation, maintenance and repair of renewable energy technologies	7.6	30,13	0,01%	100%	0%	–	–	–	–	–	T	–	–	–	–	T	0,0%	–	E	–
Turnover from Taxonomy-aligned environmentally sustainable activities (A.1)	–	2 370,43	0,85%	100%	0%												0,85%	–	1,915,11	–
A.2 Taxonomy-eligible economic activities that are not environmentally sustainable (not Taxonomy-aligned)																				
Hydrogen production	3.10	0,70	0,00%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Manufacture of carbon black	3.11	65,15	0,02%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Manufacture of organic basic chemicals	3.14	8,080,41	2,91%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Manufacture of anhydrous ammonia	3.15	1,209,40	0,44%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Manufacture of nitric acid	3.16	34,75	0,01%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Manufacture of plastics in primary forms	3.17	6,920,51	2,49%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Electricity generation from hydropower	4.5	359,92	0,13%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Electricity generation from bioenergy	4.8	74,11	0,03%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Transmission and distribution of electricity	4.9	2,538 40	0,91%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Manufacture of biogas and biofuels for use in transport and of bioliquids	4.13	2,495,75	0,90%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
District heating/cooling distribution	4.15	17,28	0,01%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Cogeneration of heat/cooling energy and power from bioenergy	4.20	116,63	0,04%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
High-efficiency cogeneration of heat/cooling energy and power from fossil gaseous fuels	4.30	1,443,29	0,52%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Construction, extension and operation of water collection, treatment and supply systems	5.3	2,76	0,00%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Anaerobic digestion of biowaste	5.7	0,54	0,00%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Freight rail transport	6.2	23,57	0,01%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
"Turnover from Taxonomy-eligible economic activities that are not environmentally sustainable (activities that are not Taxonomy-aligned) (A.2)"	–	23,383,16	8,42%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total (A.1+A.2)	–	25,753,60	9,28%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1,915,11	0,00
B. TAXONOMY NON-ELIGIBLE ECONOMIC ACTIVITIES																				
"Turnover from Taxonomy non-eligible economic activities (B) "	–	251,810,13	90,72%																	
Total (A+B)	–	**277,563,72**	**100%**																	

TABLE 5 | Proportion of capital expenditure on products or services associated with Taxonomy-aligned economic activities

				Substantial contribution criteria						'Do no significant harm' criteria										
Economic activity (1)	Code(s) (2)	Total absolute capital expenditure (3) PLNm	Proportion of capital expenditure (4) %	Climate change mitigation (5) %	Climate change adaptation (6) %	Water and marine resources (7) %	Circular economy (8) %	Pollution (9) %	Biodiversity and ecosystems (10) %	Climate change mitigation (11) Y/N	Climate change adaptation (12) Y/N	Water and marine resources (13) Y/N	Circular economy (14) Y/N	Pollution (15) Y/N	Biodiversity (16) Y/N	Minimum safeguards (17) Y/N	Proportion of Taxonomy-aligned CapEx, year N (18)%	Proportion of Taxonomy-aligned CapEx, year N-1 (19) %	Category (enabling activities) (20) E	Category (transitional activities) (21) Y
A. TAXONOMY-ELIGIBLE ECONOMIC ACTIVITIES																				
A.1. Environmentally sustainable (Taxonomy-aligned) activities																				
Manufacture of organic basic chemicals	3.14	3,505,10	3,88%	100%	0%	–	–	–	–	–	T	T	–	T	T	T	3,88%	–	–	T
Electricity generation using solar photovoltaic technology	4.1	57,63	0,06%	100%	0%	–	–	–	–	–	T	–	T	–	T	T	0,06%	–	–	–
Electricity generation from wind power	4.3	6,51	0,01%	100%	0%	–	–	–	–	–	T	T	T	–	T	T	0,01%	–	–	–
Electricity generation from bioenergy	4.8	36,48	0,04%	100%	0%	–	–	–	–	–	T	T	–	T	T	T	0,04%	–	–	–
Transmission and distribution of electricity	4.9	786,72	0,87%	100%	0%	–	–	–	–	–	T	–	T	T	T	T	0,87%	–	E	–
Storage of electricity	4.10	2,79	0,00%	100%	0%	–	–	–	–	–	T	T	T	–	T	T	0,00%	–	E	–
Manufacture of biogas and biofuels for use in transport and of bioliquids	4.13	351,94	0,39%	100%	0%	–	–	–	–	–	T	T	–	T	T	T	0,39%	–	–	–
District heating/cooling distribution	4.15	2,77	0,00%	100%	0%	–	–	–	–	–	T	T	–	T	T	T	0,00%	–	–	–
Infrastructure enabling low-carbon road transport and public transport	6.15	52,47	0,06%	100%	0%	–	–	–	–	–	T	T	T	T	T	T	0,06%	–	E	–
Installation, maintenance and repair of renewable energy technologies	7.6	2,51	0,00%	100%	0%	–	–	–	–	–	T	–	–	–	–	T	0,00%	–	E	–
Capital expenditure on environmentally sustainable (Taxonomy-aligned) activities (A.1)*	–	4,804,92	5,32%	100%	0%												5,32%	–	844,49	3,505,10
A.2 Taxonomy-eligible economic activities that are not environmentally sustainable (not Taxonomy-aligned)																				
Hydrogen production	3.10	30,70	0,03%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Manufacture of carbon black	3.11	39,05	0,04%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Manufacture of chlorine	3.13	12,47	0,01%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Manufacture of organic basic chemicals	3.14	190,16	0,21%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Manufacture of anhydrous ammonia	3.15	36,52	0,04%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Manufacture of nitric acid	3.16	18,48	0,02%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Manufacture of plastics in primary forms	3.17	68,97	0,08%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Electricity generation from hydropower	4.5	6,30	0,01%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Electricity generation from bioenergy	4.8	98,98	0,11%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Transmission and distribution of electricity	4.9	1,043,21	1,16%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Heat storage	4.11	24,98	0,03%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Manufacture of biogas and biofuels for use in transport and of bioliquids	4.13	225,51	0,25%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
District heating/cooling distribution	4.15	12,43	0,01%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Cogeneration of heat/cooling energy and power from bioenergy	4.20	4,89	0,01%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Electricity generation from fossil gaseous fuels	4.29	1,389,84	1,54%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
High-efficiency cogeneration of heat/cooling energy and power from fossil gaseous fuels	4.30	1 911,75	2,12%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Renewal of water collection, treatment and supply systems	5.2	9,16	0,01%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Anaerobic digestion of biowaste	5.7	5,40	0,01%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Freight rail transport	6.2	169,60	0,19%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
"Capital expenditure on Taxonomy-eligible economic activities that are not environmentally sustainable (activities that are not Taxonomy-aligned) (A.2)"	–	5,298,40	5,87%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0,00	0,00
Total (A.1+A.2)	–	10,103,32	11,19%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	844,49	3,505,10
B. TAXONOMY NON-ELIGIBLE ECONOMIC ACTIVITIES																				
"Capital expenditure on Taxonomy non-eligible economic activities (B)"	–	80,172,12	88,81%																	
Total (A+B)	–	**90,275,44**	**100%**																	

*Dostosowany KPI CapEx w związku z emisją obligacji 5,29%

TABLE 6 | Proportion of capital expenditure on products or services associated with Taxonomy-aligned economic activities

				Substantial contribution criteria						'Do no significant harm' criteria										
Economic activity (1)	Code(s) (2)	Total absolute operating expenditure (3) PLNm	Proportion of operating expenditure (4) %	Climate change mitigation (5) %	Climate change adaptation (6) %	Water and marine resources (7) %	Circular economy (8) %	Pollution (9) %	Biodiversity and ecosystems (10) %	Climate change mitigation (11) Y/N	Climate change adaptation (12) Y/N	Water and marine resources (13) Y/N	Circular economy (14) Y/N	Pollution (15) Y/N	Biodiversity (16) Y/N	Minimum safeguards (17) Y/N	Proportion of Taxonomy-aligned OpEx, year N (18) %	Proportion of Taxonomy-aligned CapEx, year N-1 (19) %	Category (enabling activities) (20) E	Category (transitional activities) (21) Y
A. TAXONOMY-ELIGIBLE ECONOMIC ACTIVITIES																				
A.1. Environmentally sustainable (Taxonomy-aligned) activities																				
Electricity generation using solar photovoltaic technology	4.1	0,54	0,02%	100%	0%	–	–	–	–	–	T	–	T	–	T	T	0,0%	–	–	–
Electricity generation from wind power	4.3	25,59	0,72%	100%	0%	–	–	–	–	–	T	T	T	–	T	T	0,72%	–	–	–
Transmission and distribution of electricity	4.9	71,19	2,00%	100%	0%	–	–	–	–	–	T	–	T	T	T	T	2,0%	–	E	–
Storage of electricity	4.10	3,51	0,10%	100%	0%	–	–	–	–	–	T	T	T	–	T	T	0,1%	–	E	–
District heating/cooling distribution	4.15	3,54	0,10%	100%	0%	–	–	–	–	–	T	T	–	T	T	T	0,1%	–	–	–
Infrastructure enabling low-carbon road transport and public transport	6.15	0,59	0,02%	100%	0%	–	–	–	–	–	T	T	T	T	T	T	0,0%	–	E	–
"Operating expenditure on environmentally sustainable (Taxonomy-aligned) activities (A.1)"	–	104,96	2,94%	100%	0%												2,94%	–	75,29	–
A.2 Taxonomy-eligible economic activities that are not environmentally sustainable (not Taxonomy-aligned)																				
Hydrogen production	3.10	0,01	0,00%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Manufacture of carbon black	3.11	5,62	0,16%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Manufacture of chlorine	3.13	9,35	0,26%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Manufacture of organic basic chemicals	3.14	133,56	3,74%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Manufacture of anhydrous ammonia	3.15	22,61	0,63%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Manufacture of nitric acid	3.16	8,61	0,24%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Manufacture of plastics in primary forms	3.17	134,88	3,78%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Electricity generation from hydropower	4.5	26,90	0,75%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Electricity generation from bioenergy	4.8	5,71	0,16%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Transmission and distribution of electricity	4.9	115,24	3,23%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Manufacture of biogas and biofuels for use in transport and of bioliquids	4.13	4,82	0,14%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
District heating/cooling distribution	4.15	1,89	0,05%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Cogeneration of heat/cooling energy and power from bioenergy	4.20	0,34	0,01%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
High-efficiency cogeneration of heat/cooling energy and power from fossil gaseous fuels	4.30	36,45	1,02%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Construction, extension and operation of water collection, treatment and supply systems	5.3	0,50	0,01%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Freight rail transport	6.2	2,98	0,08%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
"Operating expenditure on Taxonomy-eligible economic activities that are not environmentally sustainable (activities that are not Taxonomy-aligned) (A.2)"	–	509,46	14,29%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0,00	0,00
Total (A.1+A.2)	–	614,42	17,23%	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	75,29	0,00
B. TAXONOMY NON-ELIGIBLE ECONOMIC ACTIVITIES																				
"Operating expenditure on Taxonomy non-eligible economic activities (B)"	–	2,951,97	83%																	
Total (A+B)	–	**3,566,39**	**100%**																	

TABLE 7 I Nuclear and gas activities

Lp	Nuclear activities	Turnover	CapEx	OpEx
1	"The undertaking carries out, funds or has exposures to research, development, demonstration and deployment of innovative electricity generation facilities that produce energy from nuclear processes with minimal waste from the fuel cycle."	NO	NO	NO
2	The undertaking carries out, funds or has exposures to construction and safe operation of new nuclear installations to produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production, as well as their safety upgrades, using best available technologies.	NO	NO	NO
3	The undertaking carries out, funds or has exposures to safe operation of existing nuclear installations that produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production from nuclear energy, as well as their safety upgrades.	NO	NO	NO
	Fossil gas related activities			
4	"The undertaking carries out, funds or has exposures to construction or operation of electricity generation facilities that produce electricity using fossil gaseous fuels."	NO	YES	NO
5	"The undertaking carries out, funds or has exposures to construction, refurbishment, and operation of combined heat/cool and power generation facilities using fossil gaseous fuels."	YES	YES	YES
6	"The undertaking carries out, funds or has exposures to construction, refurbishment and operation of heat generation facilities that produce heat/cool using fossil gaseous fuels."	NO	NO	NO

TABLE 8 | Taxonomy-aligned economic activities (denominator)

Lp	Economic activities	Amount and proportion – turnover						Amount and proportion – CapEx						Amount and proportion – OpEx					
		CCM + CCA		"Climate change mitigation (CCM)"		"Climate change adaptation (CCA)"		CCM + CCA		"Climate change mitigation (CCM)"		"Climate change adaptation (CCA)"		CCM + CCA		"Climate change mitigation (CCM)"		"Climate change adaptation (CCA)"	
		Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
1	Amount and proportion of Taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%
2	Amount and proportion of Taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%
3	Amount and proportion of Taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%
4	Amount and proportion of Taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%
5	Amount and proportion of Taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%
6	Amount and proportion of Taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%
7	Amount and proportion of other Taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	2,370,43	0,85%	2,370,43	0,85%	0,00	0,00%	4,804,92	5,32%	4,804,92	5,32%	0,00	0,00%	104,96	2,94%	104,96	2,94%	0,00	0,00%
8	Total applicable KPI	277,563,72	100,00%	277,563,72	100,00%	0,00	0,00%	90,275,44	100,00%	90,275,44	100,00%	0,00	0,00%	3,566,39	100,00%	3,566,39	100,00%	0,00	0,00%

TABLE 9 | Taxonomy-aligned economic activities (numerator)

Lp	Economic activities	Amount and proportion – turnover						Amount and proportion – CapEx						Amount and proportion – OpEx					
		CCM + CCA		"Climate change mitigation (CCM)"		"Climate change adaptation (CCA)"		CCM + CCA		"Climate change mitigation (CCM)"		"Climate change adaptation (CCA)"		CCM + CCA		"Climate change mitigation (CCM)"		"Climate change adaptation (CCA)"	
		Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
1	Amount and proportion of Taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%
2	Amount and proportion of Taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%
3	Amount and proportion of Taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%
4	Amount and proportion of Taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%
5	Amount and proportion of Taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%
6	Amount and proportion of Taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%
7	Amount and proportion of other Taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the numerator of the applicable KPI	2,370,43	0,85%	2,370,43	0,85%	0,00	0,00%	4,804,92	5,32%	4,804,92	5,32%	0,00	0,00%	104,96	2,94%	104,96	2,94%	0,00	0,00%
8	Total amount and total proportion of Taxonomy-aligned economic activities in the numerator of the applicable KPI	2,370,43	0,85%	2,370,43	0,85%	0,00	0,00%	4,804,92	5,32%	4,804,92	5,32%	0,00	0,00%	104,96	2,94%	104,96	2,94%	0,00	0,00%

TABLE 10 | Taxonomy-eligible economic activities that are not Taxonomy-aligned

Lp	Economic activities	Amount and proportion – turnover						Amount and proportion – CapEx						Amount and proportion – OpEx					
		CCM + CCA		"Climate change mitigation (CCM)"		"Climate change adaptation (CCA)"		CCM + CCA		"Climate change mitigation (CCM)"		"Climate change adaptation (CCA)"		CCM + CCA		"Climate change mitigation (CCM)"		"Climate change adaptation (CCA)"	
		Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
1	Amount and proportion of Taxonomy-eligible but not Taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%
2	Amount and proportion of Taxonomy-eligible but not Taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%
3	Amount and proportion of Taxonomy-eligible but not Taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%
4	Amount and proportion of Taxonomy-eligible but not Taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0,00	0,00%	0,00	0,00%	0,00	0,00%	1 389,84	1,54%	1 389,84	1,54%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%
5	Amount and proportion of Taxonomy-eligible but not Taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	1 443,29	0,52%	1 443,29	0,52%	0,00	0,00%	1 911,75	2,12%	1 911,75	2,12%	0,00	0,00%	36,45	1,02%	36,45	1,02%	0,00	0,00%
6	Amount and proportion of Taxonomy-eligible but not Taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%	0,00	0,00%
7	Amount and proportion of other Taxonomy-eligible but not Taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	21,939,87	7,90%	21,939,87	7,90%	0,00	0,00%	1,996,82	2,21%	1,996,82	2,21%	0,00	0,00%	473,01	14,29%	473,01	14,29%	0,00	0,00%
8	Total amount and total proportion of Taxonomy-eligible but not Taxonomy-aligned economic activities in the denominator of the applicable KPI	23,383,16	8,42%	23,383,16	0,08	0,00	0,00%	5,298,40	5,87%	5,298,40	5,87%	0,00	0,00%	509,46	15,31%	509,46	15,31%	0,00	0,00%

TABLE 11 | Taxonomy non-eligible economic activities

Lp	Economic activities	Turnover		CapEx		OpEx	
		Amount	Proportion	Amount	Proportion	Amount	Proportion
1	Amount and proportion of economic activity referred to in row 1 of Template 1 that is Taxonomy-non-eligible in accordance with Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0,00	0,00%	0,00	0,00%	0,00	0,00%
2	Amount and proportion of economic activity referred to in row 2 of Template 1 that is Taxonomy-non-eligible in accordance with Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0,00	0,00%	0,00	0,00%	0,00	0,00%
3	Amount and proportion of economic activity referred to in row 3 of Template 1 that is Taxonomy-non-eligible in accordance with Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0,00	0,00%	0,00	0,00%	0,00	0,00%
4	Amount and proportion of economic activity referred to in row 4 of Template 1 that is Taxonomy-non-eligible in accordance with Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0,00	0,00%	0,00	0,00%	0,00	0,00%
5	Amount and proportion of economic activity referred to in row 5 of Template 1 that is Taxonomy-non-eligible in accordance with Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0,00	0,00%	0,00	0,00%	0,00	0,00%
6	Amount and proportion of economic activity referred to in row 6 of Template 1 that is Taxonomy-non-eligible in accordance with Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0,00	0,00%	0,00	0,00%	0,00	0,00%
7	Amount and proportion of other Taxonomy-non-eligible economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	251,810,13	90,72%	80,172,12	88,81%	2,951,97	82,77%
8	Total amount and total proportion of Taxonomy-non-eligible economic activities in the denominator of the applicable KPI	251,810,13	90,72%	80,172,12	88,81%	2,951,97	82,77%

05

Society

Primary objectives sought by the ORLEN Group are to develop and engage local communities, provide friendly and safe workplaces, and foster consumer awareness spanning social, civic and environmental matters.
The ORLEN Group leverages its significant purchasing power in the region to promote sustainability across value chains.

2,896 volunteers involved in the ORLEN Group's Employee Volunteering Programme

Sponsoring relationships with **90** athletes,

more than **70** sports clubs,

10 sports associations

22.5 thousand beneficiaries of assistance provided under the ORLEN Group Employee Volunteering Programme

Sustainable Development Goals 2030

Sustainable Development Goals 2030 pursued by the social measures implemented by PKN ORLEN and the ORLEN Group in 2022:

GRI indicators

GRI 11.14.1 Management of material topic: Economic impacts

GRI 11.14.4 Infrastructure investments and services supported

GRI 11.14.5 Identification and description of significant indirect economic impacts, including the extent of impacts

GRI 11.15.1 Management of material topic: Local communities

GRI 11.15.2 Operations with local community engagement, impact assessments, and development programmes

GRI 11.15.3 Operations with significant actual and potential negative impacts on local communities

GRI 11.15.4 Grievances from local communities

GRI 11.20.5 The organization's business units taking into account commitment social, impact measurement and development programs

GRI 11.22.1 Management of material topic: Public policy

GRI 11.22.2 Political contributions

1. Management of the social area

GRI 11.14.1

Management of material topic: Economic impacts

GRI 11.15.1

Management of material topic: Local communities

Overview

The ORLEN Group's corporate social responsibility stands for informed and comprehensive management of CSR and environmental protection initiatives, which we view as our priority. CSR management at PKN ORLEN falls within the remit of the External Relations Office, reporting directly to a member of the PKN ORLEN Management Board. The **External Relations Office** is responsible for implementing CSR activities, and in particular for:

- Supervising CSR activities in line with capital market standards, including in particular arranging CSR programmes and running charitable initiatives;
- Building relations with local communities;
- Coordinating and promoting nationwide and regional CSR programmes;
- Promoting socially responsible attitudes;
- Continuing efforts to maintain a platform for cooperation and sharing experience in corporate social responsibility within the ORLEN Group;
- Implementing the ORLEN Group Sustainable Development Strategy for 2021–2023 in the social sphere.

The **Sports Marketing, Sponsorship and Events Office** is responsible for formulating and implementing a strategy for sports marketing, social sponsorship, events, and culture which is a part of PKN ORLEN's marketing strategy.

CSR initiatives are undertaken based on **ORLEN Strategy 2030, the ORLEN Group Sustainable Development Strategy for 2021–2023, the ORLEN Group Code of Ethics, and Agenda 2030** – the UN resolution on sustainable development at the global and local level. Charitable activities are governed by **the Charitable Policy of PKN ORLEN S.A. and the Organisational Standard Regarding the Pursuance of the Charitable Policy by Companies of the ORLEN Capital Group.**

In 2022, a focus was placed on projects centred around social support and development, including **promotion and protection of health, broad-based safety awareness, assistance to Ukrainian war refugees, environmental education and protection of the natural environment.**

The ORLEN Group's ambition is to best fulfil the role of a responsible corporate citizen and employer, a member of the community and a good neighbour. The Group is open to the world, responsive to people's needs and ready to help. It seeks to ensure that its activities effectively address the needs of local communities, bringing about real change in the lives of their target beneficiaries. In keeping with the principles of social responsibility, PKN ORLEN has also signed up to and been engaged in **external initiatives intended to promote sustainable development:**

- In 2018, PKN ORLEN signed a declaration of Partnership for Accessibility, affirming its commitment to cooperate in the implementation of the government's Accessibility Plus programme;
- Since 2017, PKN ORLEN has been involved in the Ministry of Development's Partnership for the Implementation of Sustainable Development Goals in Poland. We have joined the initiative for implementation of the UN 2030 Agenda, seeking to ensure that our efforts support the achievement of all the 17 Sustainable Development Goals, which include: sustainable cities and communities, affordable and clean energy, responsible production and consumption, quality education, decent work and economic growth.
- Since 2017, PKN ORLEN has been involved in activities of the Polish Economic Security Consortium.
- Since 2015, PKN ORLEN has been an active member of the Sustainable Development Committee at the Polish Chamber of Chemical Industry. During the 2015 Polish Chemical Industry Congress, the Company signed the Declaration of Support to the Sustainable Development Concept in Chemical Industry.
- In 2014, PKN ORLEN signed the Declaration of Polish Businesses for Sustainable Development. By doing so, it joined the group of companies supporting the 'Vision of Sustainable Development of Polish Businesses until 2050'. The document draws on the international initiative of the World Business Council for Sustainable Development.
- In 2010, PKN ORLEN was among those energy companies that decided to sign the Declaration on Sustainable Development in the Energy Sector.
- PKN ORLEN is also a member of the global Fair Trade movement. Stop Cafes and Stop Cafe Bistros at ORLEN service stations have been selling Fair Trade coffee only since 2008.
- Since 1997, PKN ORLEN has participated in the Responsible Care programme (it was joined by the Company's legal predecessor). This global project brings together chemical manufacturing companies to improve their health, safety and environmental performance (the so called HSE triad), as well as to share information about their activities.

The ORLEN Group's social impacts

- **5 grant programmes, 604 beneficiaries of the** ORLEN Foundation's grant giving programmes
- **7 scholarship programmes, 776 scholarships awarded** by the ORLEN Foundation
- **2,896 volunteers involved in the ORLEN Group's Employee Volunteering Programme**
- **20 thousand hours** worked under the ORLEN Group's Employee Volunteering Programme
- **22.5 thousand beneficiaries** of assistance provided under the Employee Volunteering Programme
- **7.3 thousand** – visitors to the **#IGNACYteam** mobile educational zone
- **4,800 – medical consultations and examinations carried out during two editions of the Health City Campaign**
- **416 – medical consultations** provided at the Stop Smoking Assistance Point in Płock under the Comprehensive Programme for the Prevention, Diagnostics and Treatment of Cancers
- More than **310 calls** made via the helpline of the Comprehensive Programme for the Prevention, Diagnostics and Treatment of Cancers

Key policies

The policies and internal regulations concerning the social area include:

ORLEN Group Code of Ethics – defines the values, principles of conduct and rules that set ethical standards for all ORLEN Group employees, based on a revised approach to understanding ORLEN values: Responsibility, Progress, People, Energy and Dependability, as well as the current scale or operations and operating strategy, the requirements of the Group's environment, and best practices in the field of business ethics. Moreover, it is a document supporting the implementation of the ORLEN 2030 business strategy.

The ORLEN Group Sustainable Development Strategy for 2021–2023 has been integrated with the ORLEN 2030 business strategy and its decarbonisation strategy until 2050. This synergy of activities allows the ORLEN Group to pursue an ambitious business agenda for the next decade, to strengthen its financial performance, and to build long-term value for all stakeholders. The Sustainable Development Strategy also implements the ambitious goals of the Paris Agreement, UN 2030 Agenda and European Green Deal. It is built around three ESG pillars: Environmental, Social and Governance.

The Charitable Policy of PKN ORLEN S.A. is a vital element of the Company's corporate social responsibility and one of the main tools in implementing the ORLEN Group Sustainable Development Strategy for 2021–2023, which has outlined ambitious sustainability and CSR goals, closely aligned with the Group's business strategy until 2030. PKN ORLEN's charitable activities are guided by the core values embraced by the ORLEN Group: Responsibility, Progress, People, Energy, Dependability and the principles of conduct outlined in the ORLEN Group Code of Ethics. Charitable Policy of PKN ORLEN S.A. also defines the principles of giving, using and accounting for donations. Charitable support is offered directly by the ORLEN Group and indirectly, through the ORLEN Foundation, the ORLEN Foundation for Pomerania, the PGNiG Ignacy Łukasiewicz Foundation, the ANWIL Foundation, the ORLEN Unipetrol Foundation and the Energa Foundation.

By pursuing its Charitable Policy of PKN ORLEN S.A., the ORLEN Group demonstrates how it fulfils the role of a responsible corporate citizen and employer, a member of the community and a good neighbour. Behind its declaration of being open to the world, responsive to people's needs and ready to help, there are concrete actions. PKN ORLEN's charitable engagement is a response to the needs of its stakeholders, mainly local communities. The nationwide coverage of many initiatives makes it possible to reach areas where help is needed and the Company's support makes a real change in the life of communities.

The Organisational Standard Regarding the Pursuance of the Charitable Policy by Companies of the ORLEN Capital Group was introduced in 2022 in an effort to capture synergies in Group-wide social initiatives. The standard was developed based on the updated 'The Charitable Policy of PKN ORLEN S.A.', approved by the Management Board of PKN ORLEN in September 2022. Since 2021, the ORLEN Group has had in place the Organisational Standard for Supervising Foundations Sponsored or Co-Sponsored by PKN ORLEN or ORLEN Group Companies. The standard is based on the Policy on Supervising Foundations Sponsored by PKN ORLEN or ORLEN Group Companies, approved by the Management Board of PKN ORLEN in December 2020.

PKN ORLEN Standards of Conduct in Relations with Local Communities – the document is a set of guidelines on how to interact with local communities in the areas where PKN ORLEN conducts its business activities. It is intended for internal use and binding on all PKN ORLEN employees.

ORLEN Group Human Rights Policy – the document defines the key course of action, conduct and regulations applicable at the Group, which are directly or indirectly related to the protection of human rights within the organisation and in relations with external stakeholders.

ORLEN Group Procurement Policy – the document aims to support the ORLEN Group's strategy through management of the procurement categories, building a modern management culture combined with operational excellence, and fostering a sustainable supply chain. One of its strategic goals is the qualification and assessment of suppliers.

Procurement Instruction – implements the Procurement Policy and serves as a tool to achieve its objectives.

Supplier Code of Conduct – defines ethical standards that must be met by the ORLEN Group suppliers. It includes guidance on activities related to counteracting corruption, and promotes high ethical standards in business activities. Every supplier cooperating with the ORLEN Group agrees to abide by the principles set out in the Supplier Code of Conduct, demonstrating its respect for social, environmental, ethical and governance standards. Assessment of a entity's compliance with the Supplier Code of Conduct is an integral part of the process of selection and periodic evaluation of the ORLEN Group suppliers.

ORLEN Group Anti-Corruption Policy – a declaration that the Group's business objectives are to be pursued in a transparent, fair and ethical manner. The policy is designed to raise employee awareness, encourage positive attitudes and behaviours, and streamline procedures and business process oversight.

PKN ORLEN Rules for Accepting and Offering Gifts – define how PKN ORLEN employees should behave when accepting or giving gifts.

Integrated Management System Policy – being a declaration to assure quality, minimise environmental impacts, ensure employee safety and information security, it is closely related to the PKN ORLEN core values.

Food Safety Policy – declaration of the commitment to ensuring the highest quality of food products and our food and drink service, care for the health and safety of customers as well as for their culinary tastes, by continually developing the Standards and Best Practices in Food and Drink Services in accordance with the HACCP principles.

Presented below are the Group's own indicators concerning the social area reported on a year-on-year basis.

2. Key performance indicators

TABLE 12 |

ORLEN Group, excluding the former LOTOS Group and PGNiG Group	UoM	2022	2021
Scholarship programmes of the ORLEN Foundation – scholarship recipients[1]	**[number]**	**776**	**651**
Grant programmes of the ORLEN Foundation			
My Place on Earth[2] – applications submitted	[number]	2,473	1,294
My Place on Earth – grant-winning applications	[number]	170	185
My Place on Earth – estimated number of beneficiaries	[number]	222,102	464,758
My Place on Earth – volunteers involved in the implementation of the winning projects	[number]	2,291	2,116
My Place on Earth – persons with disabilities involved in the implementation of the winning projects	[number]	529	880
ORLEN for Firefighters[3] – applications submitted	[number]	3,367	2,802
ORLEN for Firefighters – grant-winning applications	[number]	375	267
We keep watch! We remember![4] – applications submitted	[number]	88	203
We keep watch! We remember! – grant-winning applications	[number]	28	34
Health promotion projects for local communities			
Comprehensive Programme for the Prevention, Diagnostics and Treatment of Cancers and Respiratory System Diseases for Residents of the City and County of Płock[5] – operation of the Stop Smoking Assistance Point in Płock	[number]	416	257
Health City – medical consultations and examinations[6]	[number]	4,800	2,000
Health for Płock grant programme – applications submitted[7]	[number]	64	111

[1] **Scholarship programmes of the ORLEN Foundation: For Eagles** – a programme for children of the employees of PKN ORLEN and ORLEN Group companies; My Above-Average Interests – a programme for schoolchildren from Płock and neighbouring areas; BONA FIDE – a programme for university students; a programme for people of Polish origin living beyond Poland's Eastern border; a programme for charges of foster family group homes; Life to the Full programme for athletes with disabilities; For a Fellow Countryman programme for descendants of Poles exiled into territories east of Poland.

[2] **My Place on Earth** – a nationwide grant programme to support the development of local communities, including by reaching small towns and encouraging activity of rural communities. Projects covered by grant applications could benefit such areas as sports, safety, education, history, culture, environmental protection, animal welfare and sustainable development. Fewer projects received funding in 2022 (compared with 2021), but the amounts of individual grants were higher. This translated into lower overall reach of the programme.

[3] **ORLEN for Firefighters –** a countrywide grant programme run since 2000, designed to support firefighters from state and voluntary firefighting units and to develop local communities. Firefighting units may apply for grants to help them pay for firefighting equipment, as well as equipment used in water, flood, road, technical, medical, chemical, environmental and technical rope rescue operations.

[4] **We keep watch! We remember!** – a grant programme addressed to NGOs and local government organisations across Poland. The applicants may receive support for the revitalisation of memorial sites important to the local community.

[5] **Comprehensive Programme for the Prevention, Diagnostics and Treatment of Cancers and Respiratory System Diseases for Residents of the City and County of Płock** – initiated by PKN ORLEN and run 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. Data on the number of consultations provided at the Stop Smoking Assistance Point in Płock.

[6] Two editions of the Health City project were held in 2022.

[7] **Health for Płock grant programme** – a grant programme addressed to non-governmental organisations and local government institutions operating in Płock, as well as the Counties of Płock, Gostynin and Sierpc. As part of the project, applicants may receive grants for such purposes as the organisation of training courses, workshops and lectures on medical prevention. 10) Free Information System for residents of Płock and 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.

TABLE 12 |

ORLEN Group, excluding the former LOTOS Group and PGNiG Group	UoM	2022	2021
Health for Płock grant programme – grant-winning applications	[number]	21	23
Information projects			
Free Information System for residents of the Płock region – users[8]	[number]	1,120	over 1,000 (1,070)
Employee volunteering programme			
Volunteer campaigns	[number]	250	105
Volunteers	[number]	2,896	over 2,000
Estimated number of volunteer campaign beneficiaries	[number]	22,500	6,928
Sponsoring projects for Płock residents	**[number]**	**34**	**28**
Customer engagement in charity projects[9]			
Vitay programme points donated by customers for charity causes	[number]	**54,285,000 amount collected PLN 271,425**	**34,841,600 funds raised: PLN 174,596**
PKN ORLEN suppliers obliged to know and accept the PKN ORLEN Supplier Code of Conduct, the ORLEN Group Anti-Corruption Policy and the PKN ORLEN Rules for Accepting and Offering Gifts	**[%]**	**100**	**100**

Presented below are the key performance indicators for the former PGNiG Group, which was integrated into the ORLEN Group on November 2nd 2022.

[8] **Free Information System for Residents and the Płock Region -** a system informing about social, cultural, sports projects, etc. initiated by PKN ORLEN and the ORLEN Foundation. The system also notifies about possible environmental nuisances and temporary difficulties related to the operation of the production plant in Płock

[9] **Engaging customers in charity projects** – customers may donate points collected in the VITAY customer loyalty scheme to social and charity causes.

TABLE 13 |

Former PGNiG for the period Nov–Dec 2022	UoM	2022 (Nov–Dec))	2021 (not applicable)
Scholarship programmes of the PGNiG Foundation – scholarship recipients (data for two months)[10]	[number]	**34**	
Debt of Gratitude programme of the PGNiG Foundation2[11] (data for two months)	[number]	**1,059**	
Employee volunteering programme - PGNiG and the Foundation (data for two months)			
Volunteer campaigns	[number]	2	
Volunteers	[number]	52	
Estimated number of volunteer campaign beneficiaries	[number]	119	
Sponsoring projects for the local communities in business locations (data for two months)	[number]	21	
Own programmes of the PGNiG Foundation - education (data for two months)			
Be Like Ignacy (7th edition) – number of participants: study clubs / schools / students	[number]	2,930 clubs / about 2,100 schools / over 40,000 students	
Big Little Discoverers – 2nd edition 2022/2023 – number of kindergartens / estimated number of beneficiaries – children	[number]	1,505 kindergartens / more than 30,000 children	
Warsaw Gasworks Museum – workshops and educational activities for children and young people (number of participants)	[number]	approx. 2,500 persons	

[10] **Scholarship programmes of the PGNiG Foundation:** Scholarship programme for children of tragically deceased employees of former PGNiG Group companies and scholarship programme for the most talented students in grades three and four of secondary technical schools, run jointly with PGNiG Termika.

[11] Support programme for heroes of Polish history in the form of a gas bill discount of up to PLN 900 per month for gas purchased from PGNiG. The programme is addressed to Warsaw Uprising insurgents and participants of the strikes that took place at the Wujek Coal Mine in Katowice in the early 1980s. It is run in partnership with PGNiG OD, the Silesian Freedom and Solidarity Centre and the Office for Veterans and Victims of Political Repression.

Former LOTOS Group for the period Aug–Dec 2022:

38 donations were made for the following causes:

- Health protection and promotion;
- Science, education and awareness raising;
- Promotion of physical culture and sport;
- Culture and arts, including cultural heritage protection initiatives;
- Security and order, including public security and road safety;
- Social assistance;
- Preservation of national traditions;
- Support for the development of local communities;
- Support for rescue services and protection of people;
- Aid to victims of catastrophes, natural disasters and armed conflicts.

3. Due diligence procedures

GRI 11.14.4

Infrastructure investments and services supported

GRI 11.14.5

Identification and description of significant indirect economic impacts, including the extent of impacts

GRI 11.15.2

Operations with local community engagement, impact assessments, and development programmes

In 2022, PKN ORLEN was pursuing the ORLEN Group Sustainable Development Strategy for 2021–2023, which has outlined ambitious sustainability and CSR goals, closely aligned with the Group's business strategy until 2030. The ORLEN Group Sustainable Development Strategy for 2021–2023 responds to the growing expectations of investors, who increasingly pay attention to ESG (Environmental, Social, Governance) rankings and reports that show actual commitment of companies to sustainability goals. CSR initiatives are also undertaken based on the ORLEN Group Code of Ethics and Agenda 2030 – the UN resolution on sustainable development at the global and local level. Charitable activities are governed by the Charitable Policy of PKN ORLEN S.A. and the Organisational Standard Regarding the Pursuance of the Charitable Policy by Companies of the ORLEN Capital Group

As part of **the social pillar of the ORLEN Group Sustainable Development Strategy for 2021–2023**, in 2022 the Group continued its initiatives supporting the potential of local communities, with due respect for their rights, by offering a various range of educational, cultural, sports and awareness building programmes relating to both social and environmental issues (e.g. promoting responsible consumption).Out of concern for the natural environment, the Group continues to build a portfolio of green non-fuel products and services for customers at its service stations, for example by introducing green packaging, expanding the vegetarian food range, and waste recycling.

In 2022, a focus was placed on projects centred around social support and development, including, promotion and protection of health, broad-based safety awareness, assistance to Ukrainian war refugees and environmental protection.

Following the outbreak of the armed conflict in Ukraine, PKN ORLEN and its corporate foundations provided active financial and in-kind support for humanitarian aid purposes. Those efforts were directed to helping both conflict-affected areas and war refugees arriving in Poland. In particular, thanks to joint work with the ORLEN Foundation, a number of activities were carried out to assist Ukrainians, which included the following:

- Ukrainian refugees were offered a stay at the Petrochemia hotel in Płock, owned by PKN ORLEN. The hotel accommodates both children and adults, to whom the Company is providing lodging, meals and counselling services – between February 27th and December 31st 2022, a total of 66 refugees benefited from the assistance offered. As at December 31st 2022, 20 refugees (12 children and 8 adults) were staying at the hotel. In December 2022, PKN ORLEN decided to continue this project and cover the cost of accommodation and food for the refugees at the Petrochemia hotel in the period from January 1st to June 30th 2023.
- PKN ORLEN made a donation in kind to the Governmental Strategic Reserves Agency in the form of 5,000 STARLINK sets providing access to the Internet based on satellite technology. Through the ORLEN Foundation, an in-kind donation comprising protection equipment for civilians, soldiers, and the Ukrainian Border Service was given to The Ones Not to Be Forgotten Foundation.
- In May 2022, the ORLEN Group made available to the City of Płock, free of charge under a loan agreement, a non-operational hotel Dębowa Góra (near Płock), to be used as accommodation for refugees from Ukraine. After the necessary repair work was carried out and the building was placed in service, the Company has covered the fixed costs of its operation. As at December 31st 2022, 110 refugees were registered at the hotel (full occupancy). In December 2022, PKN ORLEN decided to continue the initiative in the period from January 1st to June 30th 2023.
- Customers of ORLEN service stations were offered an option to donate their VITAY loyalty programme credit to humanitarian aid for Ukraine. A total of over **PLN 177.3 thousand** worth of points were transferred by customers for this purpose between March and December 2022.
- The Company made it possible to use all ORLEN Parcel lockers in Poland to transfer gifts of essential items for Ukrainians. A verified list of current needs can be found in the 'Help Ukraine' section that was added to the ORLEN Parcel website. The gifts were collected in a warehouse of RUCH, an ORLEN Group company, where they were segregated into categories. Finally, in cooperation with the Consulate General of the Republic of Poland in Lviv, parcels containing the gifts were distributed directly to civilians who remained in Ukraine.
- Resting points (tents) were set up in four locations on the Polish-Ukrainian border, where refugees, many of whom had travelled for more than a day, could have a warm meal, get warm, and find out how and where to seek further assistance. The points were located in: Hrubieszów, Zamość, Radymno and Ustrzyki Dolne. From April to mid-May 2022, a similar assistance point operated also at the Central Railway Station in Warsaw.
- Educational zones with a wide range of activities for refugee children of different ages were set up at the reception points of the largest halls serving as accommodation facilities in Warsaw and its vicinity: the Global Expo Trade Fair and Congress Centre, the Central Sports Centre at ul. Łazienkowska in Warsaw, and the PTAK Warsaw Expo hall in Nadarzyn near Warsaw. The children were also given an opportunity to visit museums. The visits were combined with workshops and Polish language lessons.
- PKN ORLEN joined the promotional campaign for the #pomagamukrainie.gov.pl. website by advertising it at its service stations.
- Polish language courses were conducted between May 9th and June 30th 2022 under the ORLEN for Płock. Standing with Ukraine programme to facilitate adaptation in Poland for children of school age, young people and adults who took refuge in Płock after the outbreak of the war. The classes were held at the Education Centre in Płock, at one of the ORLEN Group companies. The project enjoyed considerable interest, with the free courses attended by 105 participants.

- On June 1st 2022, as part of their efforts to support victims of the war, PKN ORLEN and the ORLEN Foundation contributed to the Children's Day celebrations organised for the youngest Ukrainian refugees at the PTAK Humanitarian Aid Centre in Nadarzyn. The event was the starting point of a series of summer open-air cinema shows dubbed into Ukrainian, financed by the ORLEN Foundation. The film screenings were also held at 50 refugee centres throughout Poland.

- On December 6th 2022, PKN ORLEN and the ORLEN Foundation joined in the organisation of a Santa Claus event for Ukrainian refugee children staying at the PTAK Humanitarian Aid Centre in Nadarzyn. The event marked the launch of a Christmas mobile cinema project dedicated to Ukrainian children in Poland, as part of which further 50 screenings were held throughout the country with support from the ORLEN Foundation.

Support for uniformed services

Between January and April 2022, PKN ORLEN continued its Thank You project, a social campaign addressed to uniformed services deployed on the Polish-Belarusian border in connection with the outbreak of the migration crisis. The project had been initiated in December 2021, with coffee and rest areas for soldiers set up in the border area. Its aim was to promote patriotic behaviours and honour the uniformed men and women who risk their lives to keep us safe on a daily basis.

The loyalty discount card scheme dedicated to the Territorial Defence Forces (WOT) was also continued. As part of the project WOT soldiers are entitled to discounts at ORLEN service stations. The scheme was launched on May 1st 2020, with a total of 42,000 cards issued by the end of 2022. In 2022, WOT soldiers purchased 1.63 million litres of fuel using the cards.

Loyalty cards for volunteer firefighters registered in the National Firefighting and Rescue System, who can buy fuel at ORLEN service stations at discounted prices. In 2022, 6,000 BIZNESTANK loyalty cards were issued, enabling firefighters to purchase 7.95 million litres of fuel. A total of 113,834 BINZESTANK cards have been issued since the cooperation began.

Health promotion projects

Responding to the needs of Płock residents, PKN ORLEN continued cooperation with the Maria Skłodowska Curie National Institute for Oncology under an agreement concerning the **Comprehensive Programme for the Prevention, Diagnostics and Treatment of Cancers and Respiratory System Diseases for Residents of the City and County of Płock.** The partnership is the first project of this type in Poland. The agreement will be in force until the end of 2024.

The project's key objective is to undertake health promotion initiatives relating to respiratory system and cancer diseases, as well as to implement educational programmes on the causes of those diseases. One of its goals is to make the residents of Płock and surrounding areas aware of the need to change their lifestyles, as this may significantly reduce the risk of illness.

Actions implemented under the programme in 2022:

- Continued operation of the pulmonology and oncology helplines for residents and medical staff from Płock and its surroundings (more than 310 calls in 2022). The consultants advised callers on oncology prevention activities and arranged recommended consultations and appointments with specialists from the Institutes running the project (navigator assistance is ensured for people undergoing the diagnostic/treatment process). More than 200 consultations were provided by the Institutes in 2022;

- Continued operation of the Stop Smoking Assistance Point and the Dietary Advice Point, providing access to consultations with doctors, nurses, psychologists and dieticians, and launch of a respiratory physiotherapy aid point, where a specialist helped select basic breathing exercises appropriate to age and health condition. In 2022, 416 medical, psychological, psycho-oncological, dietetic and respiratory physiotherapy consultations were provided.

- A press conference was held in April 2022 to promote the programme. It included a summary of the activities carried out in 2019–2021 and presentation of new elements of the programme: an SMS communication system for patients and doctors, and psycho-oncological consultations.

- A free SMS system was launched with information updates on the programme to support communication with medical practitioners, patients and local communities.

- Training on oncology for physicians and nurses was conducted by an experienced team of doctors. In 2022, a total of 50 people were trained. The training sessions were held at the CM Medica medical centre in Płock.

- Regular updates were made to the programme website at www.zdrowiedlaplocka.pib-nio.pl, an ample source of information on the programme, individual initiatives, disease prevention and treatment.

- Oncological consultations were provided for 230 employees in Warsaw and Płock, dermoscopy and spirometry tests were performed by doctors from the National Institute of Oncology and the National Tuberculosis and Lung Diseases Research Institute in the period from October to December 2022 as part of the Pink October campaign.

The third edition of the ORLEN Foundation's **Health for Płock grant programme** was run in 2022. Applications under the programme were filed by 64 organisations. Grants totalling PLN 300,000 were awarded to 21 of them, to finance, for example, the organisation of sports activities, meetings with dieticians, and stress management workshops.

As part of efforts designed to promote preventive health care and offer an opportunity to have medical check-ups, in 2022 PKN ORLEN and its medical partners completed the fourth and fifth editions of the **Health City** project, held on May 29th and September 11th in Płock. The project site was visited by more than 3,800 residents of Płock and the surrounding areas, who received nearly 4,800 medical examinations and consultations. They could choose from a range of tests and consultations in various fields, including cardiology, ophthalmology, podoscopy, laryngology, ECG tests, blood morphology tests, bone density tests for osteoporosis, and spirometry tests. In

addition, children could undergo evaluation of body posture defects and body composition analysis, and women were offered mammography exams. Diet consultations were also available. The Health City project is organised under the honorary patronage of the Minister of Health.

Based on the findings of a survey titled PKN ORLEN's Perception among the Residents of Płock (carried out in November/December 2022 by Mind&Roses), engagement in preventive health care projects is important and well perceived by the local community. Support for healthcare services (67%) and promotion of healthy lifestyles (58%) were named as the key indicated areas of support. In addition, the local residents identified preventive health care projects as the top priority area (among the CSR activities they were asked to assess) in which the Company should engage.

Support for sports and culture, community sponsorships

In 2022, the ORLEN Group reinforced its position as the leading sponsor of professional and amateur sports in Poland. The recent years have seen rapid growth in its commitment. **The Company is now spending 180% more to support sports, culture and CSR activities than it did in 2015. The number of individual contracts with athletes and other sports competitors increased from 13 to nearly 100 during this period, with sports clubs – from 12 to over 70, and with sports associations – from 2 to 10.** This fosters a positive brand image in the eyes of customers. 77% of respondents polled in the ARC Rynek i Opinia survey recognise the benefits of sponsorship in sports as well as technology and innovation.

The flagship sponsorship project of PKN ORLEN was its cooperation with **Alfa Romeo F1 Team ORLEN**, a Formula One team. The team came sixth in the constructors' championship in the 2022 season.

In this way, the Company consistently pursued its strategy to build global brand recognition, which is particularly helpful in promoting the brand outside of Poland, where more and more ORLEN service stations are being opened.

Last year, the Company again collaborated with **Robert Kubica**, its brand ambassador, who is invariably named among the most successful and recognisable Polish sportsmen. Kubica was a test driver for Alfa Romeo F1 Team ORLEN for the past year and participated in WEC (World Endurance Championship) races. While sporting the Prema ORLEN Team colours, he achieved a huge success together with his partners, climbing the podium of the legendary 24-hour Le Mans race as the first Pole in history.

Following the merger between PKN ORLEN and the LOTOS Group, **Kajetan Kajetanowicz** made his debut on the ORLEN Rally Team. The most titled Polish rally driver competed in WRC 2, the World Rally Championship, and had another excellent year, climbing the podium for the fourth time in a row. He finished the 2022 season in the third place.

The ORLEN Team is also represented by competitors across various motorsport disciplines, who were remarkably successful in 2022. **Bartosz Zmarzlik** won his third title as an individual speedway world champion, Mikołaj Marczyk made his debut in the World Rally Championship, and powerboat racer **Bartłomiej Marszałek** came second and third during two final rounds in the F1H2O World Championship in Sharjah.

ORLEN Team members also gave an unforgettable performance in the world's most famous off-road rally. In the 44th edition of the Dakar Rally, **Kamil Wiśniewski** was the first team representative ever to finish on the podium. The quad driver came third. In the car drivers' competition, Kuba Przygoński took the sixth place, while motorcyclist Maciej Giemza came 18th.

The automotive world is at the heart of the Company's business, which – aside from motorsport sponsorships – initiates **measures to promote road safety.** Safe driving courses were organised once again in 2022, with thousands of drivers taking part. A new edition of the #GoodDriver campaign was launched in 2022, this time focusing on the importance of building environmental awareness and attitudes. Robert Kubica, together with the youngest environmental consultants, demonstrated that everyone could contribute to environmental protection by making informed product and service choices. ORLEN Team drivers Mikołaj Marczyk and Jakub Przygoński took part in a special event of the ORLEN Foundation, which over the past 12 months renovated one of the wings of the Children's Memorial Health Institute in Warsaw. The sportsmen met with the little patients and spent one day with them in the hospital, answering their questions and handing out small gifts.

The merger with the LOTOS Group was also very important in terms of sponsorship investments and implementation of sponsorship projects. ORLEN became the **General sponsor of football,** and it was football players who took part in the major sports event of 2022, competing in the FIFA World Cup held in late November and early December in Qatar. The White-and-Reds advanced to the knockout stage for the first time in 36 years, losing in 1/8 finals to France, who later finished as runners-up.

Last year was also the first year of PKN ORLEN's partnership with the **Polish Ski Association**. The 2022/2023 season started with successes, as Dawid Kubacki won the two World Cup opening competitions on the hill in Wisła. The Polish representative finished the year as the leader of the series. The cooperation between PKN ORLEN and the Polish Ski Association goes beyond sponsoring the national team. As the General Sponsor of skiing sports in Poland, ORLEN is a partner in the ORLEN – In Search for the Champion's Successors project, which scouts for new talent. The programme includes ORLEN Cup competitions, with young ski jumpers competing in boys' and girls' categories.

Last year was exceptional in terms of the cooperation between PKN ORLEN and the **Polish Volleyball Federation**. ORLEN was the Main Sponsor of the Women's and Men's World Championships in Poland. While Poland and the Netherlands had been chosen to host the women's IVF competition a long time before, the host for the men's championship was re-selected in 2022, because of the Russian aggression on Ukraine. Russia was getting ready to host the competition but was excluded, and the hosting was re-assigned to Poland and Slovenia.

Poland was also successful on the court, with the men's team winning silver, its third medal in a row. The female volleyball players also thrilled fans with their play and filled the country's largest arenas.

They reached the quarter-final stage of the World Championship, defeated by Serbia after an exciting struggle. The national team's successes in the past year include taking the third place in the Volleyball Nations League. Beach volleyball players Michal Bryl and Bartosz Łosiak were also outstanding, having won Beach Pro Tour Challenge tournaments in Mexico, Portugal and Qatar, as well as the Beach Pro Tour Elite 16 tournament in Germany.

PKN ORLEN invariably cooperates with the **Polish Olympic Committee** as a Strategic Sponsor. The Polish squad at the XXIV Olympic Winter Games in Beijing was made up of 57 female and male athletes. They brought one medal home, a bronze one won by Dawid Kubacki in the ski jumping competition. The Polish Paralympic Committee (PKOl), on the other hand, delegated 11 competing athletes and four guides to China. The PKOl was responsible for the preparation of the Polish squad for the Sixteenth Summer European Youth Olympic Festival EYOF 2022 in Banská Bystrica. The Polish Youth Olympic Festival squad included 95 athletes and achieved the best result in history. They won 20 medals in Slovakia, claiming the 10th place in the medal table.

For the **Polish Athletic Association**, which has PKN ORLEN as its Main Sponsor, the priorities for 2022 were to compete in the World Championship in Eugene and the European Championship in Munich. In the United States, Paweł Fajdek proved to be the world's best hammer thrower, while Wojciech Nowicki and Katarzyna Zdziebło (two-time world vice-champion in racewalking) won three silver medals. When competing on the Old Continent, the White-and-Reds won 14 medals.

The Company's support is channelled to sports associations as well as professional athletes who are members of the **ORLEN Sports Group.** They have been remarkably successful. For instance, Paweł Fajdek, already mentioned above, won his fifth consecutive gold medal in hammer throw at the world championship. **Aleksandra Mirosław** became the European champion in speed climbing, beating the world record twice during the season. During the European Athletics Championships, medals were won by Anna Kiełbasińska (bronze in 400 metres and relay), Iga Baumgart-Witan, Justyna Święty-Ersetic, Małgorzata Holub-Kowalik (4x400 metres relay),

Sofia Ennaoui (bronze in women's 1,500 metres run). Furthermore, Polish female athletes succeeded in the multi-sport European Championships in Munich: Marta Walczykiewicz won a bronze medal in kayak singles, while Urszula Łoś won two medals in track cycling, silver and bronze.

An effective system for training children and young people is one of the pillars of ORLEN Group's sports sponsorship strategy. Athletic disciplines are extremely helpful in fostering health-oriented attitudes in children and young people, which is why the Company decided to sponsor a number of initiatives for young beneficiaries. The From Backyard to a Running Track programme covered more than **5,000 students** nationwide, who competed in 10 tournaments. The Hooop Spoort project was carried out in 10 locations across Poland, involving **2,500 children** from grades four to six. PKN ORLEN is the main partner of the School Sports Club programme, as well as the Finals of Track&Field Thursdays.

PKN ORLEN stepped up its partnership commitments to both professional and amateur cycling races. The Company sponsored **Tour de Pologne,** Poland's largest and most popular race. Furthermore, it was again the main partner of the **ORLEN Race of Nations**, where the best U23 cyclists competed sporting Poland's national colours. Support was also provided to amateur competitive initiatives: the ORLEN Lang Team Race, including ORLEN Tour de Pologne Amateurs.

PKN ORLEN has been consistently involved in **professional sports sponsorships in Płock.** The ORLEN Wisła Płock handball players had a very successful season, having won Poland's Cup, a silver medal in PGNiG Superliga, and ranking third in the EHF European League. The Wisła Płock football players finished the 2021/2022 season in the sixth place, and closed out the following autumn round in the same position. Support for the handball and football teams has a business as well as a CSR dimension. It is a manifestation of PKN ORLEN's commitment to the matters of Płock and the region as well as its understanding of the local community's needs.

The Energa Group, member of the ORLEN Group since 2020, is also actively engaged in sports sponsorships, most of all through its extensive cooperation with **the Polish Basketball Federation** and title sponsorship of **Men's and Women's Energa Basket League**, Poland's premier basketball league. In 2022, the Polish men's national team advanced to the medal zone of the European Championship for the first time in 55 years. The Federation was also successful in the organisational context, as it was chosen to co-host EuroBasket 2025. Energa continued its partnership with the Amp Futbol Polska federation, the Energa MKS Kalisz clubs and its long-time partner Lechia Gdańsk. Energa is also the main sponsor of Tour de Pologne

As a national giant, PKN ORLEN also supports initiatives designed to protect Polish national heritage. In 2022, the Company continued its cooperation with the Grand Theatre – National Opera, having delivered 4 premieres, 23 repertoire performances, 26 concerts, 11 special projects and 52 educational projects. A charity gala for Ukraine 'We stand with you' was held in April, with proceeds from ticket sales donated to help Ukrainian children. Overall, the events hosted by the Grand Theatre – National Opera attracted audiences of almost 300,000.

In 2022, the **Fryderyk Chopin National Institute,** supported by ORLEN, organised an event to commemorate the 212th anniversary of Chopin's birth, which culminated in two concerts by Bruce Liu, the winner of the XVIII International Chopin Piano Competition, dedicated to the victims of the war in Ukraine. The concerts were streamed on the YouTube channel of the Fryderyk Chopin National Institute and broadcast by Polskie Radio Program II. Liu also performed at the 18th Chopin and his Europe International Music Festival. 25,000 people attended 35 concerts (including piano recitals, chamber music and symphony concerts), most of which were freely available online and via Polskie Radio broadcasts.

Furthermore, ORLEN sponsored the **26th Ludwig van Beethoven Easter Festival** at the National Philharmonic. In April, a total audience of 11,000 filled the auditorium to listen to 11 symphony concerts and 2 piano recitals, and 60,000 more listened to radio broadcasts of the event.

For the fourth time, PKN ORLEN was a patron of the **Fourth Eufonie International Music Festival of Central and Eastern Europe.** Inaugurated by the Vienna Symphony with Jan Lisiecki, the event included 13 concerts in Warsaw with nearly 600 performing artists. The programme of the Eufonie festival included three world premieres and three Polish premieres. Most of the concerts are available on the YouTube channel of the National Centre for Culture, which organised the festival.

In the previous year, the Company supported such institutions as **Teatr Wielki-Opera Narodowa, the National Museum in Warsaw, the Józef Piłsudski Museum in Sulejówek, the Royal Castle in Warsaw, the National Museum in Poznań and the Museum of the History Monument – Frombork Cathedral Complex.**

Initiatives supported by PKN ORLEN to promote Poland included economic projects as well. During the Expo Dubai 2020, the Company was patron of **the Chopin at Expo Dubai** 2020 project. Thanks to this project, nearly 300 Chopin recitals by young pianists took place in the Polish Pavilion.

The Company is also committed to patriotic projects. PKN ORLEN was a strategic partner of **the HeroesON Warsaw Uprising Veterans Award**, a recognition for individuals and institutions whose activities, in a remarkable manner, promoted the knowledge of Poland's 20th century history, historical and patriotic education, and – starting from this year – also contemporary expressions of patriotism and upholding the values that guided the Warsaw Insurgents.

The Company was a golden patron of the 10th edition of the **Wolf's Trail Cursed Soldiers Memorial Run,** which attracted as many as 70,000 runners all over Poland. ORLEN continued its support as the main patron of **The Rebellious, the Invincible, the Cursed Festival.** Over four festival days, more than 100 films were screened in Gdynia, along with 17 radio programmes and 15 music videos. There were also 26 panel discussions, 15 meetings with film directors, filmmakers and witnesses to history, nine exhibitions, five book promotions, and two gala events.

During the official ceremony of the 10th edition of the **Guardian of Remembrance** project, of which PKN ORLEN was patron, individuals and institutions that had been particularly involved in cultivating the memory of momentous events of Poland's past were honoured with awards. The Company received a jubilee award on the 10th anniversary of the Guardian of Remembrance project for its unswerving commitment to commemorating key historical events and fostering Polish patriotism. In addition, the Wacław Felczak Polish-Hungarian Cooperation Institute presented the PKN ORLEN CEO Daniel Obajtek with the Custos Virtutum – Guardian of Values award.

As part of community sponsorships, PKN ORLEN supports organisations which save the lives and health of Poles on a daily basis. Just like in previous years, in 2022 PKN ORLEN supported a number of them, including: the **Volunteer Mountain Rescue Service, Volunteer Masuria Rescue Service, and Volunteer Water Rescue Service in Płock and Legionowo, to name just a few.**

Involvement with local communities in Płock

PKN ORLEN and other ORLEN Group companies put special focus on their role as socially responsible members of their respective local communities. The Group considers both direct and indirect impacts of its activities on the social environment it operates in.

It is an employer, tax payer, sponsor, charity provider, and partner for numerous suppliers, institutions, and organisations. The basic tools used to monitor the effectiveness of projects for local communities include surveys carried out by independent research institutes. The methods used include Computer Assisted Personal Interview Surveys (CAPI) on a representative sample of residents aged 18+, according to data from Statistics Poland.

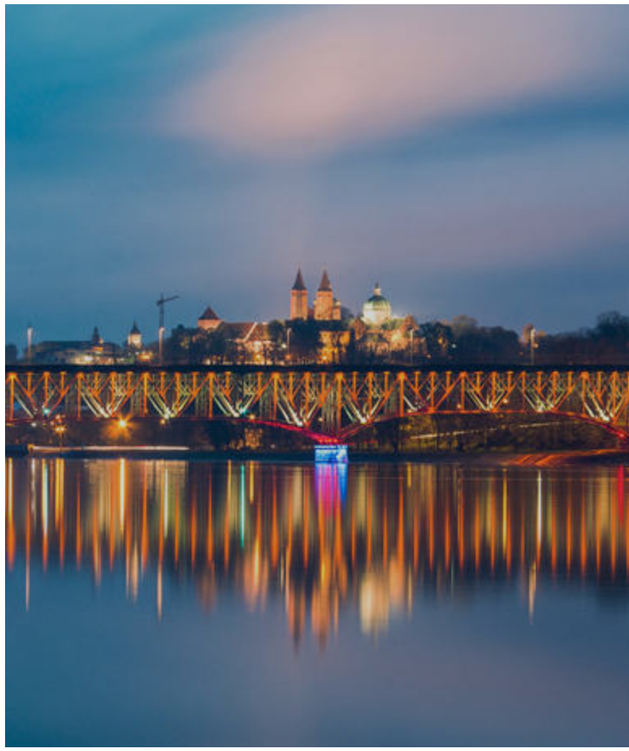
In addition, the number of inhabitants who stated that PKN ORLEN' plant has an adverse environmental impact decreased.

Operations with local community engagement, impact assessments, and development programmes include the External Relations Office, the Social Sponsorship Department and the Marketing Office.

In 2022, the Company actively collaborated with local communities, mainly in Płock and other business locations.

Based on the findings of a **survey of PKN ORLEN's perception among the residents of Płock,** where respondents pointed to the promotion of healthy lifestyles and support for healthcare services through purchases of advanced medical equipment, diagnostics and financing of preventive programmes as the priority areas on which the Company's support should focus, PKN ORLEN continued its activities supporting preventive health care, such as: the Comprehensive Programme for the Prevention, Diagnostics and Treatment of Cancers and Respiratory System Diseases for Residents of the City and County of Płock, Health City, and the 3rd edition of the Health for Płock grant programme, which is discussed is detail in this section. In the survey, respondents were most appreciative of PKN ORLEN's CSR activities which reflected the Company's commitment to disease prevention projects.

It was noted in the same survey that local inhabitants could also see the positive environmental impact of PKN ORLEN's investments in green technologies and that they supported its further green transition. In addition, fewer inhabitants think that PKN ORLEN's plant has an adverse environmental impact. Importantly, more and more people are noticing the plant's reduced impact on the environment, including fauna, flora, water and air purity as well as health of local inhabitants. The latter group have a good opinion of PKN ORLEN primarily because of its focus on supporting the city's development through investments. As far as initiatives benefitting Płock are concerned, the environmental focus remains the most important aspect for local inhabitants, followed by the Company's impact on the economic development of Płock and the region.



The activities carried out in 2022 involved support for projects with a potential local community impact. These included: involvement of representatives of the External Relations Office in the work of the project team for the Olefins III complex in Płock and the clean-up team handling a product pipeline failure in Baby Dolne (County of Gostynin). For the Olefins III complex, the necessary documents and analyses required by international financial institutions, identifying the potential impact of the project on the local community, a stakeholder engagement plan and mitigation scenarios were prepared. Care was taken to ensure proper communication with local stakeholders, including via the ORLEN Info Free Information System. Ongoing updates were provided on projects related to the operation of the production plant, social projects and the construction of the Olefins III complex. In 2022, PKN ORLEN sent 130 text messages to 1,120 registered users of the system. The messages included mainly information on preventive health care, internship, educational and scholarship opportunities, cultural and sports events supported or organised by PKN ORLEN or the ORLEN Foundation, as well as communications on the operation of industrial plants and systems.

34 projects were completed in 2022 under the **ORLEN for Płock** programme, which has been in place for many years now. As a sponsor, PKN ORLEN supports players of the Wisła Płock Sports Club Academy, where 450 boys and girls are advancing their football skills, as well as the Wisła Płock Physical Culture Association, which trains new generations of handball players. The Company is also engaged in sports activities of the Wisła Płock Volleyball Association, which prepares its players to participate in junior tournaments (with about 50 girls being now trained in the junior section). Training activity of the Club helps to promote sports, particularly volleyball, among young residents of Płock. During the summer holidays, two free week-long day camps offering sports, cultural and artistic activities were held for children and young people, attended by nearly 450 boys and girls.

PKN ORLEN continued as a sponsor of **the Hetman Płock Chess Club**, whose activity contributes to developing sporting skills of children, youth, junior and adult players. The seniors won bronze in **the 2022 Polish Blitz Team Championship in speed chess.**

The undisputed leader of the team and also the best player in the tournament was Petro Golubka, a chess player from Płock, who finished with a score of ten out of a possible eleven points. PKN ORLEN sponsored the national and regional Children and Youth Show Jumping Championships organised at the Łąck Stud Farm near Płock, with 140 competitors from all around Poland. As part of the programme, the Company's sponsorship support was also extended to the Orkan Sochaczew rugby players, who became Polish champions in the 2021/2022 season.

In the theatre seasons 2021/2022 and 2022/2023, PKN ORLEN gave its patronage to **the Płock Dramatic Theatre**. The theatre has over 65,000 spectators per year, staging, on average, eight premieres each season. They include some of the best Polish and world classics, contemporary drama, farces, and comedies, as well as fairy tales for children. Performances are complemented by a range of accompanying events, such as exhibitions, discussions, workshop meetings, or theatre lessons combined with a tour around the theatre. PKN ORLEN also became a sponsor of **the Witold Lutosławski Symphonic Orchestra of Płock,** which gave 35 concerts for audiences of almost 13,000.

The Company's cooperation with lifeguards of the **Płock Water Volunteer Rescue Service (WOPR)** continued: a lifeguarded bathing spot on Lake Górskie near Płock was organised for the sixth time, used by nearly 50,000 people during the summer holiday season. Free swimming lessons for children from grades four to eight and adults aged 40+ were held again, attended by 100 residents of Płock. The Company organised another series of educational and training classes on safe driving and specialist training to improve driving techniques. The project attracted almost 800 participants, including PKN ORLEN employees and residents of Płock.

The Company continued its projects dedicated to local communities, including: **Comprehensive Programme for the Prevention, Diagnostics and Treatment of Cancers and Respiratory System Diseases for Residents of the City and County of Płock, My Place on Earth, ORLEN for Firefighters, Grant Fund for Płock, and two editions of Health City.**

PKN ORLEN was engaged in continued cooperation with the Płock **City Bike System**, equipping it with additional 250 bicycles at 25 locations, which are fully compatible with the existing system. By the end of November 2022, ORLEN bike stations have been used over **154,397** times.

In 2022, PKN ORLEN began pilot implementation of **the ORLEN – A Good Neighbour programme**, focusing on relations with local communities in the areas of the Company's operations. Its objectives include building strong relations with the local communities, exerting positive impacts and mitigating negative impacts on the local environment, and building a positive image of ORLEN. The programme activities will include dialogue and communication with the local communities and support for their development. The pilot version of the programme is being implemented at the ORLEN Fuel Storage Terminals.

Continued support was provided for activities of the **Grant Fund for Płock** Foundation. The Group is a founder and sponsor of the Foundation, Poland's first initiative of this kind, which is unique in that it is based on sectoral collaboration and fosters business-

local government partnerships. The Grant Fund, which in 2023 will celebrate its 20th anniversary, provides financial support to local non-governmental organisations, offering them the opportunity to carry out interesting, interdisciplinary projects that extend beyond municipal competitions. By financing Płock-based institutions, but also ideas submitted by private individuals and informal groups, the Foundation participates in projects aimed at raising the standard of living for Płock residents in all areas of life, from sports, through social welfare, to education and culture. Money is donated to projects initiated by local residents that are consistent with the Strategy for Sustainable Development of the City of Płock and the UN Sustainable Development Goals.

In an effort to foster pro-environmental attitudes, the **Let's Go Green**. Conserve Water project was run in ten schools and kindergartens from Płock and the County of Płock through a series of special eco-lessons designed to build awareness of responsible water management in the youngest kids. The classes took the form of interactive workshops addressing environmental protection topics, with a key focus on water consumption and conservation. A simplified model of a car wash known from ORLEN service stations was used to help children understand the water management processes and solutions employed by PKN ORLEN in its operations.

A new batch of the educational family game **Treasure Hunt,** acquainting players with PKN ORLEN's environmental protection initiatives and encouraging pro-environmental behaviours, was produced with a PKN ORLEN service station equipped with rooftop photovoltaic batteries, wind farm, electric vehicle charging station and green landscape elements rendered as 3D shapes. The game's board also highlights the biodiversity of the area near the Płock production plant, including the endangered species PKN ORLEN helps to protect (the peregrine falcon and the indigenous honeybee species).

The second edition of a brochure entitled **Health Is Our Common Value** was released. The publication includes information on a number of health-promotion initiatives undertaken by PKN ORLEN for its employees and their families, a first aid instruction, as well as a game adapted for use by visually impaired people.

After two years of interruption caused by the pandemic, the second edition of a two-day educational conference entitled **'Bees in Human Life. Biodiversity and Protection'** was organised in association with the Warsaw Province Agricultural Advisory Centre (MODR) in Płock. The purpose of the event, which gathered several hundred participants, was to disseminate knowledge of the role of bees in the natural environment and their functioning in cities, as well as of the ways to conserve indigenous bee species that are at risk of extinction. The conference attendees learned about how bees can be protected and how one of the rare species is bred in apiaries operated by the Płock branch of MODR, including ones located on the site of PKN ORLEN's production plant.

A broad-based survey was conducted among driving school students as part of the **Safe Future on the Road** project, oriented towards development of an effective method for educating prospective drivers and thus reducing the number of road incidents in the 18–24 age group. The survey findings will be used by the project team to formulate a teaching concept focusing on young drivers in order to improve road safety and thus bring down road accident rates. The project is carried out in partnership with the Municipal Police Command Centre in Płock and the Provincial Road Traffic Centre in Płock within the framework of GovTech Poland, a governmental innovation programme.

To support ORLEN station personnel as part of the **We Sell Responsibly campaign**, materials were prepared relating to the prohibition on sale of alcohol to intoxicated customers and sale of alcohol and tobacco products to customers under 18 years of age.

Involvement with local communities in Pomerania

After the merger of the LOTOS Group and PKN ORLEN on August 1st 2022, the PKN ORLEN Gdańsk Branch continued the acquired company's CSR projects. The Branch strives to operate in a sustainable manner in all areas of its business, with due regard to all legal requirements and in accordance with the principles of corporate social responsibility. The company supports social initiatives and projects. Its sponsorship activities focus on sports, culture and art, as well as social and environmental initiatives carried out primarily in the counties and provinces where its plants are located and in places where its marketing activities are run.

The **Road Champions** programme designed to educate and involve young motorists in efforts to improve road safety was continued in 2022. The programme was delivered mainly through practical training to improve driving techniques provided at dedicated centres and educational workshops for secondary school students held throughout Poland.

In 2022, more than 12,000 students signed up to participate in the programme, whose ambassador was the rally driver Kajetan Kajetanowicz. The project has been run since 2020.

Since 2008, the **Headed for the Baltic** programme has been operated together with the company's partners: the Gdańsk University Development Foundation and the Marine Station of the Gdańsk University in Hel.The programme comprised a set of initiatives to protect biodiversity of the Baltic Sea. A strong focus was placed on environmental education and on raising the awareness of the presence of plastics and microplastics in the Baltic Sea. In 2022, educational activities of the Blue School were attended by a total of about 15,000 students, while the outdoor educational events in the Pomerania region attracted some 13,000 participants.

Since 2013, the company's patronage has covered the **E(x)plory Programme**, the largest initiative in Poland to support talented youth in the implementation of innovative research projects and promote their achievements internationally. Seeking primarily to promote science among children and youth, the programme is addressed to gifted students and young scientists aged 13–20. Schools from all over Poland are involved in the programme, with 241 projects entered in 2022 for the E(x)plory Competition. The Gdynia Explory Week was attended by an audience of 542 on site and 18,568 online. The number of direct participants of the E(x)plory School Festivals was 7,523.

In July 2022, a community project to set up **an urban apiary** was launched on the site of the LOTOS refinery in Przejazdowo near Gdańsk. Eight hives with a gentle subspecies of honey bee, previously painted by children of the company's employees and their parents during a joint event, were placed around the site. The bees are looked after by experienced beekeepers, who do everything from putting up the hives, to taking care of the insects and harvesting the honey, to maintaining the apiary in good condition. The main objectives behind the initiative are to raise the environmental awareness of the company's staff, improve biodiversity in the immediate vicinity of the refinery and protect the environment.

Involvement with local communities – PGNiG Branch Complex

In its CSR activities throughout 2022 PGNiG focused mainly on the following areas of social engagement: Support for Ukraine after the outbreak of the war (providing accommodation, food and transport for refugees, ongoing assistance, support for bottom-up initiatives put forward by employees, including collections of medicines, school supplies, etc.); Health promotion activities addressed to the employees (Health Days, Pink October); Environmental protection campaigns; Regular blood donation sessions; Educational campaigns and meetings. In 2022, to mark the 200th anniversary of the birthday of the Polish inventor Ignacy Łukasiewicz, a great number of educational events for children and young people were held to popularise his achievements; Active support for the local community provided by the PGNiG Operator Branch in Pakistan.

Following the merger with the ORLEN Group (November 2nd 2022), in November and December 2022 the PGNiG Central Branch and the PGNiG Branch Complex continued a range of social outreach projects that have a long tradition within the organisation. The last two months of the year were the time of recapitulation of year-round initiatives, including:

- **Oil Miner in the School and Kindergarten –** 13th edition of the project, implemented mainly by the Zielona Góra Branch. Throughout the school year, PGNiG employees in miner uniforms met with preschool and primary school children in the Branch's area of operation to speak about the work of an oil miner. In the 13th edition, 192 employee volunteers met with more than 21,000 children. Furthermore, employees of the Geology and Hydrocarbon Production Branch in Warsaw and the Sanok Branch visited schools and kindergartens to educate pupils on the oil and gas industry. A great number of those visits took place in the period around December 4th, which is when the St Barbara's holiday of miners is celebrated.

- **Dwelling for Nature (October–November 2022)** – the project involves providing shelter to small mammals, birds and insects living in cities. 81 hedgehog, squirrel and bird boxes and insect hotels were put up in places suggested by employees (kindergarten and school gardens, green areas in housing estates). The objective is to draw the staff's attention to the issues of biodiversity conservation, depletion of habitats and human impact on ecosystems, by encouraging them to create space for nature and animals in their immediate environment.

- **Flower Meadows** – maintenance of 1,100 square metres of meadows sown in 2021. In 2023, the area of flower meadows at the site of the PGNiG Central Branch at ul. Kasprzaka 25 in Warsaw is planned to be expanded.

- **Charitable drives** – in December 2022, the PGNiG Central Branch and other PGNiG Branches organised Christmas charity drives to collect gifts, which were then transferred to organisations supporting those in need.

- **PGNiG Library** – the CSR Department of the PGNiG Central Branch operates a library, regularly buying new books to complement the existing collection in line with its profile and readers' needs (each employee can make a suggestion about what titles should be added). In 2022, 76 books worth PLN 6,370 were bought. The PGNiG Library consists of two parts: an archival collection taken over from the library of the former Warsaw Gasworks (some 700 volumes of books and periodicals published in 1840–1945) and a contemporary collection (titles published after 1945) comprising more than 8,450 volumes.

- **PGNiG for Health** – a project addressed to PGNiG employees, run by the PGNiG Sanok Branch in November. It takes the form of a campaign promoting preventive medical check-ups. As part of the campaign, electrocardiogram and spirometry tests, glucose checks and bone density scanning were provided to 160 employees.

- **Exhibitions** – the PGNiG Zielona Góra Branch continued its year-round Exhibition Hall project, hosting exhibitions that showcase not only the heritage of the Polish oil and gas industry but also works by famous local artists and art enthusiasts, PGNiG employees, senior citizens, preschoolers and people with disabilities from Zielona Góra. It also hosts workshops for PGNiG employees and their children, and educational meetings for children and youth.

- **Educational meetings** – the Zielona Góra Branch continued its year-round programme of educational meetings for children and youth. They are an opportunity to communicate the Branch's activities and present information on the industry and the hydrocarbons produced. In 2022, 17 meetings with children were held.

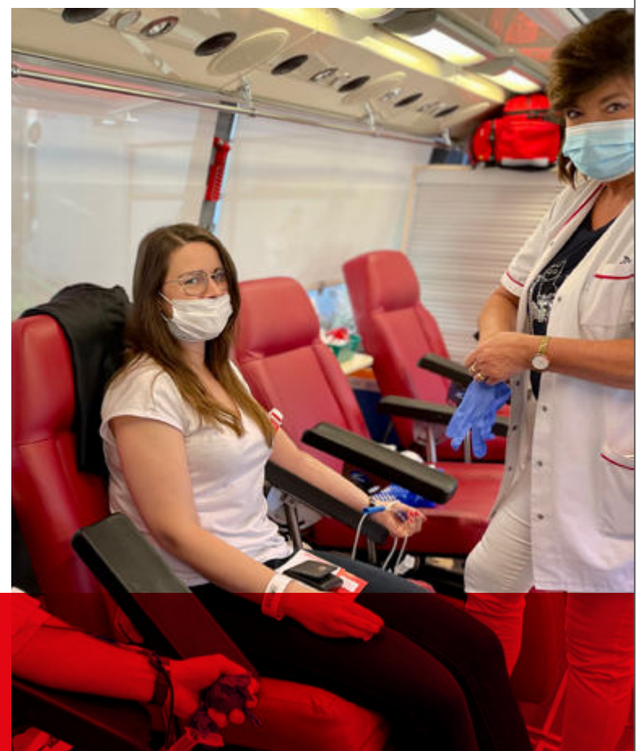
- **Honorary blood donor sessions** The Gift of Blood for St Barbara's Day blood donation drive was held on December 8th 2022 under the slogan '200 litres of blood for the 200th anniversary of Ignacy Łukasiewicz's birthday'. The event was addressed to employees of the Zielona Góra Branch and its cooperating companies as well as Zielona Góra residents. Its purpose was to collect blood and promote blood giving and taking up healthy lifestyles. **In the Year of Ignacy Łukasiewicz, a pioneer of the oil industry, and on the 200th anniversary of his birthday, the blood donors' target was to collect 200 litres of blood during several drives held in 2022. The target was successfully achieved.**

GRI 11.15.3

Operations with significant actual and potential negative impacts on local communities

The industrial operations of the production plant in Płock and the other production sites of the ORLEN Group may occasionally cause short-term nuisance, such as noise or odour. The operating activities are carried out to the highest standards, including the PKN ORLEN Standards of Conduct in Relations with Local Communities and the ORLEN Group Human Rights Policy. The ORLEN Group has a system in place to report grievances about any potential nuisance caused by the ORLEN Group facilities. Environmental grievances about the plant in Płock are reviewed on an ongoing basis by the Environmental Inspection System of PKN ORLEN in Płock, and similar activities are carried out at the other plants of the ORLEN Group.

The ongoing construction of the advanced Olefins III complex near Płock, which started in 2021, is an excellent example. Since the beginning, it has entailed the risk of increased road traffic, presence of an international community of workers and cultural differences related to it. Inhabitants of the neighbouring village may be concerned about the health impacts of the new facilities. The Company's representatives try to prevent any community concerns, meeting with the local authorities. As a result of such discussions, understanding with the local government has been reached and the required permits for the project have been obtained. A bilateral agreement was also signed with the Płock county for financial support from PKN ORLEN to restore the roads travelled by the construction site vehicles. Furthermore, a number of initiatives were launched and implemented for the benefit of the local community in the municipality of Stara Biała, where the project is located, based on the Company's existing portfolio of CSR activities. The local residents have been offered access to the free information system ORLEN Info. Once they register in the system, they can receive text or email messages. Any person looking for information on the project may use a form available on the Company's website for making comments and complaints.



The Company's business operations also involve the use of long-distance pipelines to transport petroleum products. Unpredictable events sometimes lead to pipeline failures. One such accident happened in early 2022 in Baby Dolne (County of Gostynin, western part of the Warsaw Province). The Company believes in social dialogue based on independence of the parties, legal compliance, as well as trust, mutual willingness to compromise, and observance of the rules. The rules of social dialogue are founded on internal regulations and generally applicable laws, which facilitates development of constructive and lasting solutions in partnership with community representatives. With social well-being in mind, the Company did all it took to prevent the spread of the product spilled from the pipeline. A team of experts was delegated to meet the local community including the affected land owners in order to provide complete information and support.

GRI 11.15.4

Grievances from local communities

In 2022, ORLEN Group companies underwent inspections by environmental authorities, which assessed their activities in terms of their impact on various components of the natural environment. A total of 158 inspections were carried out, including: 123 scheduled inspections, 15 inspections made at the request of a Group company, and 20 emergency inspections initiated on the basis of a notification from a third party. During 28 inspections, violations of the terms of applicable permits or decisions, and/or non-compliances with environmental standards were found. The respective companies were required to implement post-inspection measures. In two cases a fine was imposed.

The inspections covered a variety of areas, including waste management, wastewater management, use of natural resources, and assessment of the quality of surface water and wastewater discharges. Furthermore, the ORLEN Group companies received 36 grievances about their operations concerning, among other things, noise or odour emissions from their sites.

In 2022, no grievances from external stakeholders were reported to the PKN ORLEN Ethics Officer.

In every case, both PKN ORLEN and the ORLEN Group companies responded promptly by notifying the relevant environmental authorities of the reported issues and by implementing measures to verify them through surveys, measurements, analyses and observations, with a view to selecting appropriate measures to control and mitigate any potential incidents. For more information, see the 'Environment and climate' section.

Activities under the Charitable Policy of PKN ORLEN S.A.

The Charitable Policy of PKN ORLEN S.A. is an important component of PKN ORLEN's corporate social responsibility and one of the key tools in implementing the ORLEN Group's Sustainable Development Strategy 2021–2023. PKN ORLEN's Charitable Giving Policy also defines the rules of making, using and accounting for donations. Donations are granted in alignment with the Company's areas of social engagement, which mainly involve support for environmental protection, local communities, safety and health, sports, education and culture.

GRI 11.22.1

Management of material topic: Public policy

PKN ORLEN's charitable activities are guided by the core values embraced by the ORLEN Group: Responsibility, Progress, People, Energy, Dependability and the principles of conduct outlined in the ORLEN Group Code of Ethics. Charitable giving is just one of the forms of assistance provided by PKN ORLEN. Employee volunteering campaigns supported by the ORLEN Foundation and sponsorship projects are also important. PKN ORLEN's charitable engagement is a response to the needs of its stakeholders, mainly local communities. The nationwide coverage of many initiatives makes it possible to reach areas where help is needed and the Company's support makes a real change in the life of communities.

To create synergies across the ORLEN Group's social initiatives, the Organisational Standard for Delivery of the Charitable Policy of PKN ORLEN S.A. by Companies of the ORLEN Group was put in place in 2022. The standard was based on the Charitable Policy of PKN ORLEN S.A. of Polski Koncern Naftowy ORLEN S.A., approved by the Management Board of PKN ORLEN on September 19th 2022.

In 2021, the ORLEN Group adopted the Organisational Standard for Supervising Foundations Sponsored or Co-Sponsored by PKN ORLEN or ORLEN Group Companies. The standard is based on the Policy on Supervising Foundations Sponsored by PKN ORLEN or ORLEN Group Companies, approved by the Management Board of PKN ORLEN on December 17th 2020.

Over the past year, PKN ORLEN was actively supporting a number of foundations of which it was the sole founder or a co-founder:

- **ORLEN Foundation** (with PKN ORLEN being its sole founder);
- **ORLEN Foundation for Pomerania** (with PKN ORLEN being its sole founder since the merger with the LOTOS Group on August 1st 2022);
- **PGNiG Ignacy Łukasiewicz Foundation** (with PKN ORLEN being its sole founder since the merger with the PGNiG Group on November 2nd 2022);
- **Foundation of the Ignacy Łukasiewicz Oil and Gas Industry Museum in Bóbrka;**
- **Grant Fund for Płock Foundation;**
- **Grow Up With Us Foundation;**
- **Polish National Foundation.**

In addition to the foundations mentioned above, in 2022 PKN ORLEN provided support to a number of other beneficiaries, including the Polish Economic Security Consortium through the Polish Economic Security Foundation, the Legal and Economic Dialogue and Analysis Institute, the Governmental Strategic Reserves Agency, the Military Institute of Medicine in Warsaw, the Military University of Technology, the West Pomeranian University of Technology in Szczecin, the Municipal Headquarters of the State Fire Service in Płock, the Wrocław University of Technology, the Provincial Hospital Complex in Płock and Voluntary Fire Service brigades. The following institutions received support through the ORLEN Foundation: the Ones Not to Be Forgotten Foundation, the Józef Psarski Warsaw Province Specialist Hospital in Ostrołęka and the Central Police Headquarters.

In 2022, PKN ORLEN continued the cooperation under an agreement with the Maria Skłodowska-Curie National Institute of Oncology, in partnership with the National Tuberculosis and Lung Diseases Research Institute, in the Comprehensive Programme for the Prevention, Diagnostics and Treatment of Cancers and Respiratory System Diseases for Residents of the City and County of Płock. The agreement will be in force until the end of 2024. For more information, see the 'Society' section.

An essential role in delivering the goals of the charitable giving policy is played by the **ORLEN Foundation** with its grant programmes. In 2022, the Foundation operated five programmes devoted to this objective: **ORLEN for Firefighters, My Place on Earth, We Keep Watch! We Remember!, Health for Płock and Safe Eagle Nestlings.** In 2022, more than 600 entities received over PLN 6 million in grants under these programmes. Additionally, the ORLEN Foundation provides a number of training opportunities for its beneficiaries, improving the efficiency and creativity of local organisations and helping them build trust within their communities. Benefits for the localities where they are active include an extended offering of cultural and sports events, cultivation of local traditions, and a greater number of opportunities for children, young people and senior citizens. Through thousands of its beneficiaries, the ORLEN Foundation is able to build social capital and drive positive change even in the smallest localities.

For years, scholarship programmes have been another pillar of the ORLEN Foundation's activities. In 2022, the Foundation operated as many as seven scholarship programmes: **My Above-Average Interests, For Eagles, Scholarship Programme for Students from Foster Family Group Homes, Life to the Full, Bona Fide, For a Fellow Countryman, and Special Scholarships.** Scholarships are awarded to young people who stand out for their sporting, artistic or academic achievements. In 2022, the number of scholarship recipients grew to 776. The ORLEN Foundation was also involved in informal education as an opportunity for young people to discover new interests, proving it is possible to learn not only from textbooks. In 2022, the Foundation ran as many as four educational projects for students, beneficiaries of its programmes and other stakeholders: **ORLEN Foundation Academy, ORLEN Foundation Debate League, Trial by Fire board game, #IGNACYteam, and Screening Matters.**

GRI 11.22.2

Political contributions

In line with its Charitable Policy of PKN ORLEN S.A., PKN ORLEN will not review requests for donations from trade unions, employers' organisations, professional self-governments, sports clubs operating as companies under commercial law, as well as political parties and their foundations or associations. No donations were made to political parties, politicians or similar institutions in 2022.

As a result of the merger with the LOTOS Group on August 1st 2022, the LOTOS Foundation commenced a process to have its name changed and update its existing documents. On September 23rd 2022, the LOTOS Foundation was renamed as the **ORLEN Foundation for Pomerania** and its new charter came into force. The mission of the ORLEN Foundation for Pomerania is to support events and initiatives spanning health care, culture, art, promotion of sports among children and young people and national heritage, including restoration of historical monuments. It actively channels financial support to areas involving science, education and awareness raising. It helps with community projects, including construction of public facilities. An important area of interest for the Foundation is the promotion of safety through the support of professional and volunteer firefighting units, which the ORLEN Foundation for Pomerania equips with the necessary rescue gear.

In 2022, from the merger with the ORLEN Group until the end of the calendar year, the ORLEN Foundation for Pomerania financially supported 72 different initiatives, donating a total amount of PLN 3.7 million. Most of that support was allocated to health protection or targeted at victims of the war in Ukraine. The ORLEN Foundation for Pomerania is committed to helping and implementing long-term support for citizens of the country affected by military aggression. In addition, the Foundation runs – in association with the Provincial Police Headquarters – the Learn to Stay Safe Educational Project, launched in September 2022. Its participants are 6,000 elementary school first-graders.

Following its merger with the PGNiG Group on November 2nd 2022, corporate foundations run by PKN ORLEN were joined by the **PGNiG Ignacy Łukasiewicz Foundation,** with the mission of supporting national heritage and culture, as well as promoting science, education and sports. Other goals pursued by the Foundation are to support the spread of historical education, foster national identity and cultivate the memory of Polish heroes. The Foundation's key educational programmes include: **Be Like Ignacy, 'Be Like Ignacy' Mobile Laboratory, Big Little Discoverers 2, and EKO-active environmental education competition** The Foundation also runs scholarship programmes: Scholarship programme for children of tragically deceased employees of former PGNiG Group companies and scholarship programme for the most talented students in grades three and four of secondary technical schools, run jointly with PGNiG Termika.

Since mid-October 2022, the Foundation has operated and managed the **Warsaw Gasworks Museum.** In the 2.5 months from its opening, the museum was visited by about 2,500 people, organised 16 series of educational workshops, and six VR film screenings. The Foundation carried out a number of initiatives to mark the **Year of Ignacy Łukasiewicz,** including the release of a special postal stamp featuring Ignacy Łukasiewicz and the We Warm Up Polish Hearts grant programme. In 2022, the Foundation offered support to heroes of Polish history in the form of a gas bill discount of up to PLN 900 per month for gas purchased from PGNiG under the **Debt of Gratitude Programme**. The programme is currently addressed to two target groups: Warsaw Uprising insurgents and participants of the strikes that took place at the Wujek Coal Mine in Katowice in the early 1980s. In 2022, the programme covered 1,059 beneficiaries, including 387 insurgents and 672 miners.

The ORLEN Group also operates three corporate foundations – the ANWIL Foundation, Energa Foundation and Unipetrol Foundation.

Established in 2014, the **ANWIL Foundation** supports projects aimed at raising the level of education of the Włocławek residents, counteracting social and economic exclusion, improving the condition of the natural environment, preserving the historical heritage, as well as protecting and promoting health. Over the past eight years, the Foundation has allocated over PLN 10 million to its statutory activities. With these funds, 673 projects were implemented by the beneficiaries (schools, kindergartens, universities, NGOs, farmers' wives associations, volunteer fire brigades, and other public-benefit organisations). As part of the ANWIL Helps employee volunteering programme, ANWIL employees participated in 108 volunteering projects for non-governmental organisations, care providers, foster care centres, educational institutions, schools, sports organisations, as well as science, culture and art centres operating in the city of Włocławek and neighbouring municipalities. A total of 324 scholarships for talented youth and undergraduate students were funded by the Foundation under two scholarship programmes: Primi inter Pares (for eighth-grade students of primary schools and students of secondary schools) and Youth with ANWIL (for junior and senior science students). Among the initiatives carried out by the Foundation in 2022 was the sixth edition of the Learning with ANWIL, a programme promoting science, the third edition of the I Choose Sports and Say Goodbye to Boredom project, which promotes physical activity and sporty lifestyles, and We Feel Green, a new programme born out of concern for the natural environment. In addition, last year saw the second edition of the Be Healthy. Health City project, organised by the Foundation to promote preventive health care and healthy lifestyles. The event, as part of which 2,500 free medical tests were offered, attracted a turnout of 3,300.

The **Energa Foundation** provided financial support in excess of **PLN 8.5 million** to **698** persons in total, including **491** individuals and **207** legal entities, in 2022. A quarter of the funds (nearly PLN 2 million) were spent to cover the cost of treatment, surgeries and rehabilitation. Last year, **70** Energa Group employees benefited from support with a total value of **PLN 738.3 thousand**. In 2022, in the face of the military conflict in Ukraine, the Energa Foundation launched the Energa **Foundation for Ukraine** programme, through which it provided financial support to arrange accommodation for Ukrainian war refugees in Poland, in the amount of **PLN 683.9 thousand**. The Energa Foundation purchased 2,000 powerbanks worth nearly PLN 50,000. They were

donated to individuals and legal entities for transfer to Ukraine. Under the programme, the Energa Foundation provided financial support of almost **PLN 2 million** to public benefit organisations and health care, security and medical emergency providers,

including:

- **Provincial Police Headquarters in Gdańsk** (purchase of materials and prizes for the Learn to Stay Safe Educational Project);
- **Drop of Energy Foundation** (hosting a blood donation drive);
- **Volunteer Fire Brigades** (purchase of firefighting equipment);
- **Pomerania for Children Hospice** (support for medical and nursing care and purchase of a mobile ultrasound machine for hospice patients);
- **Independent Public Healthcare Facility in Krotoszyn** (support for purchase of medical equipment to be used in ambulances: transport ventilators and disinfection devices);
- **University Clinical Centre in Gdańsk** (establishment of a Robotics Centre of Excellence (RAS));
- **Congregation of the Comboni Missionaries of the Heart of Jesus in South Sudan** (purchase of photovoltaic panels for the Training Centre building in Yirol);
- **Poznań Province Volunteer Water Rescue Service in Gołuchów** (support for modernisation of the water rescue service);

- **Sons of Divine Providence Hospice in Wołomin** (support for finishing works on the building).

In addition, the Energa Foundation, together with the ORLEN Foundation as the organiser, got involved in the Movember Campaign, aimed to encourage ENERGA Group employees to undergo preventive medical check-ups and to raise awareness of men's health conditions.

Operating in the Czech Republic, the **ORLEN Unipetrol Foundation** was established in 2016 by the ORLEN Unipetrol Group, which is part of the ORLEN Group. Its core mission is to support education and popularise science, with a special focus on natural sciences and engineering. The Foundation runs a **Scholarship Programme** for secondary school and university students standing out for excellent academic performance and talent for natural sciences, especially chemistry and technology. The Foundation's **Grant Programme,** on the other hand, is targeted at kindergartens, as well as elementary and secondary schools to help them expand their educational activities and run interesting scientific projects. The Foundation also runs **a Fellowship Programme** for teachers.

Seeking to support education and related activities, the Foundation offers both students and teachers an exciting opportunity to explore the world of chemistry. Through its educational projects, it shows that chemistry is a modern and fascinating branch of science, holding endless discoveries and opportunities for future applications. In addition, the Foundation organises conferences focused on innovative education and up-to-the-minute **educational trends. Its** workshops for teachers involving professional lecturers are concerned with topics based on school curricula. Thanks to the lectures, teachers can make learning – even with a minimum amount of equipment – a more enjoyable and satisfying experience for students. All these initiatives are part of the following projects: **Plastic and Its Magic Suitcase, Miraculous Day with Chemistry, Flying Teacher, 4EDU Conference, Summer Workshops for Teachers, Fridays with Science lectures for students, mobile EDUbus Laboratory.**

The Foundation also engages with a number of not-for-profit organisations, frequently getting involved in community events and special occasions.

ORLEN Unipetrol became a strategic partner of the University of Chemistry and Technology in Prague in 2002, having since donated almost CZK 31.5 million for educational and development projects. ORLEN Unipetrol has also established collaboration with municipalities near its production plants (Litvínov, Kralupy nad Vltavou and Neratovice). In 2022, more than CZK 3.2 million was donated to 27 municipalities.

Employee volunteering

The Employee Volunteering Programme at the ORLEN Group has been developed since 2019. Since that time, employees are provided with opportunities to engage in volunteering projects offered by the ORLEN Foundation and to implement their own ideas. They can propose their own initiatives, consult and refine them with programme coordinators and receive grants to enable project execution. The ORLEN Foundation hosts an annual event called the Volunteering Week for its volunteers. 2022 was an exceptional year in that the programme was joined – with the enlargement of the ORLEN Group – by employees of the former LOTOS and PGNiG Groups. A great challenge was to coordinate the volunteering activities undertaken by employees to help Ukrainian refugees. However,

the effort put into developing the programme more than paid off, as last year saw a record high number of volunteering initiatives, with about **3,000** ORLEN Group employees engaged in the Employee Volunteering Programme, contributing almost **20,000 hours** of unpaid work. The beneficiaries of the volunteering activities were **close to 22,500 people.** The second Volunteering Gala was held on December 5th 2022. During the official ceremony at the ORLEN Arena in Płock, the Foundation honoured the winners of the Best Volunteering Project of the Year 2021/2022 survey and presented special awards.

In the Pomerania region, employees have volunteered their services for many years. Employee-volunteers of the PKN ORLEN Gdańsk Branch and the ORLEN Foundation for Pomerania have devoted their time, knowledge and skills to support the local communities. In 2022, about 40 volunteers in Gdańsk participated in the nationwide Schoolbag Full of Smiles campaign organised by Caritas to support children from disadvantaged families at the start of the new school year. Dozens of volunteers also became involved in the Christmas Fair, at which employees could buy Christmas handicrafts made by people with disabilities during Occupational Therapy Workshops organised by Caritas in Pomerania. Also in 2022, a dedicated blood collection bus visited multiple times the premises of the Gdańsk refinery.

The PGNiG Branch Complex in association with the PGNiG Ignacy Łukasiewicz Foundation carried out two volunteering projects:

- 48 employees cleaned the grounds of the Old Powązki cemetery (107 gravestones) as a way of paying tribute to those who rest there.
- A Christmas collection drive for the needy of the Felician Sisters Hospice ended in the transfer of gifts to the hospice. Their amount exceeded the organisers' expectations, as they managed to collect 250 kg of the most needed items. The gifts donated by employees were then packed and transported to the hospice by four volunteers. The Felician Sisters Hospice in Nowowiejska Street has 12 patients under its care.

R&D investments

In 2022, activities of the R&D&I area focused on **developing its own technologies and solutions originated from science and on strengthening the R&D ecosystem and tools used to acquire innovations.**

Acceleration programmes for technology start-ups offering solutions ready for testing and scaling up as part of the ORLEN Group's production, logistics and sales infrastructure were successfully expanded. Their implementation makes it possible to quickly validate solutions that suit the ORLEN Group's long-term development plans in areas such as decarbonisation, digitalisation, operational efficiency, sustainable development, circular economy and energy generation. In 2022, more than 100 technological challenges were defined as part of the **ORLEN Skylight Accelerator** programme calls. Cooperation, in areas such as retail, refining, logistics, water and wastewater management, marketing and energy generation, was ultimately proposed to 23 start-ups selected from among candidates that had responded to the calls. In 2022 also ANWIL and the Energa Group companies were covered by the ORLEN Skylight Accelerator programme. Moreover, in April 2022 PKN ORLEN entered into an agreement with Microsoft, commencing cooperation between the Skylight accelerator and Founders Hub 101 programmes. Collaborative links with start-ups in 2022 were also developed on the Czech market as part of the ChemTechNext initiative organised by ORLEN Unipetrol, with applications submitted by more than 50 start-ups and seven of them finally selected for potential joint projects.

During the period, infrastructure of the **Research and Development Centre in Płock** used for the scale-up of proprietary technologies and preparing them for industrial scale deployment was extended to include four pilot units simulating refining and petrochemical processes (hydrocracking, diesel oil hydrodesulfurisation, reforming and pyrolysis). An atmospheric and vacuum distillation unit is also under construction, and five more pilot plants simulating industrial processes new to the Company are in the design phase. The units will be used to test commercial and innovative technology and feedstock solutions. Over the past year, the R&D Centre already launched projects focused on fuel testing, selecting specific lubricant technologies, developing technologies for heavy residue conversion into marketable products, and in-depth research into corrosion prevention.

In 2022, PKN ORLEN was engaged in **120 R&D&I projects**, most of them relying on close **collaboration with science partners.** Last year, the value of this work was in excess of PLN 10 million. The wide extent of ongoing research projects called for a large number of partnerships, which last year included: the University of Warsaw, the Warsaw University of Technology, the Adam Mickiewicz University of Poznań, the Kazimierz Wielki University, the AGH University of Science and Technology of Kraków, the GIG Research Institute, the Institute of Energy and Fuel Processing Technology, the Institute of Heavy Organic Synthesis of Kędzierzyn-Koźle, the Industrial Chemistry Research Institute of Warsaw, the Kazimierz Wielki University of Bydgoszcz, the Oil and Gas Institute – National Research Institute of Kraków, the Air Force Institute of Technology, and the Poznań University of Technology.

The research projects carried out in previous years in partnership with the Gdańsk University of Technology (KORMON*) and the Industrial Chemistry Research Institute (CO_BIO**) were recognised by international expert panels at prestigious invention fairs, where they competed with hundreds of proposals from around the world:

Examples of effective cooperation between business and science in 2022 included the following projects:

- **Innovative 4-CBA hydrogenation catalyst,** in which new formulations of innovative catalysts were produced with potentially better catalytic properties than commercial counterparts.
- **New Plastics,** *focused on experiments to obtain new polymers and biopolymers based on the carbon capture and utilisation technology.*
- **Plastics recycling** – a research programme aimed at selecting appropriate technologies for PKN ORLEN's chemical recycling complex.

The flagship programme for systematically building an extensive network of relationships and directly reaching science partners with PKN ORLEN's research challenges is the **NEON** (New ORLEN) Joint Venture with the National Centre for Research and Development. The programme is run through grant competitions aimed to select unique scientific projects that will receive funding from PKN ORLEN and the National Centre for Research and Development within defined thematic categories. In the past year, two competition calls were announced in the following categories: Biomass and Industry 4.0, with a total envelope of PLN 43 million. Experience from the first competition showed that the Company's expectations are highly specialised, and Polish science has not yet come up with satisfactory solutions to address them, which made it impossible to select a winner. The second competition for digital and automated solutions, announced in December 2022, entered the call for proposals phase at the end of January 2023.

'ORLEN IN YOUR PORTFOLIO' programme for retail investors and ORLEN Investing Academy

- As at the end of 2022, the number of the programme participants was 17,500 (an increase of 4,000 over the year), while 280,000 people used the educational section of the orlenwportfelu.pl website (an increase of 60,000 over the year).
- The programme partners are six brokerages, which operate 60% of all individual investment accounts in Poland.
- Key activities carried out in 2022:
  - 6th edition of the Index Investment Challenge (WSE Foundation)
  - Participation in Wallstreet 26, the largest conference for retail investors
  - Capital Market Hero Award in the ESG category, Large Companies subcategory, at Wallstreet 26
  - Financial Education Day conference at the WSE
  - Investing in Practice – 14 new episodes of the series
  - 'Investing in times of uncertainty' roadshow – Lublin, Kraków
  - 4th exam of the ORLEN Investing Academy
  - Retail Investors' Day in Toruń
  - Conference on loyalty schemes at the WSE

International Trade Fair for 'Ideas – Inventions – New Products' iENA 2022 in Nuremberg(Die internationale Erfindermesse iENA **'Ideen-Erfindungen- Neuheiten'**) – Gold Medal for the KORMON project, Silver Medal for the CO-BIO project;

INTARG® International Invention and Innovation Show in Katowice – Grand Prix for the KORMON project, Gold Medal for the CO-BIO project and award for PKN ORLEN, which was recognised as the Most Innovative Entity 2022.

* KORMON – a globally innovative system for general corrosion and hydrogen embrittlement monitoring

* CO-BIO – an industrial trial of simultaneous hydrotreatment (co-hydrogenation) of crude oil fractions with vegetable oils successfully carried out on a full scale refinery unit

Responsible supply chain

GRI 2.6

Activities, value chain and other business relationships

PKN ORLEN uses services of over 9 thousand suppliers, while the ORLEN Group has over 25 thousand suppliers.

The responsible business and sustainable development criteria have been incorporated into the procurement management standard. The ORLEN Group only works with trading partners that respect human rights and operate in compliance with the applicable law, ensuring safe and decent conditions of work and employment and adhering to the required standards of ethics.

These criteria are set out in the **Supplier Code of Conduct,** which is mandatorily applied by the ORLEN Group companies in their procurement processes. Each ORLEN Group company subject to the Procurement Policy and Procurement Instruction is obliged to comply with the same requirements as those applicable at PKN ORLEN. All existing and potential suppliers are obliged to know and accept the requirements concerning human rights, compliance with the law, safe and decent working conditions, the highest ethical standards, and care for the natural environment.

Acceptance of the Supplier Code of Conduct by prospective and existing suppliers is a formal precondition for participating in procurement procedures. If a bidder does not accept the Code, their bid will not be considered in the procurement process because the formal criteria are not satisfied. The purpose of the Code is to promote responsibility among the ORLEN Group's stakeholders and encourage responsible practices among the suppliers. Moreover, every tenderer taking part in procurement procedures must read, understand and accept the ORLEN Group Anti-Corruption Policy and the PKN ORLEN Rules for Accepting and Offering Gifts.

In 2022, as part of the ORLEN Group's Procurement Centralisation Project, purchases within agreed categories were centralised at 20 ORLEN Group companies, including;

- A Central Procurement Instruction, applicable to purchases within central categories, was developed and implemented.
- A new cooperation agreement was drafted and signed with each company, including an updated settlement method.
- One common IT system was deployed at all companies for requisitions management (SAP CP).
- A framework for cooperation and responsibility in the procurement process and for agreement drafting and execution was agreed with the respective companies.

The former LOTOS Group and PGNiG Group were not covered by the Procurement Centralisation Project. Acquisition activities were carried out as part of other projects.

GRI 11.10.8 GRI 11.12.3

Percentage of new suppliers that were screened using social criteria

All PKN ORLEN suppliers are obliged to know and accept the PKN ORLEN Supplier Code of Conduct, the ORLEN Group Anti-Corruption Policy and the PKN ORLEN Rules for Accepting and Offering Gifts.

In an effort to continuously improve procurement processes, the Group works to enhance and ensure greater consistency of vendor selection procedures. We developed a **model for vendor selection in procurement category management strategies,** and the key suppliers are evaluated on a regular basis as part of the **supplier relationship assessment process.** The supplier selection and assessment criteria, which are based on best market practices, facilitate mitigation of reputation, financial and process risks, and ensure high quality of cooperation with suppliers.

Other measures to improve procurement processes and prevent risks arising from vendors' actions or outsourcing contracts include: properly executed documentation, checklists in IT systems, completeness and quality of underlying documents, as well as review and assessment of contracts with suppliers in terms of certificates held and security clauses.

Goods and services are procured in accordance with the principles of ethics and the applicable law, with transparency and professionalism maintained throughout the process.

GRI 11.14.6

Proportion of spending on local suppliers at significant locations of operation

In 2022, goods and services sourced from Płock-based companies accounted for some 10%* of PKN ORLEN's spending (*excluding purchases from suppliers of crude oil and natural gas).

At key foreign companies of the ORLEN Group: Unipetrol (Litvínov) and ORLEN Lietuva (Mažeikiai), spending on services provided by local suppliers was 1.91% and 0.45%, respectively, of their total expenditure in 2022.

Service quality and customer satisfaction

Growth of the Company's retail segment is driven by enlargement of the sales network and significant expansion of the product portfolio offered to customers. Over 3,500 ORLEN-branded service stations are to operate in Central and Eastern Europe by 2030. The Group will seek to enhance

the availability of alternative fuels, for instance by deploying at least 10,000 EV charging points and developing the sales of hydrogen and LNG/CNG.

The ORLEN Group manages Central and Eastern Europe's largest chain of **over 3,000 service stations, located in Poland, the Czech Republic, Germany, Slovakia, Hungary and Lithuania.** As at the end of 2022, the chain comprised more than 2,000 Stop Cafe/star Connect/ORLEN w ruchu non-fuel outlets.

The ORLEN Group is consistently expanding its retail network to sell alternative fuels. As at the end of 2022, there were **589 EV charging stations** within CODO and DOFO chains, located mainly in Poland and the Czech Republic. There are plans to further expand the EV charging business into Germany and other markets served by the ORLEN Group. The ORLEN Charge service was also rolled out for fleet customers with electric vehicles. As at the end of 2022, PKN ORLEN had 2 hydrogen fuel stations and 19 public CNG fuel stations (63 CNG refuelling points).

Our broad integrated offering of non-fuel products and services is expected to keep attracting new customer groups. RUCH is not only a network of newsstands in very good locations, but also advanced courier services. The launch of RUCH's potential, development of new store and food service formats outside ORLEN service stations, as well as the network of parcel pick-up points will accelerate growth of our retail segment. As at the end of 2022, **1,875 automated parcel machines were launched as part of the ORLEN Parcel service** and, through the RUCH chain, **6,149 parcel collection points were acquired (vs 4,500 in 2021).**

PKN ORLEN is also developing digital platforms to support the retail area. Mobile apps, especially the flagship one ORLEN VITAY, have seen record growth in user numbers, garnering high store ratings of over 4.5/5 stars. The tool will provide customers with convenient access to the integrated ecosystem of products and services offered by the ORLEN Group and its selected partners. The new e-commerce business, integrated with the VITAY loyalty scheme, is also growing at pace. The platform is available to all customers, but participants of the VITAY programme can discount the price of any product up to PLN 1.

For more than five years, the Stop Cafe food service offering has included a permanent vegan and vegetarian food range, which is constantly expanded. For over 13 years now, **Fairtrade-certified coffee** has been available at all Stop Cafe outlets within the ORLEN retail chain. Participation in the Fairtrade scheme helps improve the situation of farming communities in the Global South. PKN ORLEN works only with proven manufacturers and suppliers, and its private label stop.cafe products are made according to established recipes.

With environmental protection in mind, PKN ORLEN keeps working to **optimise the quality of packaging and accessories and replace them with biodegradable substitutes** (subject to biochemical decomposition) wherever possible, e.g. having introduced wooden cutlery (knives, forks, spoons) in paper packaging. A new version of shopping bags has also been introduced: this single-material packaging is FSC certified. Use of PEFC or FSC certified single-material packaging, mainly paper, at service stations. The FSC and PEFC certifications confirm that the production, processing and trade of wood and forest-based products (such as paper) are compliant with applicable EU requirements.
This means that wood used by the Company originates from legal sources. Moreover, disposable plastic packaging (e.g. for lettuce or hot meals) is being replaced with packaging made of sugar cane (bagasse) pulp or rPET.

*nie uwzględniono wydatków dla dostawców ropy naftowej i gazu ziemnego

As a socially responsible company, friendly to families with children, PKN ORLEN has joined **the Large Family Card programme.** Holders of the card are offered discounts at ORLEN service stations across Poland when purchasing fuel, Stop Cafe products or using car wash services. **Facilities for people with disabilities at PKN ORLEN stations**: 1,580 service stations have toilets adapted to the needs of people with disabilities, and 1,295 stations have special parking spaces for the disabled. Ramps for people with disabilities are available at 1,525 stations. We are gradually expanding present-day solutions to enhance the accessibility of our services. At all ORLEN service stations, customers can pay for fuel at the pump via the ORLEN Pay mobile application, using a special QR code displayed on each pump . In 2022, to achieve further service improvements, the Mobile Cashier and the Fast Lane programmes were extended. The PKN ORLEN chain has three ORLEN Drive stations where motorists, including those with disabilities, can use a complete range of refuelling and food services without leaving their car. In recent years, over 30 thousand employees of the ORLEN service stations have received training in services to people with disabilities.
The training system was developed in cooperation with the INTEGRATION Foundation. In addition, work is ongoing to develop innovative solutions that will revolutionise the attendant call system to assist people with disabilities at service stations.

4. Material risks and management approaches

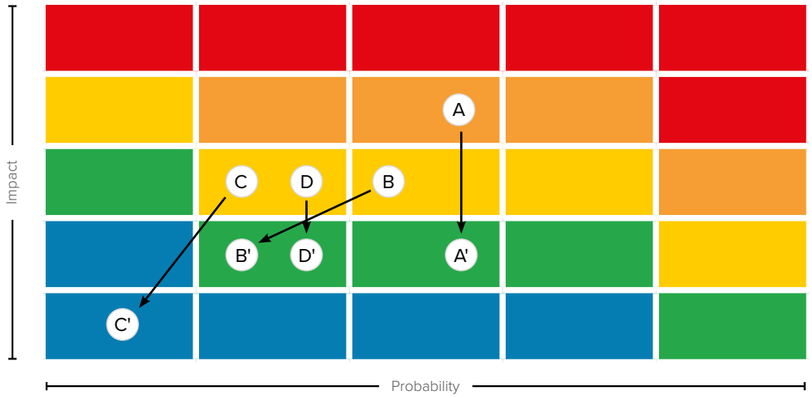
TABLE 14 | Social risks

Risks/processes	Risk description	Risk mitigation methods	Risk development trend
A. Corporate social responsibility	• Lack of public awareness of the ORLEN Group's CSR activities	Delivery of the ORLEN Group Sustainable Development Strategy for 2021–2023, which defines focus areas for CSR activities Implementation and supervision of the Responsible Care Framework Management System and appointment of the Responsible Care Framework Management System Officer	↔
B. Reputation, brand and marketing management	• Use of the brand in connection with adverse, controversial activities • Activities with adverse effect on the image of PKN ORLEN S.A.	Supervision over the process of defining the methodology for conducting promotional campaigns; key activities subject to approval by relevant business areas	↔
C. Non-compliance with regulations governing charity activities	• Lack of awareness of legal regulations and PKN ORLEN's procedures governing charity activities	Development, implementation and adherence to procedures related to delivery of PKN ORLEN's charity policy based on the Charitable Policy of PKN ORLEN S.A., Organisational Standard Regarding the Custody of Foundations of PKN ORLEN and ORLEN Capital Group and Organisational Standard Regarding the Pursuance of the Charitable Policy by Companies of the ORLEN Capital Group.	Risks identified in 2022
D. Outsourcing and subcontractor risk	• Limited control over the ORLEN Group's processes which are subcontracted or outsourced	Ensuring correctness, completeness and quality of documentation, including completion reports and checklists, in IT systems Regular assessments of service providers	↔

Table key

Risk materiality for the organisation	critical	high	medium	low	very low
Risk level after taking into account the controls	critical	high	medium	low	very low
Risk development trend year on year	↓ Falling	↑ Rising	↔ Stable		

Effects of application of controls in risk management



A, B, C, D

Social risks
– risk materiality.

A', B', C', D'

Social risks
– risk level after taking into account the controls.

06

Employee matters and respect for human rights

The ORLEN Group employees are provided with fair and supportive working conditions. The Group's relations with internal stakeholders and the external business environment are based on integrity, respect in everyday relationships and on dialogue, cooperation and involvement of each staff member in building a culture consistent with the Company's core values. ORLEN Group values: Responsibility, Progress, People, Energy and Dependability.

64,494 ORLEN Group employees

40 Ethics Officers at the ORLEN Group

75% overall employee satisfaction rate at PKN ORLEN

Sustainable Development Goals 2030

Sustainable Development Goals 2030 pursued by measures implemented by PKN ORLEN and the ORLEN Group in 2022 with respect to employee matters and human rights:

The GRI Standards 2021 disclosures described in this section:

- GRI 2.7 Employees
- GRI 2.25 Processes to remediate negative impacts
- GRI 2.29 Approach to stakeholder engagement
- GRI 2.30 Collective bargaining agreements
- GRI 11.7.2 Minimum notice periods regarding operational changes
- GRI 11.7.3 Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings
- GRI 11.10.1 Management of material topic: employment practices
- GRI 11.10.2 New employee hires and employee turnover
- GRI 11.10.3 Benefits provided to full-time employees that are not provided to temporary or part-time employees
- GRI 11.10.5 Minimum notice periods regarding material operational changes, with indication whether such periods are specified in collective agreements
- GRI 11.10.6 Average hours of training per year per employee by gender, and by employee category
- GRI 11.10.7 Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings

1. Management of the employee matters and human rights area

Activities related to employee matters and respect for human rights are pursued mainly by the **HR function** and the **Ethics Officer.**

Overview

Responsibilities of the HR function include:

- Recruitment, development and retention of key management staff to ensure achievement of strategic objectives.
- Development and implementation of policies, principles and standards in human resources management, in particular: recruitment, adaptation, development and training, hiring and dismissal of employees, compensation systems, bonuses, perquisites, social benefits, collective bargaining agreements.
- Supervision over the setting of bonus-related targets for key management staff.
- Shaping social relation standards in the organisation;
- Preparing proposals of redundancy benefits for employees affected by workforce restructuring measures.
- Coordination, planning and spending under the compensation budgets and bonus systems (including incentive schemes), conducting training, recruitment and covering the costs of other HR management tools and systems.
- Human resources management, in particular: recruitment, onboarding, development and training, hiring and dismissal of employees, compensation systems, bonuses, perquisites, social benefits, collective bargaining agreements.
- Drafting and implementation of collective labour regulations at PKN ORLEN and development of related standards for the ORLEN Group
- Communication with company trade unions and coordination of efforts with regard to collective bargaining agreements and social matters.
- Development, maintenance and application of the Remuneration Policy for Members of Management and Supervisory Boards of ORLEN Group Companies.
- Operation of uniform ethics standards and procedures within the ORLEN Group.
- Building the image of an attractive employer.

The **Ethics Officer** monitors compliance with the ORLEN Group's Code of Ethics, guarantees that employees, employers and all stakeholders can freely report violations, and raises the employees' awareness of business ethics and ethical standards, and of the importance of their own role in building the ethical corporate culture. The Ethics Officer is elected by PKN ORLEN employees and performs his or her duties without remuneration. **The Ethics Officer takes steps to investigate and eliminate behaviours which conflict with the PKN ORLEN values, and in particular:**

- Provides ongoing support to PKN ORLEN employees with respect to their enquiries and concerns regarding ethical issues, including with respect to employee relations.
- Guarantees to all stakeholders, in particular the employees, an opportunity to freely report violations of the ORLEN Group Code of Ethics on an anonymous basis, using internal communication procedures and channels.
- Receives, selects and evaluates complaints for legitimacy and materiality; in the case of minor complaints, the Ethics Officer undertakes remedial action on his or her own, while more complex and serious cases are referred to the Secretary of the Human Capital Committee.
- Informs the parties concerned about the measures taken, with due regard to confidentiality requirements.
- Prepares, based on the complaints and comments received, an annual report for the Human Capital Committee and suggests solutions to improve the corporate culture.

Other responsibilities of the Ethics Officer include educational activities to foster knowledge of the Code of Ethics, which include lectures on ethics for the management staff and training for all PKN ORLEN employees to promote the ethical values and principles, training during the Onboarding Programme for new hires to familiarise them with the Code of Ethics and the objectives and operation of the corporate ethics system, and a training programme for interns and trainees.

In line with global trends relating to compliance with ethical requirements, an **Ethics Team** has been appointed within the HR function.

Its key responsibilities include:

- Coordination of all ethical issues based on the provisions of the Code of Ethics, in accordance with the objectives of the ORLEN 2030 strategy and the vision of ORLEN Group growth.
- Development, implementation and updates of policies, procedures and tools aligned with the ORLEN Group's ethical standards.
- Carrying out communication activities promoting a corporate culture based on ethics and the ORLEN values, and behaviours compliant with the adopted principles of conduct.
- Cooperation with PKN ORLEN's and other ORLEN Group companies' organisational units in the field of ethics, in particular as regards implementation of the Code of Ethics and ethical standards.

The Ethics Officer operates as part of the Ethics Team. However, the autonomous and social nature of the Ethics Officer's role have remained unchanged. The Ethics Team and the Ethics Officer are tasked with increasing employee involvement in building corporate culture based on ethics and values, which is to be done by enhancing communication and training activities and implementing consistent ethical standards at PKN ORLEN and other ORLEN Group companies. Ethics Officers have been appointed at those ORLEN Group companies which employ more than 100 staff. In Group companies with a workforce of less than 100, the responsibility for ethical issues rests with the employer.

As at the end of 2022, 40 Ethics Officers were appointed at PKN ORLEN and other ORLEN Group companies.

GRI 11.10.1

Management of material topic: employment practices

Key policies

The policies and internal regulations concerning the employee area include:

Collective Bargaining Agreements

The Collective Bargaining Agreement is a social contract, being a source of labour law, that has been reached through negotiations between the employer and trade unions. It is an HR constitution of sorts that sanctions a motivating and coherent remuneration and bonus system, sets standards for employer-employee relationships and provides norms governing an equal partnership between the employer and trade unions. The Collective Bargaining Agreement regulates the broad-based labour relations management concept in accordance with applicable laws and best market practices. It is an element of integration and harmonisation of industrial relations, supporting execution of business processes. It serves as an effective and objective tool for regulating HR management policies, with a particular focus on the hiring, promotion and remuneration systems, by applying transparent solutions regarding the pay scale, base pay and bonus system.

The Collective Bargaining Agreement enables effective and open dialogue with social partners by regulating important issues concerning collaboration with trade unions.

With regard to employees' right to freedom of association and collective bargaining, the PKN ORLEN Collective Bargaining Agreement provides that the employer:

- Recognises the trade unions as representatives of all employees in matters concerning their collective rights and interests, within the scope defined by laws of general application.
- Agrees to respect the freedom of activity and equality of the trade unions and not to discriminate against employees on the grounds of trade union membership or non-membership.

The Collective Bargaining Agreement outlines general rules governing negotiation of annual pay rises, cooperation between the employer and the trade unions in restructuring matters, and negotiation of matters relating to the Agreement.

Work Rules

In 2021-2022, ORLEN Group companies carried out a project to update their Work Rules, comprising key internal regulations that govern the organisation of work processes and the associated rights and obligations of the employer and employees. Based on those regulations, PKN ORLEN implemented an electronic attendance list. The update process made it possible to review the solutions in place, apply a consistent approach, and ensure proper protection for the parties to the employment contract. In connection with planned amendments to the Labour Code, solutions were developed and tested to introduce remote work as one of work organisation options.

Remuneration Policy for Members of Management and Supervisory Boards of ORLEN Group Companies

PKN ORLEN Management Board Members are each year required to implement the management objective of defining and applying rules of remuneration of Members of Management and

Supervisory Boards of ORLEN Group companies in accordance with the Act on Remuneration of Persons Managing Certain Companies (known as the Salary Cap Act), which is ensured by day-to-day implementation of and compliance with the Remuneration Policy for Members of Management and Supervisory Boards of ORLEN Group Companies. The document defines the process of making HR decisions as part of corporate supervision, which guarantees that Management Board and Supervisory Board members at the ORLEN Group companies are remunerated in accordance with the provisions of the Act.

As the number of ORLEN Group companies grew significantly in 2022, all of the acquired subsidiaries of PKN ORLEN confirmed the implementation and application of the Policy. In order to maintain a common policy within the Group, compliance with the Salary Cap Act and thus implementation of the Policy is also addressed in the objective setting and reporting system for members of Management Boards of ORLEN Group companies that are parents of other groups.

Restructuring agreement with trade unions

It sets out the rules of cooperation between the social partners in restructuring processes and the employees' rights in such processes.

Bonus System Rules

The PKN ORLEN Management Board, Management Boards of other ORLEN Group companies, as well as directors reporting directly to the Management Board and PKN ORLEN employees are covered by bonus schemes that support the implementation of strategies and achievement of key business objectives of the ORLEN Group. The key positions are rewarded based on the annual bonus system: the bonus is granted for achieving individual qualitative and quantitative targets, which are reviewed after the end of the year for which they were set. In 2022, other PKN ORLEN employees were rewarded based on one of the following three bonus schemes: a quarterly/annual, quarterly, or monthly scheme. The processes of target setting and reporting and of bonus granting are standardised on an ongoing basis to ensure that the bonuses have an incentive effect.

The concept of the 2022 objective setting process took account of the growing number of ORLEN Group companies, steps towards standardising the regulations and mechanisms for objective setting and reporting at the newly acquired companies, as well as the need to define the objectives on a case-by-case basis. The key components of the Group's strategy were described in the 2022 MBO Sheets in all ORLEN Group companies, including projects and initiatives related to the completed acquisitions, i.e. the merger with Grupa LOTOS and PGNiG.

ORLEN Group training rules

They govern the provision of employee training. The purpose of training management is to support implementation of the business strategy, assist employees in their development, and build appropriate corporate culture. Each ORLEN Group company creates conditions for its employees to develop their skills, qualifications, knowledge and competencies.

Corporate Social Benefit Activity Rules
– define the scope of social benefits and the rules for granting such benefits to the current and former employees of PKN ORLEN and its subsidiaries covered by agreements on the joint social benefits programme, as well as the employees' family members. Additionally, PKN ORLEN offers a uniform employee benefits package to employees of all ORLEN Group companies participating in the joint social benefits programme.

Employee Referral Programme

On July 1st 2022, an Employee Referral Programme was launched at PKN ORLEN to support recruitment processes by reaching a select group of candidates through employees. Employees are able to participate in creating the work environment and actively help in recruitment by referring external candidates for new openings. The effective and mutually beneficial referral programme is a new way for PKN ORLEN to access sought-after professionals.

Well-Being Policy

Well-Being Policy – offers key solutions to improve the quality of life and broadly defined employee well-being, and is broken down into several areas: wellness, work comfort, work satisfaction, work-life balance, external environment. Well-being within the organisation means continuous and dynamic management of employee well-being by addressing employee needs in every dimension. In April 2022, a health and well-being promotion event under the name Wellbeing Week was held at three locations: Płock, Warsaw and Włocławek. Participants were given an opportunity to broaden their knowledge of how to stay healthy, be more physically active and eat well. The Well-Being Policy is a document developed at PKN ORLEN. Also, the ORLEN Group companies received recommendations to implement it and already have in place policies of a similar standard.

Expatriate Policy

The Policy sets out the rules to be followed when seconding employees to foreign ORLEN Group companies with respect to hiring and agreeing on contract terms and benefits for expats at PKN ORLEN and other ORLEN Group companies. Given the ORLEN Group's fast-paced expansion on international markets, activity of its employees plays a vital part in growing the Group's business, ensuring knowledge transfer and opening new opportunities for employee development. Employee secondment or employment in a foreign company of the ORLEN Group is consistent with the Group's strategic plans to continue building human capital with international professional experience.

In 2022, practices applied on the Polish and international markets in the area of secondment of employees to foreign countries were reviewed in order to assess the ORLEN Group's own practices. The review confirmed their consistency with the market standards. Based on the conclusions contained in the review report, minor updates were made to the 'Rules for hiring expatriates by PKN ORLEN and other ORLEN Group companies and defining terms of their contracts', taking into account the need to adapt certain benefits and perquisites to the evolving environment.

ORLEN Group Best Practices in Employee Mobility

Best Practices in Employee Mobility describe the employee mobility process and define the related procedures. The solutions provided in the document are implemented taking into account the specific nature and regulations of individual ORLEN Group companies, each of which is a separate employer within the meaning of the Labour Law. Mobility is aligned with the Group's strategic plans to build human capital with extensive professional experience in the long term. These Best Practices are adopted and applied by companies newly included in the ORLEN Group. The number of mobile employees varies according to needs: in 2022, it exceeded 30 people.

ORLEN Group Employee Migration Policy

The Policy developed in 2022 defines procedures to be followed by ORLEN Group companies that are employers of personnel migrating within the Group as a result of recruitment, restructuring and/or mobility processes. When an employee of an ORLEN Group company is hired by another ORLEN Group company in connection with any of those processes, all the Group companies should act in accordance with the applicable laws and regulations to effectively leverage the potential of such employees and to achieve synergies.

Each ORLEN Group company is a separate employer and enjoys discretion when making HR decisions, which does not preclude sharing information between Group companies concerning HR guidelines and/or processes, in particular where they are parties to relevant agreements or arrangements defining the scope of mutual cooperation as well as the purpose and scope of sharing information on employees. The Policy ensures smooth operation of business processes within the Group with due respect for the employees' right to change employers.

Employee onboarding

The purpose of onboarding is to prepare employees to effectively perform their tasks in a new workplace within the shortest possible time frame. The process aims to effectively integrate new hires into the organisation, introduce them to their new tasks and duties and familiarise them with the employer's procedures and policies. The process also involves integrating new hires into the corporate culture and into their teams. With the need for continuous process improvement in mind, in-house training for employees to be promoted to managerial positions was developed and implemented in 2022. It facilitated adaptation of the internally promoted individuals to their new roles. Besides the usual meetings for new hires, onboarding meetings were held for more than 520 employees of Grupa LOTOS being transferred to PKN ORLEN. The online meeting format, which proved its worth during the pandemic, was again applied, ensuring high attendance by employees based in different locations across Poland.

Family-Friendly Employer programme

Internal order on the Family Friendly Employer Programme and Initiatives celebrating long service, retirement and birthdays of former employees – sets forth the rules for the operation of the Family Friendly Employer programme and governs all activities related to celebrating long service, retirement and birthdays of former employees. It sets out the rules governing initiatives for employees celebrating long service or those retiring, as well as pensioners celebrating their 70th, 75th, 80th, 85th and following birthdays.

Employee Pension Plan

It guarantees additional financial resources to PKN ORLEN employees, to be used once they leave employment and retire. The basic contribution under the scheme is funded by the employer, while the employee has the option to fund an additional contribution.

A pension and savings scheme enabling PKN ORLEN employees to save additional funds for their future pension on favourable market terms.

Employee Capital Plan

It is a long-term retirement savings scheme, with the option to disburse the funds early or after the employee turns 60. Savings in PPK accounts constitute the employee's fully private and heritable financial capital. PPK contributions originate from three sources: the employee, the employer and the state.

Pay on Request

It is a benefit which gives employees quick and easy access to their salaries before pay day.

Legal Benefit

The service offers access to unlimited legal advice on personal matters provided by email and telephone, including family and civil law, real estate purchases and rentals, as well as consumer complaints, relations with banks and insurers, traffic incidents, contacts with authorities in administrative proceedings, to name just some benefits.

Cafeteria

It is an online platform allowing employees to manage their benefits according to their personal needs. They can redeem points obtained from the employer for a broad range of benefits.

MyCar Programme

The Programme is a car-related benefit offered as an alternative to a company car. It is a monthly cash benefit for the purchase or rental of a private car for business purposes, equivalent to the lease payment for a company car. In addition, MyCar beneficiaries are provided with a shopping card to pay for fuel, non-fuel products and services at ORLEN service stations within a predefined limit..

ORLEN Passion

The scheme has been designed in response to the needs of employees who wish to practice and develop their hobbies and out-of-work passions. Thanks to the Company's support, employees are offered additional financial or in-kind resources to pursue their activities in sports, arts, culture, science and many other fields.

Master Benefit and Car Platforms

They are car benefits supporting subscription car rentals.

Discount Chocolate

Discounts for products and services of PKN ORLEN's partner companies, for example computer equipment, PZU insurance products, Apple products, mobile plans, eyeglasses, etc.

Policy for assisting employees during crisis

The purpose of the policy is to provide assistance to employees and their family members going through a personal crisis. In providing support, the employer takes into account the particular occurrence, the type and scale of damage or loss sustained, as well as the personal and financial circumstances of the affected employee and his or her family members. Depending on the above criteria, the employee may be provided with financial, medical, psychological or legal assistance.

Psychological support at the workplace

The purpose of this initiative is to provide psychological support and assistance to employees and their immediate family members in difficult professional or private life situations. The practice is run by the Occupational Psychology Centre operating within the PKN ORLEN structures, which offers immediate assistance in emergencies. After a fatal accident that occurred in the Production Area in September 2022, employees received immediate psychological support, which continued on the following days. A psychological support workshop on how to deal with severe stress was co-organised for staff, with the aim of providing them with additional knowledge helpful in building mental resilience. Lectures were also co-organised for employees and managerial staff teaching them how to take care of their own well-being and the well-being of their subordinates ('Leader of Well-Being', 'How to consciously manage your own energy'). The lectures reflected the organisation's holistic approach to employees. A total of 81 support conversation were conducted in 2022 with employees of PKN ORLEN, the ORLEN Group and their immediate family members. Psychoeducation activities were also conducted.

The human rights policies and internal regulations include:

Code of Ethics – defines the values, principles of conduct and rules that set ethical standards for all ORLEN Group employees, based on a revised approach to understanding ORLEN values: Responsibility, Progress, People, Energy and Dependability, as well as the current scale or operations and operating strategy, the requirements of the ORLEN Group's environment, and best practices in the field of business ethics. It contains provisions concerning, inter alia, respect for diversity, including fair treatment of all employees regardless of their age, gender, position, religion, nationality or beliefs, equal opportunities for personal and professional development, as well as responsibility for building an ethical, safe and supportive workplace. It also includes provisions discussing ethical and responsible attitudes towards all stakeholders, including employees, consumers, business partners and local communities. Moreover, it is a document supporting the implementation of the ORLEN 2030 business strategy.

ORLEN Group Human Rights Policy

The Policy outlines the key standards for conduct, behaviour and regulations applicable at the ORLEN Group, which are directly or indirectly related to the protection of human rights within the organisation and in relations with external stakeholders.

PKN ORLEN Workplace Bullying, Discrimination and Harassment Prevention Rules

In addition to formal regulations, the Rules encompass measures designed to prevent any conduct that could be considered bullying, discrimination, or other forms of harassment. The initiatives taken to create an engaging work environment and training programmes focusing on managerial responsibilities in preventing workplace bullying, discrimination and harassment that were delivered in 2022 had a positive impact on the Company's organisational culture. Promoting a work culture based on trust and respect is among the main objectives of its HR strategy.

Conflict of Interest Management Policy

The Policy sets standards to be applied by the ORLEN Group companies in identifying, disclosing and managing conflicts of interest. Its purpose is to reduce the risk of corruption and misconduct in business processes, ensure due care in the activities of the ORLEN Group companies, raise employees awareness of how to avoid conflicts of interest and counteract misconduct, and define rules and standards of conduct for reporting, disclosing and managing conflicts of interest.

Diversity Policy

The Policy aims to promote values, standards and practices that foster equal treatment of employees and create an atmosphere of acceptance. It sets out the objectives and principles that mainly aim to raise awareness and understanding of the importance of diversity and to create an open and tolerant work environment. The Diversity Policy is a document developed at PKN ORLEN. Also, the ORLEN Group companies received recommendations to implement it and already have in place policies of a similar standard.

Policy defining the work conditions and rules for people with disabilities

The objective of the policy is to provide people with disabilities with equal opportunities in the workplace, taking into account the type and degree of disability, enable them to obtain and maintain adequate employment, return to work, receive promotion, as well as support them in independent living and their integration with other employees.

2. Key performance indicators

GRI 2.7

Employees

GRI 11.10.6

Average hours of training per year per employee by gender, and by employee category

Employee relations KPIs at the ORLEN Group in 2021 and 2022

TABLE 15 |

Employee relations KPIs	UoM	ORLEN Group		PKN ORLEN	
		2022	2021	2022	2021
Headcount, including:	[persons]	64,494	35,424	12,174	5,878
PKN ORLEN[1]		12,174	5,878	12,174	5,878
former PGNiG Group[2]		19,267	-	-	-
ENERGA Group		8,781	8,888	-	-
Unipetrol Group		5,523	4,876	-	-
former LOTOS Group[3]		2,962	-	-	-
ORLEN Serwis Group	[persons]	2,410	2,326	-	-
Polska Press Group		1,708	1,827	-	-
ANWIL		1,660	1,610	-	-
ORLEN Ochrona Group		1,610	1,707	-	-
ORLEN Lietuva Group		1,485	1,467	-	-
Other		6,914	6,845	-	-

[1] Includes employees transferred in 2022 as a result of the acquisition of companies of the former LOTOS and PGNiG Groups and Rafineria Gdańska (70%)

[2] Does not include employees transferred in 2022 as a result of the acquisition of companies of the former PGNiG Group

[3] Does not include employees transferred in 2022 as a result of the acquisition of companies of the former LOTOS Group and Rafineria Gdańska (70%)

Workforce by gender, including:					
Women	[%]	28	29	24	24
Men		72	71	76	76
Workforce by type of job, including:					
White-collar staff	[%]	58	54	60	60
Blue-collar staff		42	46	40	40
Workforce by education, including:					
Tertiary	[%]	47	46	64	67
Secondary		35	37	28	30
Vocational		16	15	7	3
Primary		2	2	1	0
Average training hours per employee, including[4]:					
Women	[number]	25.3	19.5	54.0	42.6
Men		31.8	20.4	41.2	34.6
Managers		34.8	29.0	63.6	50.8
Non-managers		29.4	18.8	1.7	34.5

[4] Excluding the former LOTOS Group and former PGNiG Group

Employee relations KPIs at PKN ORLEN and for employees transferred in 2022 as a result of the acquisition of companies of the former LOTOS and PGNiG Groups and Rafineria Gdańska

TABLE 16 |

Employee relations KPIs	UoM	PKN ORLEN 2022	Other[1] 2022	PKN ORLEN with other 2022
Headcount, including:	[persons]	6,091	6,083	12,174
PKN ORLEN	[persons]	6,091	-	6,091
former Lotos		-	510	510
PGNiG Central Branch		-	4,754	4,754
Rafineria Gdańska[5]		-	819	819
Workforce by gender, including:				
Women	[%]	25	23	24
Men		75	77	76
Workforce by type of job, including:				
White-collar staff	[%]	61	58	60
Blue-collar staff		39	42	40
Workforce by education, including:				
Tertiary	[%]	71	56	64
Secondary		27	30	28
Vocational		2	12	7
Primary		0	2	1
Average training hours per employee, including:				
Women	[number]	54.0	-	-
Men		41.2	-	-
Managers		63.6	-	-
Non-managers		41.7	-	-

[1] Includes employees transferred in 2022 as a result of the acquisition of companies of the former LOTOS and PGNiG Groups and Rafineria Gdańska (70%)
[5] Rafineria Gdańska (70% interest)

GRI 2.30

Collective bargaining agreements

TABLE 17 |

Employee relations KPIs	UoM	2022	2021
Employees covered by collective bargaining agreements, including[6]:			
PKN ORLEN	[%]	100	Do uzupełnienia
Polish companies		76	65
Foreign companies		82	85
Trade union membership in 2022:			
PKN ORLEN	[%]	52	49
ORLEN Group		50	48

[6] Including employees of the former LOTOS and PGNiG Groups

Composition of governance bodies and breakdown of employees per employee category according to gender, age group and other indicators of diversity at the ORLEN Group in 2021–2022:

TABLE 18 |

Composition of governance bodies and breakdown of employees	UoM	ORLEN Group		PKN ORLEN	
		2022	2021	2022[1]	2021
Management Boards of ORLEN Group companies by gender, including:					
Women	[%	16	14	14	13
Men		84	86	86	87
Supervisory Boards of ORLEN Group companies by gender:					
Women	[%]	31	31	44	44
Men		69	69	56	56
Management Board – age structure, including:					
below 30	[%]	0	0	0	0
30-50		56	66	75	75
over 50		44	34	25	25
Supervisory Board – age structure, including:					
below 30	[%]	3	3	0	0
30-50		66	69	33	44
over 50		31	28	67	56
Employees – employment structure by age, including:					
below 30 – Managers	[%]	1	1	0	1
below 30 – Non-managers		99	99	100	99
30-50 – Managers	[%]	12	12	12	13
30-50 – Non-managers		88	88	88	87
over 50 – Managers	[%]	10	11	12	16
over 50 – Non-managers		90	89	88	84
Employees – employment structure by gender, including:					
Women – Managers	[%]	10	9	10	10
Women – Non-managers		90	91	90	90
Men – Managers	[%]	11	11	11	13
Men – Non-managers		89	89	89	87

Composition of governance bodies and breakdown of employees per employee category according to gender, age group and other indicators of diversity at PKN ORLEN and for employees transferred in 2022 as a result of the acquisition of companies of the former LOTOS and PGNiG Groups and Rafineria Gdańska

TABLE 19 |

Composition of governance bodies and breakdown of employees		UoM	PKN ORLEN 2022	Other[1] 2022	PKN ORLEN with other 2022
Management Boards of ORLEN Group companies by gender, including:					
Women		[%]	18	0	14
Men			82	100	86
Supervisory Boards of ORLEN Group companies by gender:					
Women		[%]	44	-	44
Men			56	-	56
Management Board – age structure, including:					
below 30		[%]	0	0	0
30-50			82	50	75
over 50			18	50	25
Supervisory Board – age structure, including:					
below 30		[%]	0	-	0
30-50			33	-	33
over 50			67	-	67
Employees – employment structure by age, including:					
< 30 lat	Managers	[%]	0	0	0
	Non-managers		100	100	100
30-50	Managers	[%]	12	12	12
	Non-managers		88	88	88
> 50	Managers	[%]	17	10	12
	Non-managers		83	90	88
Employees – employment structure by gender, including:					
Women	Managers	[%]	10	11	10
	Non-managers		90	89	90
Men	Managers	[%]	13	10	11
	Non-managers		87	90	89

[1] Includes employees transferred in 2022 as a result of the acquisition of companies of the former LOTOS and PGNiG Groups and Rafineria Gdańska (70%)

GRI 11.10.2

New employee hires and employee turnover

Other employee data at the ORLEN Group for 2021–2022:

TABLE 20 |

Employee relations KPIs		UoM	ORLEN Group		PKN ORLEN	
			2022	2021	2022[1]	2021
Employees by type of contract and gender, including:						
Open-ended contract	Women	[number]	15,609	8,771	2,610	1,175
	Men		42,046	22,333	8,551	3,964
Fixed-term contract	Women		1,745	1,035	227	169
	Men		3713	2,488	595	456
Probationary period contract	Women		308	195	44	19
	Men		728	402	95	50
Temporary substitution	Women		247	147	42	30
	Men		98	53	10	15
Employees by type of contract and region:						
Open-ended contract	Czech Republic	[number]	4,739	4,829	0	0
	Canada		41	43	0	0
	Germany		214	211	0	0
	Lithuania		2,172	2 124	0	0
	Poland		49,435	23,886	11,149	5,138
	Other		1 054	11	12	1

[1] Includes employees transferred in 2022 as a result of the acquisition of companies of the former LOTOS and PGNiG Groups and Rafineria Gdańska

Fixed-term contract	Czech Republic	[number]	539	472	0	0
	Canada		3	3	0	0
	Germany		30	7	0	0
	Lithuania		33	48	0	0
	Poland		4,813	2,992	821	625
	Other		40	1	1	0
Probationary period contract	Czech Republic	[number]	168	97	0	0
	Canada		0	1	0	0
	Germany		6	22	0	0
	Lithuania		30	22	0	0
	Poland		831	453	139	69
	Other		1	2	0	0
Temporary substitution	Czech Republic	[number]	0	0	0	0
	Canada		0	1	0	0
	Germany		0	0	0	0
	Lithuania		4	3	0	0
	Poland		341	196	52	45
	Other		0	0	0	0

Employees by employment type and gender

Full-time	Women	[number]	17,635	9,971	2,898	1,376
	Men		46,339	25,123	9,212	4,465
Part-time	Women		274	177	25	17
	Men		246	153	39	20
New hires by age, gender and region, including:			**5,887**	**3,415**	**710**	**439**
Age	below 30	[number]	2,025	1,298	224	165
	30-50		3,072	1,733	442	253
	over 50		790	384	44	21
Gender	Women	[number]	2,062	1,162	244	130
	Men		3,825	2,253	466	309
Region	Czech Republic	[number]	801	586	0	0
	Canada		10	3	0	0
	Germany		53	61	0	0
	Lithuania		423	353	0	0
	Poland		4,207	2,401	710	439
	Other		393	11	0	0

Hires rate[7]		[%]	**10.8**	**9.5**	**6.1**	**4.9**
Employee turnover [%][8]		[%]	**11.7**	**9.6**	**9.6**	**7.5**
Age	below 30	[%]	18.6	17.3	7.6	4.1
	30-50		8.9	7.4	4.5	3.3
	over 50		11.3	10.4	9.5	9.2
Gender	Women	[%]	12.8	10.7	6.0	5.0
	Men		10.0	9.0	6.1	4.9
Regiony	Czech Republic	[%]	13.7	11.7	-	-
	Canada		31.8	6.3	-	-
	Germany		16.0	17.5	-	-
	Lithuania		17.9	16.8	-	-
	Poland		9.8	8.4	6.1	4.9
	Other		0,0	35.7	-	-

[7] Hires rate – new hires as a proportion of total headcount, excluding the former LOTOS and PGNiG Groups

[8] Employee turnover – number of employees leaving the group in a given year as a proportion of total number of employees in a given group, excluding the former LOTOS and PGNiG Groups.

The proportion of temporary work contracts at the ORLEN Group is negligible and they are used on an as needed basis. Employee turnover rates at the ORLEN Group are similar to those recorded in 2022.

Other employee data at PKN ORLEN and for employees transferred in 2022 as a result of the acquisition of companies of the former LOTOS and PGNiG Groups and Rafineria Gdańska.

TABLE 21 |

Employee relations KPIs		UoM	ORLEN Group 2022	Other[1] 2022	PKN ORLEN with other 2022
Employees by type of contract and gender, including:					
Open-ended contract	Women	[number]	1,268	1,342	2,610
	Men		4,092	4,459	8,551
Fixed-term contract	Women		178	49	227
	Men		415	180	595
Probationary period contract	Women		39	5	44
	Men		71	24	95
Temporary substitution	Women		24	18	42
	Men		4	6	10
Employees by type of contract and region, including:					
Open-ended contract	Czech Republic	[number]	0	0	0
	Canada		0	0	0
	Germany		0	0	0
	Lithuania		0	0	0
	Poland		5,359	5,790	11,149
	Other		1	11	12
Fixed-term contract	Czech Republic	[number]	0	0	0
	Canada		0	0	0
	Germany		0	0	0
	Lithuania		0	0	0
	Poland		593	228	821
	Other		0	1	1

[1] Includes employees transferred in 2022 as a result of the acquisition of companies of the former LOTOS and PGNiG Groups and Rafineria Gdańska (70%)

Probationary period contract	Czech Republic	[number]	0	0	0
	Canada		0	0	0
	Germany		0	0	0
	Lithuania		0	0	0
	Poland		110	29	139
	Other		0	0	0
Temporary substitution	Czech Republic	[number]	0	0	0
	Canada		0	0	0
	Germany		0	0	0
	Lithuania		0	0	0
	Poland		28	24	52
	Other		0	0	0

Employees by employment type and gender:					
Full-time	Women	[number]	1,495	1,403	2,898
	Men		4,556	4,656	9,212
Part-time	Women		14	11	25
	Men		26	13	39

New hires by age, gender and region, including:			**583**	**127**	**710**
Age	below 30	[number]	179	45	224
	30-50		381	61	442
	over 50		23	21	44
Gender	Women	[number]	206	38	244
	Men		377	89	466
Region	Czech Republic	[number]	0	0	0
	Canada		0	0	0
	Germanyy		0	0	0
	Lithuania		0	0	0
	Poland		583	127	710
	Other		0	0	0
Hires rate[7]		[%]	**6.1**	**-**	**6.1**
Employee turnover [%][8]		[%]	**9.6**	**-**	**-**
Age	below 30	[number]	7.6	-	-
	30-50		4.5	-	-
	over 50		9.5	-	-
Gender	Women	[number]	6.0	-	-
	Men		6.1	-	-
Region	Czech Republic	[number]	-	-	-
	Canada		-	-	-
	Germany		-	-	-
	Lithuania		-	-	-
	Poland		6.1	-	-
	Other		-	-	-

[7] Hires rate – new hires as a proportion of total headcount, excluding the former LOTOS and PGNiG Groups.

[8] Employee turnover – number of employees leaving the group in a given year as a proportion of total number of employees in a given group, excluding the former LOTOS and PGNiG Groups.

TABLE 22 |

Company Social Benefits Fund (data for PKN ORLEN and companies – joint social benefits programme), including[9]	[persons]	32,126	33,716	15,502	15,614
Employees		14,068	15,155	5,844	6,091
Former employees	[persons]	7,710	7,600	5,101	4,720
Family members		10,348	10,961	4,557	4,803

[9] Excluding employees of the former LOTOS and PGNiG Groups

Employee engagement and satisfaction KPIs

In 2022, PKN ORLEN held the fifth edition of the employee engagement and satisfaction survey. It covered 71%, or more than 4,000 employees, who shared their opinions on their working environment.

The key indicators captured by the survey were:

- The **employee engagement rate**, which was 64%, i.e. 13 pp above Poland's average for 2021 and as much as 32 pp above the European energy sector 2019–2021 benchmark. This result places PKN ORLEN in the high score range (upper quartile). The indicator provides information on what percentage of employees are actively engaged with the organisation. An engaged employee speaks positively about the company, associates their professional future with it, and is willing to go above and beyond for their employer.
- **Overall employee satisfaction**, which was 75%.

In addition to the standard indicators, the survey examined employee satisfaction with 13 aspects of work environment that have a major positive effect on employee engagement.

The highest rated aspects were:

- Engaging leaders – 76%
- Values – 76%
- Cooperation – 72%
- • Work-life balance – 67%

At PKN ORLEN, for 23 questions on the work environment the satisfaction rates improved (by 3 pp or more). The areas in which the satisfaction rates rose the most were the relationship with the manager, free and open communication, support in adapting to change, encouragement to come up with ideas and suggest changes and improvements.

3. Due diligence procedures

Workforce

In 2022, the ORLEN Group's hiring policy was focused on recruiting top quality specialists for both day-to-day operations and strategic projects. **Acquisition of the former PGNiG Group (24,021 people) and LOTOS Group (4,291 people) in 2022 and expansion of the ORLEN Group's energy, IT and retail areas led to a year-on-year increase in total workforce by 29,070 people, to 64,494 employees.**

Remuneration Policy

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 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.

The ORLEN Group companies have implemented consistent rules for granting awards under the Employer Prize Fund (set forth in a formal document), and the award process for tool-integrated companies is carried out through the centralised IT system SSEGK.

In 2022, PKN ORLEN executed a pay agreement for 2022, which provided for obligatory base pay rises of PLN 515 for employees in grades 1–2 and 7–8, and PLN 555 for employees in grades 3–6. Furthermore, Christmas bonuses totalling PLN 3,500 were agreed. Other ORLEN Group companies entered into pay agreements matching each company's financial capabilities and depending on the company's position on the pay market. They provided for a pay increase of PLN 250 to PLN 500 per employee, in most cases depending on the employee's current pay terms and experience. This means an average pay rise of up to 9.5% at individual companies. One-off bonus rates agreed in the annual one-off bonus determination process held at each company ranged from PLN 800 to PLN 3,500.

In 2022, the PKN ORLEN Collective Bargaining Agreement was amended in consultation with the trade unions. The amendments were included in Protocol No. 5 to the Collective Bargaining Agreement. The key changes consisted in updating the Base Pay Table, setting new bonus rates, and replacing the quarterly/annual bonus with a quarterly bonus. An important aspect of the amendments is that they have significantly increased the minimum pay rates for particular positions in the Pay Grade Table, making them more competitive and attractive to potential employees. A portion of the bonus amount was included in the base pay and the maximum statutory bonus amount was reduced, which made it possible to increase employees' fixed remuneration while keeping the variable portion at market levels and maintaining a performance-oriented remuneration system.

The terms of the Collective Bargaining Agreement agreed with the trade unions in Protocol No. 5 include solutions to reward the loyalty of employees with long years of service for the organisation, set higher pay levels for those employees who operate complex units, pay allowances to emergency service staff in key health and safety areas, and reward employees willing to share their knowledge. The changes came into effect on January 1st 2023.

In addition to the amendments to the Collective Bargaining Agreement agreed with the trade unions at PKN ORLEN in 2022, which came into effect on January 1st 2023, Collective Bargaining Agreements were also agreed at ORLEN Południe and Energomedia (with the changes effective as of January 1st 2023), and Polska Press and Energa Obrót (with the changes effective as of February 2023). New Remuneration Rules were introduced at CCGT Grudziądz, RUCH, Energa Invest, Neptune 1 and ORLEN Energia.

In 2022, the average gross monthly remuneration (including base pay, bonuses, awards, lump-sum allowances and overtime) at the ORLEN Group was PLN 10,063.

[9] The average gross monthly remuneration at the ORLEN Group does not include remuneration at the former LOTOS and PGNiG Groups, which became part the ORLEN Group in the second half of 2022 (in August and November, respectively). Otherwise, the value would have been distorted due to the inclusion of remuneration only for the last months of 2022 and would not have been comparable year on year.

TABLE 23 |

Job grade	Female-to-male total pay ratio at PKN ORLEN in 2022*[9]	
	2022	2021
Clerk	98.2%	94.9%
Specialist	101.7%	103.6%
Manager	108.2%	110.4%
Project manager	98.4%	99.6%
Sales	99.4%	100.6%

[6] excluding employees of the former LOTOS Group and the PGNiG Central Branch

Development of the human resources functions and standardisation of processes across the ORLEN Group

HR and payroll solutions at the ORLEN Group evolve continually so as to effectively support its business processes. Based on the HR policy for the ORLEN Group, HR and payroll processes at the Transaction Centre are optimised on an ongoing basis. IT systems are developed to streamline staff administration activities and improve the efficiency of HR processes at the Group.

KCP, a work time planning and reporting tool, was implemented in further ORLEN Group companies, increasing standardisation and efficiency of the working time management process.

After the implementation of an electronic attendance list and an application for leave planning, work began on an e-file concept. Changing the way in which employee files are maintained will not only facilitate administration activities in relation to employees working in various locations across Poland and abroad, but will also help optimise costs and contribute to sustainable development goals. The standardisation of HR processes, undertaken a few years ago, provides a sound basis for further improvement of HR processes and work optimisation at the Corporate Service Centre. In parallel, work is being carried out on harmonising HR and payroll systems at ORLEN Group companies in order to streamline administration activities and roll out uniform solutions also at new Group companies.

Human resources management at the ORLEN Group

In 2022, the focus was on consistent implementation of the HR policy, which helps build an engaging work environment, develop leadership skills among the management staff and implement standards and best practices at further Group companies. The main projects in 2022 included an engagement survey conducted at all ORLEN Group companies and implementation of a new competence model and a mentoring programme. At the same time, after the merger with Grupa LOTOS, the HR Policy was approved for implementation at further companies of the former LOTOS Group. An operational HR model was confirmed and on this basis the organisation of work at the HR Area was reviewed and adapted to suit the needs of the new ORLEN Group. The HR Policy has already been implemented by 83 companies, which now cooperate with the HR Area in running projects and programmes relevant to human resources management at the ORLEN Group.

In connection with optimisation of the Group's Strategy for 2020–2030, new priorities were defined for the following key areas: employer branding, value-creating innovations, engagement, diversity, and competencies. Work has also begun on updating the HR Strategy. As part of the PMI Integration and Transformation project, conceptual work began on developing a programme to integrate the companies. Together with the Strategy Area, a method of effective change management within the organisation is being developed in order to successfully transform the Group.

In 2022, the Career Development Sessions project was continued for designing personal development plans based on the assessment of an employee's development needs. In addition, PKN ORLEN and other ORLEN Group companies continued activities related to the Age Management Policy to counteract adverse consequences of demographic shifts on the labour market.

An additional consideration vital in the context of the need to hire and develop specialised staff is the Group's dynamic growth, including the construction of a new Olefins 3 complex and the launch of a new Research and Development Centre in Płock. The Group's HR needs underpin its employer branding efforts, which consist in expanding the reach of internship programmes, continuing the brand ambassador programme, social media activity, and building relations with the academic community.

GRI 11.7.3

Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.

Development and training

In 2022, a new project named **Festival of Diversity** was launched, centred on such topics as collaboration in diverse teams, knowledge and experience sharing, and organisational culture based on respect and openness. It also addressed issues relating to supporting individuals with disabilities and development of female leadership. An additional option was an opportunity for employees to undergo blood tests as part of preventive healthcare.

Programmes to develop data science analytical skills, support digitalisation projects and strengthen project management skills were continued. The programme aims to develop project managers on a multidimensional level, also taking into account the agile methodology.

In addition, online lectures were given on diversity at work, well-being, competencies of the future, personal effectiveness and social media.

Professional advancement programmes were initiated for two groups of production staff: masters and engineers. They focused on developing communication and problem-solving skills.

In 2022, continued training was provided in anti-corruption policy, personal data protection and ICT security.

To assist them in proceeding with their individual advancement plans worked out at Career Development Sessions, employees were provided with development opportunities in various forms (online/stationary) and with various content, including project work, innovation, communication and cooperation, response in difficult situations, negotiations, and stress management. Employees participated in specialist (open and closed) training sessions tailored to the needs of a given area or employee that required knowledge in a specific field, as well as in postgraduate and MBA courses, conferences and industry events.

As in previous years, initiatives were continued to foster a culture of work safety and provide safe driving, first aid and mandatory training as well as training on mentoring for behavioural advisers dealing with occupational safety. Employees also improved their foreign languages skills as part of existing projects.

In 2022, development activities were continued to support implementation of the ORLEN Group's business strategy.

As part of the efforts designed to hone the skills and attitudes of the management staff, further training was offered under the ORLEN Group's manager development programme. As in previous years, in 2022 managers advanced their team management skills, including in change management and leading distributed teams. They were also offered additional development options to broaden their knowledge in such areas as support for acquisitions, building a culture of innovation, feedback, diversity management, personal energy management, cyber threats and defence techniques, as well as in mentoring and managerial coaching. ORLEN continued to provide mandatory management staff training in labour law and working time, as well as anti-bullying and anti-discrimination regulations. Another important element was training on the ORLEN Group Code of Ethics.

In 2022, the Leader Club programme launched in 2021 was carried on. The programme workshops focused on managing distributed teams and teams working on a remote or hybrid basis, building managerial competencies related to preparing, communicating and implementing change, and driving efficiency and cooperation.

Age Management Policy

In 2022, activities under the ORLEN Group's Age Management Policy were continued with the use of an application for monitoring the HR situation in connection with employees reaching the retirement age and succession planning. The application was successively implemented by further ORLEN Group companies.

The Policy seeks to address the negative effects of demographic changes on the labour market. Activities in this area focus on raising the management staff's awareness of age management, promoting intergenerational diversity and communication, facilitating knowledge and skill transfer, undertaking employer branding initiatives, especially in the local labour market, at universities and schools, and succession planning within the company.

ORLEN Group's new competence model

The development direction adopted by the ORLEN Group required a new look at its organisational culture and competence needs. Therefore, in the light of new challenges involved in building a multi-utility business, the ORLEN Group's new competence model was developed, indicating the direction and course of action to achieve the goals set in its 2030 Strategy, which presents in a clear and simple way the skills, attitudes and behaviours important to the organisation, separately for managerial and non-managerial positions.

The model is used in employee recruitment, development and training processes.

Social dialogue and employee benefits

The scope of benefits to the current and former employees of PKN ORLEN and ORLEN Group companies (agreement on the joint social benefits programme) is defined by the **Corporate Social Benefit Activity Rules.** Employees are entitled to social benefits including assistance towards the cost of employee holidays or sanatorium treatment, childcare, holidays for children and teenagers, school starter kits, family support, sports and fitness membership, cultural and educational activities, holiday stay with physical therapy treatments, or inpatient rehabilitation for children with disabilities. Employees' children receive Christmas gifts. Employees may apply for non-repayable allowances and repayable housing loans. Social benefits are also granted to former employees of PKN ORLEN and ORLEN Group companies which are parties to the agreement on the joint social benefits programme.

GRI 2.29

Approach to stakeholder engagement

The ORLEN Group believes in **social dialogue with employee representatives, i.e. the trade unions**, based on independence of the parties, legal compliance, as well as trust, mutual willingness to compromise, and observance of the rules. The rules of social dialogue are founded on internal regulations and generally applicable laws, which facilitates development of constructive and lasting solutions in partnership with employee representatives.

The ORLEN Group is also engaged in dialogue with the European Works Council. The Council is another form of collective dialogue, in this case at the European level, as continued growth of the ORLEN Group enables application of mechanisms that engage employees in the broad collective efforts not only at the national but also at the international level.

The ORLEN Group recognises the trade unions as representatives of all employees in matters concerning their collective rights and interests, within the scope defined by laws of general application. The ORLEN Group is ready to engage with the trade unions to settle any and all issues that may emerge, especially those concerning collective rights and interests of employees, in the course of social dialogue conducted in good faith, with mutual respect for the interests of each party and for employees.

GRI 11.7.2

Minimum notice periods regarding operational changes

GRI 11.10.5

Minimum notice periods regarding material operational changes, with indication whether such periods are specified in collective agreements

Pursuant to Annex 4 to the Collective Bargaining Agreement for Employees of Polski Koncern Naftowy ORLEN S.A., i.e. the 'Rules of cooperation between the employer and the trade unions in restructuring matters', the **trade unions are given 35 or 45 days' advance notice of any planned operational changes affecting employment.**

Negotiations with the trade unions begin 15 days after a process is communicated and last for 20 or 30 days depending on what the process involves (if the process involves mass redundancies – 20 days, and if it involves transfer of employees to another employer under Article 23.1 of the Labour Code – 30 days).

The ORLEN Group believes in social dialogue with employee representatives, i.e. the trade unions, based on independence of the parties, legal compliance, as well as trust, mutual willingness to compromise, and observance of the rules. The rules of social dialogue are founded on internal regulations and generally applicable laws, which facilitates development of constructive and lasting solutions in partnership with employee representatives.

GRI 11.10.3

Benefits provided to full-time employees that are not provided to temporary or part-time employees

The employer provides financial assistance to low-income families. Employees may apply for assistance towards the cost of holiday stay with physical therapy treatments for a disabled child with a caregiver or inpatient rehabilitation for a disabled child, as well as non-repayable allowances and repayable housing loans.

PKN ORLEN offers a uniform employee benefits package to employees of all ORLEN Group companies participating in the joint social benefits programme. Which as at December 31st 2022 covered 28 Group companies. All personnel employed under employment contracts, whether full-time or part-time, are entitled to benefits from the PKN ORLEN Social Benefits Funds. Benefits from the Social Benefits Fund guaranteed to former employees of PKN ORLEN and other Group companies covered by the joint social benefits programme include: co-financing of holidays or sanatorium treatment, holidays for children and teenagers, school starter kits, Christmas gifts for children, non-repayable financial support, holiday stay with physical therapy treatments for a disabled child with a caregiver or inpatient rehabilitation for a disabled child, nursing home care, repayable housing loans and, additionally support for low-income employees, birthday cash benefits for former employees aged 70+ (paid every five years) and 95+ (paid every year).

PKN ORLEN, as an employer, contributes to the cost of Group Life Insurance premiums. All employees who have signed up for the insurance receive a contribution of PLN 40. The ORLEN Group has a common group life insurance package in place for all employees who declared their willingness to take out insurance. In most Group companies, the employer pays a portion of the insurance premium.

As a company committed to implementing the latest solutions that help maintain a healthy work-life balance, PKN ORLEN runs the Family Friendly Employer programme, offering such benefits as additional two days off to care for a child under the age of three, two days off to care for a disabled child under 24 years of age, a nursery school for children of employees, one additional hour for breastfeeding, medical care during pregnancy, baby feeding rooms, gifts for newborn babies, and providing employees on parental/childcare leaves with up-to-date information on developments across the Group. In 2022, the project was expanded to include additional two days off for taking care of parents/parents-in-law. Most of the programme's components have also been implemented by other ORLEN Group companies as part of best practice sharing.

PKN ORLEN provides extensive **preventive medical care** covering employer-sponsored medical plans going beyond the traditional scope of occupational medicine, including consultations with specialists, diagnostic tests, rehabilitation and flu vaccinations. A uniform standard for employer-sponsored medical plans is in place across the ORLEN Group. Preventive healthcare programmes are run in cooperation with Centrum Medyczne Medica Sp. z o.o. of Płock and the Military Institute of Medicine of Warsaw as part of a project to investigate health impacts of the work environment.

In addition to those programmes, disease prevention campaigns are organised at the workplace on an ad hoc basis to facilitate medical check-ups and encourage employees to choose a healthier diet and to lead a more active and healthy lifestyle.

The **Blood Donors Club at PKN ORLEN** organised blood donation drives and registration of potential bone marrow donors in the DKMS database. In addition, blood donor sessions were organised for employees or employees' family members in need of blood transfusion. The sessions were carried out in mobile ambulances at the ORLEN Group's locations in Płock, Warsaw, Trzebinia, Olsztyn, Gutkowo and Włocławek.

The purpose of this initiative is to provide psychological support and assistance to employees and their immediate family members in difficult professional and private life situations. The practice is run by **the Occupational Psychology Centre** operating within the PKN ORLEN structures, which offers immediate assistance in emergencies. After a fatal accident that occurred in the Production Area in September 2022, all employees of the affected department immediately received support, which continued on the following days. A psychological support workshop on how to deal with severe stress was co-organised for staff, with the aim of providing them with additional knowledge helpful in regaining mental resilience. Lectures were also co-organised for employees and managerial staff teaching them how to take care of their own well-being and the well-being of their subordinates ('Leader of Well-Being', 'How to consciously manage your own energy').

The lectures reflected the organisation's holistic approach to employees. A total of 81 support conversation were conducted in 2022 with employees of PKN ORLEN, the ORLEN Group and their immediate family members. The assistance was offered in connection with various circumstances, not only workplace situations. Psychoeducation activities were also conducted, with a total of 20 publications issued in 2022 in various forms (communications, news, articles) and on diverse topics.

Health and safety topics covered in formal agreements with trade unions

Care is taken to maintain a transparent social dialogue within the ORLEN Group. Health and safety issues are mutually agreed on and covered in formal documents negotiated with trade unions effective at ORLEN Group companies domiciled in Poland, which include:

- Collective Bargaining Agreements registered by the Regional Inspectors of the National Labour Inspectorate, in accordance with the provisions of Part XI of the Polish Labour Code and the Minister of Labour and Social Policy's Regulation on the procedure to be followed in the case of registration of collective bargaining agreements, keeping the register of collective bargaining agreements and registration files, as well as forms of registration clauses and registration cards; and/or

- Work Rules established in accordance with the provisions of Section IV of the Polish Labour Law. Those documents provide for ensuring working conditions that meet safety and hygiene standards, including personal protection equipment against agents that are hazardous and harmful to human health, as well as working clothes and footwear. Occupational health and safety issues are covered by Collective Bargaining Agreements also at Unipetrol in the Czech Republic and ORLEN Lietuva in Lithuania, the ORLEN Group's foreign subsidiaries. Employees of ORLEN Deutschland, where there are no active trade unions, are not parties to any formal or collective agreements. The same holds true for ORLEN Upstream Canada, whose entire workforce is subject to occupational health and safety regulations applicable in the province of Alberta.

Image-building activities

In 2022, the second edition of **the Employer Brand Ambassador** programme was carried out to reinforce PKN ORLEN's image as an attractive employer. It included communicating its strengths as an employer and building personal employee brands to show the people who form the ORLEN Group. The image-building programme is based on promoting projects implemented by project ambassadors, which fosters the image and reputation of the employer's brand while identifying the key areas of their activities, processes and innovation, showcasing the contribution of employees to the company's strategy. The primary objectives of the programme are reaching out to prospective candidates, building satisfaction and pride, improving employee identification with the employer, and raising employee awareness of the broadly defined ORLEN products and services. In collaboration with the Warsaw University of Technology, the ambassadors served as mentors for engineering students. PKN ORLEN took part in the first edition of the Warsaw University of Technology Mentoring Conference, during which an employer brand ambassador and an athlete ambassador of the ORLEN Team shared their experiences in an inspirational lecture for participants. Recruitment for the third edition of the Ambassador programme was conducted in 2022, with new professional ambassadors starting their service in 2023.

Furthermore, as part of the image-building efforts, PKN ORLEN's solutions and practices were promoted through social media, in partnership with external firms, and through participation in expert panels, conferences, webinars, podcasts, debates, or offering expert commentaries. Campaigns to recruit interns as well as image-building campaigns were run, including the 'Games You Can Play Not Only with Your Daughter – Games You Can Play not Only with Your Son' gender diversity campaign with the aim of breaking stereotypes and highlighting the values, skills, and hobbies passed on to children, but also encouraging employees to promote work-life balance among their colleagues. The campaign promotes gender diversity and rewards benefits, including the cafeteria programme. The practice is being continued, joined by employees who participate in other internal projects related to employee hobbies and interests: Festival of Diversity, Orlen Passion, Employer Brand Ambassador, Shoot What Makes you Tick, and external campaigns, including 'Two Hours for the Family', the #IgnacyTEAM educational campaign, and Father's Day.

PKN ORLEN is consistently building its employer brand on social media, successfully expanding its LinkedIn and Facebook community.

Education and talent acquisition policy

PKN ORLEN consistently works to attract and retain talent, focusing of specific target groups relevant to the Company's business areas – current and prospective employees, as well as students and graduates of vocational schools and universities. In 2022, a strong focus was placed on recruiting engineers, IT, power generation, pro y areas.

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 the academic community and vocational schools, creating synergies between business and science. Students receive expert support during hands-on activities and have the opportunity to take part in study visits and trainee placements offered by the ORLEN Group companies. PKN ORLEN cares for the professional development of young people − students, university graduates and school leavers, by providing them with an opportunity to acquire their first professional experience on internship and work placement programmes. In 2022, PKN ORLEN had 47 interns in the **Headed for ORLEN** programme, **Energy for the Future** programme carried out in cooperation with the Ministry of Climate and Environment and PGE Polska Grupa Energetyczna S.A., Polskie Górnictwo Naftowe i Gazownictwo S.A. and Polskie Sieci Elektroenergetyczne S.A., **The Energy Academy Programme** was run with the Lesław Paga Foundation, addressed to young people who plan to work in the energy sector in the future, and a partnership with the Main School of Fire Service in Warsaw.

Collaboration with Poland's leading universities is a central pillar of the ORLEN Group's efforts to educate specialists and build internal capabilities supporting the Group's key strategic goals. PKN ORLEN participated in various **career fairs** (Engineer Career Fair, Career and Internship Fair for Computer Specialists and Electronic Engineers at the Faculty of Electronics and Information Technology of the Warsaw University of Technology, 4th edition of the Military University of Technology Employers List, Offshore Career Days at the Gdańsk University of Technology, and the Youth Career Forum at the Gdynia Maritime University), reaching potential job seekers at technical universities, and supporting students and graduates in gaining professional experience and finding work placements. In addition, education and information initiatives were carried out at universities, including the 'ORLEN Knowledge Day'. In 2022, PKN ORLEN also took part in the Meet Your Employer event and Industry Seminars at the Warsaw University of Technology. As part of its collaboration with the Stanisław Małachowski General Secondary School, students from an innovative chemistry class had the opportunity to visit the PKN ORLEN Research and Development Centre in Płock, and students of the chemistry technical school in Płock and students participating in the Erasmus scholarship programme at Stanislaum General Secondary School in Płock were given a tour around the Company's production plant. PKN ORLEN is working with the Nicolaus Copernicus University in Toruń on a project to optimise diesel fuel properties. In 2022, ORLEN became a patron of Falling Walls, an international science competition that provided a platform for promoting the Company, its research and development projects and employer brand in Poland and globally.

PKN ORLEN engaged in the fourth edition of the Success University project. Programme participants could benefit from one-on-one consultations with PKN ORLEN's female recruiters as part of a career counselling project. They were also invited to take part in mock recruitment interviews and inspirational workshops on the green transition, showing how business is evolving, and what professions and competencies will be in demand to support the process.

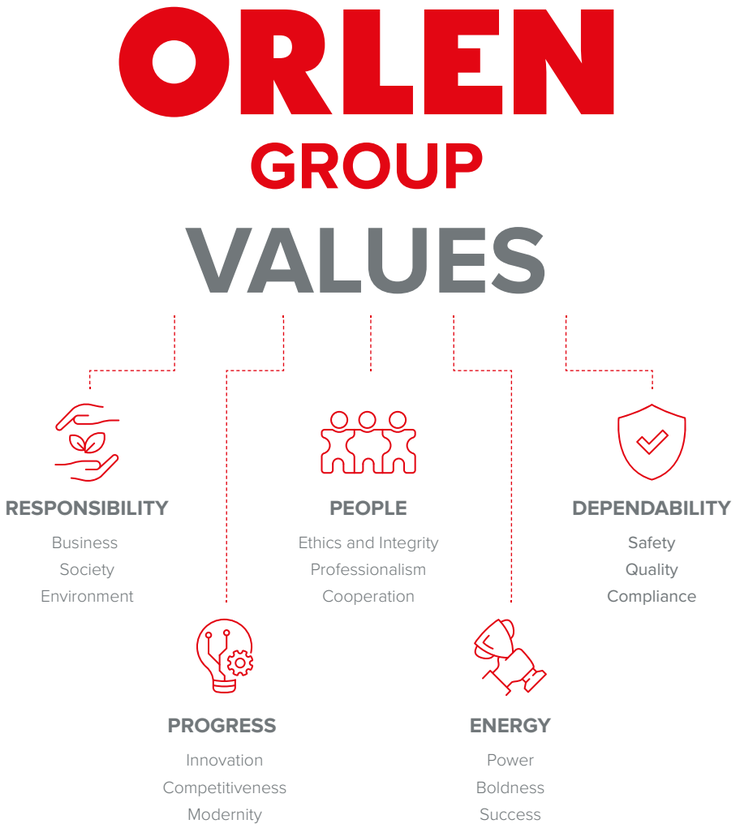
Respect for human rights at the ORLEN Group

ORLEN Group Code of Ethics

Guidance on appropriate attitudes and conduct has been compiled in **the ORLEN Group Code of Ethics**. It is the ORLEN Group's priority to offer fair treatment to all employees and third parties regardless of their age, gender, job, disability, denomination, nationality or beliefs.

Compliance with the ORLEN Group Code of Ethics is monitored by **the Ethics Officer**, who guarantees that employees, employers and all stakeholders can freely report violations, and raises employees' awareness of business ethics and ethical standards, and of the importance of their own role in building the ethical corporate culture. The Ethics Officer is elected by PKN ORLEN employees and performs his or her duties without remuneration. The Ethics Officer takes steps to investigate and eliminate behaviours which conflict with the PKN ORLEN values and standards of conduct.

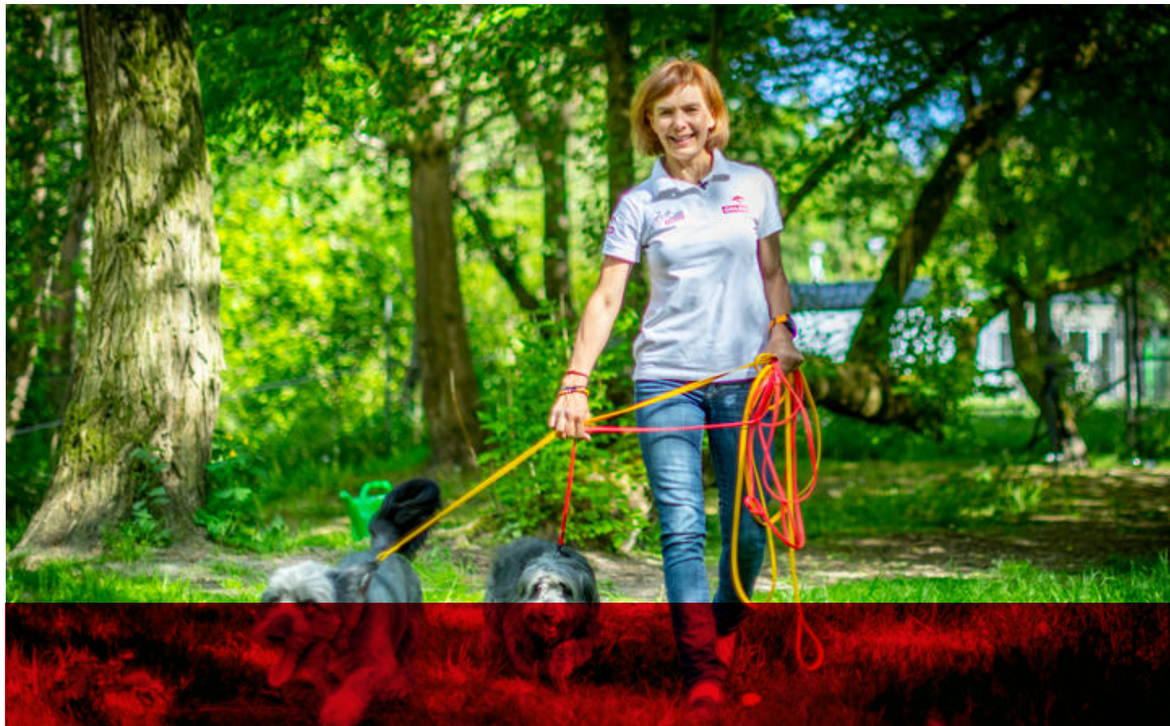
SCHEME 5 |



As part of PKN ORLEN's efforts to promote the adopted values and standards of conduct, as well as to foster the desired attitudes and behaviours, it carries out projects addressed to employees, which include the **Distinguished PKN ORLEN Employee** title awarded every year in recognition of outstanding professional and social contributions and ethical behaviour in line with the PKN ORLEN S.A. values and standards of conduct. It is the highest and most important distinction at the Company, awarded every year to employees in three categories: for outstanding service, special achievements or socially responsible attitudes.

Human rights training at PKN ORLEN and the ORLEN Group in 2022

As part of the educational activities promoting the knowledge of the ORLEN Group Code of Ethics, since 2021 the Ethics Officer has conducted mandatory training sessions for management personnel. Topics discussed during the training sessions include the special role and tasks of managers in building an ethical organisational culture. In 2021, 96% of all management staff were trained in the subject. Currently, the training sessions are held once a quarter for newly promoted and newly hired managers. A mandatory e-learning course has been launched for the other employees, consisting of a lecture by the Ethics Officer, an interactive learning presentation and a knowledge test. The training covers topics related to the ethics system in place at PKN ORLEN and other ORLEN Group companies, discusses the Code of Ethics, presents the mechanism for reporting and handling enquiries, concerns and violations of the Code of Ethics at PKN ORLEN, and explains the role of the Ethics Officer. In addition, the Ethics Officer delivers lectures on ethics, including: 'Building assertiveness. Assertive communication', 'Effective conflict management. Fair fighting', 'Management by values for managers', and 'Colour code – Communication styles encrypted in colours – Effective business communication'.



Human rights training at PKN ORLEN and ORLEN Group in 2022

TABLE 24 |

Title	Number of training units in total	Number of training units 2022
Online training provided by the Ethics Officer		
'ORLEN Group Code of Ethics with a manager's tasks and role in building an ethical work environment'	859[11]	92
'Building assertiveness. Assertive communication'	-	79
'Effective conflict management. Fair fighting'	-	16
'Colour code'	-	26
'Management by values for managers'	-	24
Training courses available on PKN ORLEN's e-learning platform		
ORLEN Group Code of Ethics	5,095[11]	3,327

[11] The total number of active employees (as at December 31, 2022) who have completed training on the Code of Ethics in the ORLEN Group in a given formula, since implementation of the ORLEN Group Code of Ethics, i.e. in 2021, 859 training sessions for the managerial staff and 5,095 for other employees.

As at the end of 2022, 91% of PKN ORLEN employees received human rights training. At the other ORLEN Group companies, the number of employees trained on the ORLEN Group Code of Ethics was 7,812. The number of employees trained in the subject has been steadily increasing.

The ORLEN Group Human Rights Policy introduced in 2022 outlines the key standards for conduct, behaviour and regulations applicable at the ORLEN Group, which are directly or indirectly related to the protection of human rights within the organisation and in relations with external stakeholders. The Policy was developed based on the ORLEN Group's internal regulations, national legislation, international standards and guidelines, including in particular The Universal Declaration of Human Rights, the Declaration of the International Labour Organization on Fundamental Principles and Rights at Work, i.e. the key conventions of the International Labour Organization, the UN Guiding Principles for Business, that is the UN 'Protect, Respect and Remedy' Framework, OECD Guidelines for Multinational Enterprises, the International Finance Corporation Standards, and the Ten Principles of the United Nations Global Compact. The Policy relates to:

- **Fostering human rights at the ORLEN Group with respect to employees** – building an open and inclusive work environment, occupational health and safety, well-being of employees, equal opportunities in employment, freedom of association and cooperation with trade unions, zero tolerance for child and forced labour, preventing discrimination, bullying and any form of workplace misconduct.
- **Protection of human rights in the supply chain and in relations with stakeholders –** promoting respect for human rights (ORLEN Group Supplier Code of Conduct), awareness raising among suppliers, offsetting the impact of business activities on local communities, resolving conflicts in an amicable way, physical security management
- **Reporting and handling cases of misconduct** – reporting mechanisms for cases of violation and misconduct, zero tolerance for threats, intimidation, retaliation or attacks, mitigating the consequences of violations, reporting and remedial action.
- **The Group's commitments to monitoring compliance** – due care, monitoring, quantitative and qualitative indicators, and employee training.

The **ORLEN Group Conflict of Interest Management Policy** was introduced in 2022 in order to promote transparency in business relations and ensure compliance with relevant laws, internal regulations and voluntary ethical standards adopted by ORLEN Group companies, and to establish clear responsibilities and a procedure for identifying and managing conflicts of interest.

The Policy sets forth the ORLEN Group's standards for the identification, disclosure and management of conflicts of interest, reflecting the ethical standards defined in the ORLEN Group Code of Ethics as well as international and industry standards regarding misconduct prevention, and taking into account the Best Practice for WSE Listed Companies and ORLEN Group companies' internal regulations. Its purpose is to reduce the risk of corruption and misconduct in business processes, ensure due care in the activities of the ORLEN Group companies, raise employees awareness of how to avoid conflicts of interest and counteract misconduct, and define rules and standards of conduct for reporting, disclosing and managing conflicts of interest.

In May 2022, PKN ORLEN held its **Ethics Days**, as online and stationary events in Warsaw and Płock. PKN ORLEN employees could take part in webinars hosted by Dr Paweł Fortuna and Dr Joanna Heidtman, as well as training games. The webinars highlighted the importance of ethical values and how adhering to them can influence daily work, while the Symbols and Team puzzle training games demonstrated the importance of communication, cooperation and knowledge sharing at work. The Ethics Days featured an art contest for children of ORLEN Group employees under the theme 'A Child in the World of ORLEN's Values'. The artworks were to depict how children imagined and what they associated with a chosen ORLEN value: Responsibility, Progress, People, Energy and Dependability. About 150 works were submitted for the competition.

GRI 2.25

Processes to remediate negative impacts

Internal and external mechanisms to obtain advice on how to report actual or suspected misconduct

The values, principles and standards defined in the Code of Ethics apply to each ORLEN Group employee from their first day of work, regardless of their position or form of contract. Even if some of the standards of conduct contained in the Code of Ethics do not apply to a given job, this does not relieve the employee of the obligation to respond to or report violations of the Code. A variant path is defined for reporting and analysing information on actual or suspected cases of misconduct, depending on the severity and complexity of the problem and on the confidence of the parties involved. At PKN ORLEN, a suspected violation of the values, principles and standards of conduct or any ethical dilemmas may be reported to:

The Line Manager, the Ethics Officer, or the Secretary of the Human Capital Committee.

Reports may also be made through the **Anonymous Whistleblowing System (ASZN)** to the Control and Security Office

A variant path is defined for reporting and analysing information on actual or suspected cases of misconduct, depending on the severity and complexity of the problem and on the confidence of the parties involved. **The reports received by the Ethics Officer in 2022 predominantly related to cooperation issues, inappropriate communication or poor interpersonal relations**. No incidents involving theft of company assets, a conflict of interest or alcohol abuse were reported. Most of the cases concerned violation of a specific provision of the ORLEN Group Code of Ethics. Most of the reported issues were investigated, with corrective measures implemented.

In 2022, four reports of misconduct were investigated under the **Workplace Bullying, Discrimination and Harassment Prevention Rules**. The Employee Relations Committee found three of those reports to be groundless and one of them to be unfounded in the part relating to workplace bullying and partially justified with respect to the place of work specified in the employment contract and the working time system of other employees holding the same job title.

4. Material risks and management approaches

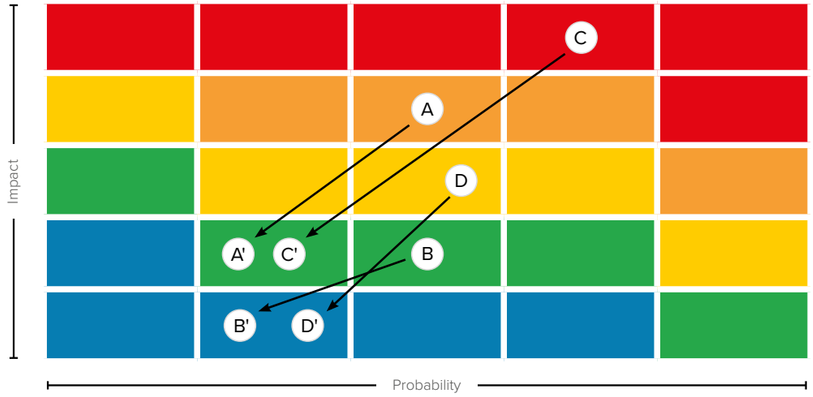
TABLE 27 | Employee risks

Risks/processes	Risk description	Risk mitigation methods	Risk development trend
A. Availability of employees and subcontractors	• Loss of key personnel • Persistent shortage of experienced staff with relevant technical expertise	Monitoring and reviewing of job-specific training needs, oversight of the recruitment process to ensure employment of candidates with relevant qualifications Supporting vocational education to develop practical skills.	↔
B. Allocation and development of human resources	• Constraints in recruitment/ employee turnover; lack of transparency of the recruitment/ employment termination process	Identification of the key skills for a given position at the recruitment stage, supervision of the process of contract termination, control of the position change processes within the Company	↔
C. Workplace accidents and other hazards	• Failure to identify material risks for particular jobs • Injury/death at a production plant	Introduction of a health and safety hazard reporting system, including division of responsibilities, supervision of the hazard identification process in the Occupational Risk Assessment, introduction of procedures to follow in the event of an accident at work	↔
D. Employees and subcontractors' activities	• Activities of employees and subcontractors resulting in violation of OHS regulations	Reviewing and issuing opinions on contracts with subcontractors in terms of safety certificates and safety clauses, implementation of the Comprehensive Prevention System	↔

Table key

Risk materiality for the organisation	critical	high	medium	low	very low
Risk level after taking into account the controls	critical	high	medium	low	very low
Risk development trend year on year	↓ Falling	↑ Rising	↔ Stable		

Effects of application of controls in risk management



A, B, C, D
Employee risks – risk materiality

A', B', C', D'
Risk level after taking into account the controls

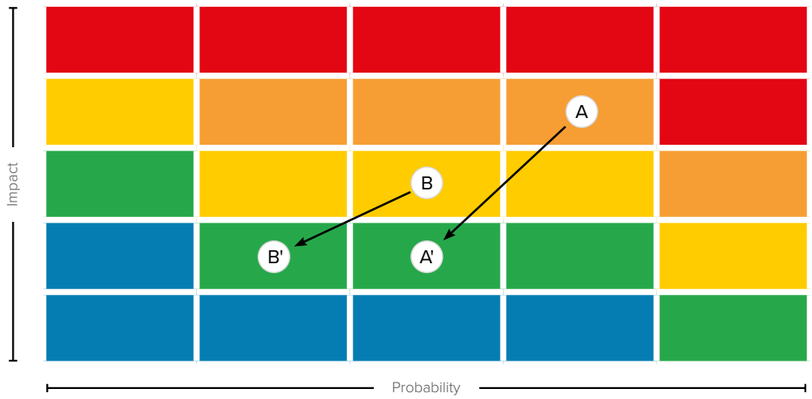
TABLE 28 | Human rights risks

Risks/processes	Risk description	Risk mitigation methods	Risk development trend
A. Ehics standards	• Inadequate ethical standards for a given business environment • No support for employees in resolving conflicts of interest • Ineffective system of internal reporting of unethical or illegal practices	Keeping track and reviewing compliance with the value system set out in the Core Values and Standards of Conduct of PKN ORLEN, appointment of the Ethics Officer, introduction of the Anonymous Misconduct Reporting System Provision of systematic training for employees and regular reporting by the Ethics Officer to the Human Capital Committee	↔
B. Labour law	• Violations of labour law • Penalties imposed as a result of court proceedings initiated by current or former employees	Obligatory knowledge of applicable laws and internal regulations governing employment relationships, i.e. the Work Rules, Core Values and Standards of Conduct, etc. Agreement setting out the rules of cooperation between social partners in restructuring processes	↔

Table key

Risk materiality for the organisation	critical	high	medium	low	very low
Risk level after taking into account the controls	critical	high	medium	low	very low
Risk development trend year on year	↓ Falling	↑ Rising	↔ Stable		

Effects of application of controls in risk management



07

Environment and climate

The ORLEN Group was the first energy company in Central Europe to have declared its ambition to achieve carbon neutrality by 2050. Maintaining this commitment, we will fast-track the transition with new investments. By 2030, we intend to reduce emissions in our refining, petrochemical and upstream segments by 25%. In addition, we will cut carbon intensity in the energy segment by 40%, and lifecycle net carbon intensity of all energy products sold by the ORLEN Group by as much as 15%.

PLN 120 billion to be spent on green investment projects by 2030

25% reduction of absolute carbon emissions from Refining, Petrochemicals and Upstream

40% reduction of carbon intensity in Energy (CO_2e/MWh) and ending the production of energy and heat from coal by 2035

15% Network Carbon Intensity (NCI) factor reduction gCO_2e/MJ

Sustainable Development Goals 2030

Sustainable Development Goals 2030 pursued by the environment and climate measures implemented by PKN ORLEN and ORLEN Group in 2022:

The GRI Standards 2021 disclosures discussed in this section:

- GRI 2-12 Role of the highest governance body in overseeing the management of impacts
- GRI 2-1 Delegation of responsibility for managing impacts
- GRI 2-27 Compliance with laws and regulations
- GRI 11.1.1 Management of material topic: greenhouse gas emissions
- GRI 11.1.2 Energy consumption within the organisation, including fuel types used
- GRI 11.1.5 Direct (Scope 1) GHG emissions, by weight
- GRI 11.2.1 Management of material topic: climate change adaptation, resilience and transition
- GRI 11.3.1 Management of material topic: air emissions
- GRI 11.3.2 Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions
- GRI 11.4.1 Management of material topic: biodiversity
- GRI 11.4.3 Significant impacts of activities, products, and services on biodiversity
- GRI 11.4.4 Habitats protected or restored
- GRI 11.4.5 IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk
- GRI 11.5.1 Management of material topic: waste
- GRI 11.5.2 Waste generation and significant waste-related impacts
- GRI 11.5.3 Management of significant waste-related impacts
- GRI 11.5.4 Waste generated
- GRI 11.5.5 Waste diverted from disposal
- GRI 11.5.6 Waste directed to disposal
- GRI 11.6.1 Management of material topic: water and effluents
- GRI 11.6.4 Water withdrawal
- GRI 11.6.5 Water discharge
- GRI 11.6.6 Water consumption

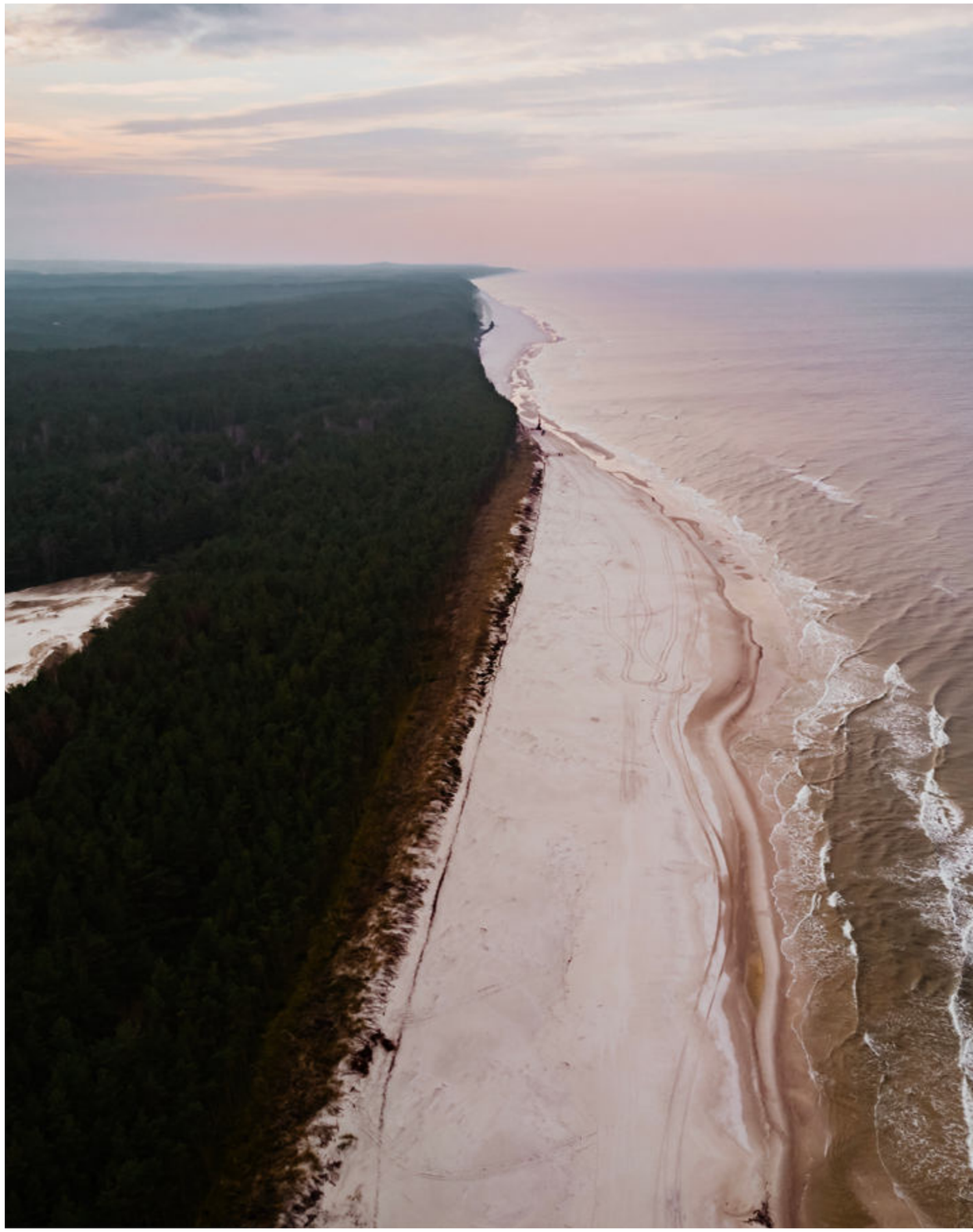
Accordance with TCFD Recommendations

Corporate governance	Level of accordance	Page number
Management of climate-related risks and opportunities	●	178-185
Management's role in assessing and managing climate-related risks	●	178-185
Strategy		
Climate-related risks and opportunities identified by the organisation over the short, medium, and long term	●	210-211, 214-216, 227-237
Description of the impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and finance	●	210-211, 214-216, 227-237
Analysis of business model resilience taking into consideration different climate-related scenarios	●	Information: Integrated report
Risk management		
Processes for identifying and assessing climate-related risks	●	Information: Integrated report
Processes for managing climate-related risks	●	Information: Integrated report
Description of how climate-related risks are integrated into the organisation's management system	●	227-237
Metrics and targets		
Metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process	●	186-209
Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks	●	Information: www.orlen.pl*
Targets used by the organisation to manage climate-related risks and opportunities and performance against targets	●	217-226

Key:

● - compliant

* data for 2021 has been published; work to calculate metrics for 2022 still in progress



1. Management of the environment and climate area

GRI 11.2.1

Management of material topic: climate change adaptation, resilience and transition

The ORLEN Group is consistently implementing the objectives of its ORLEN 2030 business strategy and sustainable development strategy in order to achieve carbon neutrality by 2050. Unveiled in February 2023, the ORLEN2030 strategy envisages certain benefits from the mergers with PGNiG and the LOTOS Group, putting the new ORLEN Group on track to rapid growth and transition.

Ensuring access to stable supplies of energy, fuel and gas from green sources will be the main goal of the combined ORLEN Group in the period to 2030. On the path to this goal the Group will primarily invest in renewable energy generation, natural gas and green projects, including biogas and biofuels. It will also develop hydrogen technologies, modern petrochemical assets and safe nuclear power generation.

Reducing its environmental footprint and climate impact has long been one of the ORLEN Group's top priorities. Its approach to management is based on the principles of corporate social responsibility and takes into account environmental criteria. We aim for sustainable development, and we report the results of our climate and environmental protection efforts.

Governance around environmental and climate-related issues

GRI 2-12

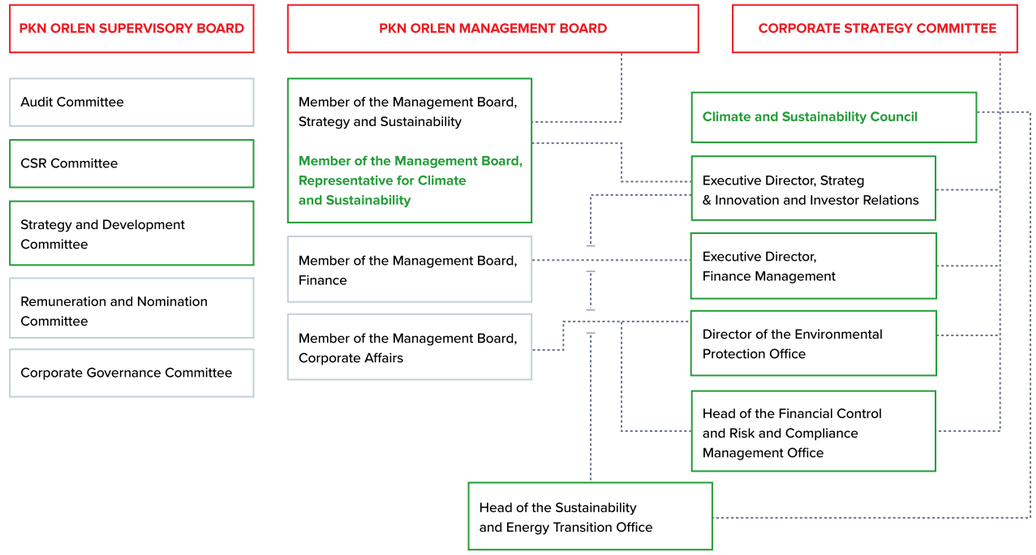
Role of the highest governance body in overseeing the management of impacts

GRI 2-13

Delegation of responsibility for managing impacts

The management of risks and opportunities arising from climate change is the responsibility of the President of the Management Board and the Member of the Management Board for Strategy and Sustainability, who acts as **the Representative for Climate and Sustainability** and chairs **the Climate and Sustainability** Council. The Council reports directly to the Management Board through meetings of the Group Strategy Committee.

SCHEME 6 |



Member of the Management Board, Climate and Sustainability:

Responsibility

- Supervises sustainability and climate-related issues – identifies and mitigates risks related to climate and sustainability.
- Takes measures in response to sustainability and climate-related issues, ensuring the measures are commensurate with the severity of a particular issue to the company.

Annual reporting:

- on relevant processes and on how frequently the management board and/or management board committees (audit, risk or other committees) are updated on and address at their meetings sustainability and climate-related issues;
- on whether the management board and/or management committees consider sustainability and climate-related issues, problems identified during strategy reviews and management, key action plans, management policies, and annual budgets;
- on how the management board monitors and oversees progress in achieving sustainability and climate-related objectives and tasks.

Climate and Sustainability Council

SCHEME 7 | Responsibilities of the Climate and Sustainability Council

Body supporting the Group Strategy Committee	
Identification and monitoring of climate-related risks and opportunities	**Climate-related risks and opportunities in the short, medium and long term** • Physical risks • Energy transition risks • Opportunities
Analysis of climate-related risks and their impact on the ORLEN Group's finances	**Climate-related risks and opportunities and their impact on:** • Financial position – assets, liabilities • Financial performance – revenue, expenses • Financial planning for capex or M&A projects
Publication of scenarios analysing resilience of the ORLEN Group's strategy to climate change	**Strategy resilience scenarios** • Scenario 2°C (Paris Agreement) • Scenario 4°C (Business as Usual)
Approval of sustainability metrics for the ORLEN Group	**Indicators and recommendations** • Financial and non-financial KPIs with respect to decarbonisation, water consumption and biodiversity • Recommendations for business areas

SCHEME 8 | Composition of the Climate and Sustainability Council

Body supporting the Group Strategy Committee		
Title	**Function in the Council**	**Company**
Member of the PKN ORLEN Management Board for Strategy and Sustainability – Representative of the PKN ORLEN Management Board for Climate and Sustainability	Chair	**PKN ORLEN**
Executive Director, Finance Management	Deputy Chair	**PKN ORLEN**
Executive Director, Strategy & Innovation and Investor Relations	Deputy Chair	**PKN ORLEN**
Head of the Sustainability and Energy Transition Office	Secretary	**PKN ORLEN**
Director of the Environmental Protection Office	Member	**PKN ORLEN**
Head of the Financial Control and Risk and Compliance Management Office	Member	**PKN ORLEN**
Chief Economist	Member	**PKN ORLEN**

Representatives of other areas (refining, petrochemicals, energy, business development, etc.) will be invited to meetings on an as-needed basis, depending on topics discussed.

The PKN ORLEN Supervisory Board exercises ongoing supervision over all areas of the Company's operations. Two committees, namely the Strategy and Development Committee and the Corporate Social Responsibility Committee, deal with sustainability and climate-related issues as part of their remit.

In 2022, economic, environmental and climate impact management was discussed at **47 meetings of the PKN ORLEN Management Board (86 topics) and at about 16 meetings of the PKN ORLEN Supervisory Board (33 topics, including 4 topics at 4 meetings of the CSR Committee and 5 topics at 5 meetings of the Strategy and Development Committee).**

Environmental initiatives are also carried out by the **Environmental Protection Office, the Water and Wastewater Management Office, and the Energy Area.**

The Environmental Protection Office carries out environmental protection tasks, ensuring that the Group complies with all applicable laws and regulations in this area. The responsibilities of the Environmental Protection Office include:

- Coordinating activities designed to implement identified legal requirements for obtaining required environmental permits;
- Carrying out environmental monitoring activities on PKN ORLEN's sites;
- Supervising activities related to air quality analysis, including operation of the Company's Environmental Inspection System;
- Coordinating and taking responsibility for activities related to monitoring, reporting and securing free CO_2 emission allowances;
- Environmental reporting in accordance with the legal requirements and calculating and paying environmental charges;
- Issuing opinions and agreeing on environmental aspects of all development plans, investment, upgrade and maintenance projects at PKN ORLEN;
- Participating in environmental inspections of PKN ORLEN facilities carried out by external and internal bodies;
- Cooperating with public administration authorities with regard to formal and legal arrangements and fulfilment of obligations imposed by such authorities;
- Supervising the scope and progress of remediation work at PKN ORLEN's facilities;
- Implementing and maintaining the leak detection and repair system (LDAR) at the Płock production plant and the PTA plant in Włocławek;
- Contributing to PKN ORLEN's positive image through environmental education and protection of biodiversity;
- Participating in the efforts to restore the peregrine falcon population in Poland, in partnership with the 'SOKÓŁ' ('FALCON') Wildlife Protection Association and the 'SOKÓŁ' Foundation.

The Environmental Protection Office also works with the environmental protection teams at the ORLEN Group companies to exchange information, share experience and optimise ways to fulfil environmental obligations. This work involves participation in issuing opinions and agreeing on the environmental aspects of development plans and investment, upgrade and maintenance projects, and providing advice on and coordinating activities relating to the scope and progress of remediation work. The Office is also responsible for preparing environmental reporting input data and for developing a uniform approach to environmental issues at the ORLEN Group level.

As part of this responsibility, work was being carried out in 2022 to develop assumptions for a biodiversity policy that would apply across the ORLEN Group. The policy would reaffirm the commitment of ORLEN Group companies to sustainable and efficient growth, recognising the preservation and promotion of biodiversity as a strategic value.

Responsibilities of the Water and Wastewater Management Office at PKN ORLEN include:

- Managing operations in the area of production of water, collection and treatment of wastewater from the Płock production plant, and coordinating the water and wastewater management activities at the ORLEN Group;
- Ensuring continuity of production and distribution of different water types and collection and treatment of wastewater at PKN ORLEN;
- Ensuring compliance with environmental standards, legal regulations, and permits while maintaining continuity of water production and wastewater collection at the Płock production plant.

Responsibilities of the Energy Area include:

- Implementing strategic projects relating to commercial and industrial power generation and renewable energy sources, i.e. wind, sun, water, and biomass;
- Developing offshore wind projects in the Baltic Sea;
- Trading in heat, electricity and property rights in certificates of origin for electricity;
- Producing and distributing electricity and heat.
- Ensuring compliance with environmental standards, legal regulations, and permits while maintaining continuity of power generation in its area.

Key policies

PKN ORLEN's internal documents stemming from the implemented systems and decisions of public administration bodies include the following:

Environmental protection

- **Environmental Monitoring Procedure** – ensuring correct monitoring of air (imissions), wastewater, rainwater and snowmelt produced at fuel terminals, and groundwater on and in the vicinity of the Płock production plant and on the fuel terminal sites, as well as identification and recording of key metrics of the Responsible Care programme relating to environmental protection, health protection, process safety (including safety and distribution of chemicals) and work safety.
- **Responsible Care Management Framework** – a management system compliant with the guidelines of the European Chemical Industry Council (CEFIC), providing support in the development of management systems implemented at the organisation. Adopted as a result of PKN ORLEN subscribing to the Declaration of Support for the ICCA Responsible Care Global Charter in 2007, it is a continuation of the Responsible Care programme that PKN ORLEN has been implementing since 1997.
- **Integrated Permits** – decisions issued for the IPPC installations of PKN ORLEN: refining units, petrochemical units, CHP units, CCGT units, wastewater treatment plants on the premises of the Płock production plant and the PTA plant and CCGT unit in Włocławek, specifying operating conditions that must be met for the units to be safe to the natural environment and people.
- **CO_2 Instruction on the Operation of the PKN ORLEN System for Carbon Dioxide Emission and Activity Level Monitoring and Reporting** – defines the rules for timely and reliable entering of data in the IT system for CO_2 emissions monitoring, including data on activity levels from each installation covered by free allowance allocations.
- **Instruction Specifying the Rules for Calculating and Paying Charges for Air Emissions of Gas and Particulate Matter and Charges for Water Services at PKN ORLEN** – a procedure put in place to introduce a uniform calculation methodology, improve the quality of data acquisition, and ensure timely and reliable transfer of data serving as the basis for calculation of the charges.
- **Waste Management Procedure** – defines activities related to recording, storage, collection and disposal of waste generated in refining, power generation, storage, auxiliary and security processes.
- **Instruction Specifying the Rules for Packaging Management at PKN ORLEN** – a procedure put in place to ensure compliance with the requirements under the Act on Packaging and Packaging Waste Management and the requirement to report on actual packaging volumes.
- **Internal Order on the Rules and Procedures for Managing Expenditures and Provision for Land Remediation and the Procedures for Remediation Projects at PKN ORLEN** – specifies rules for the financing and execution of remediation projects on PKN ORLEN sites.

- **Instruction on the Operation of the LDAR System at PKN ORLEN –** describes implementation and maintenance of the leak detection and repair system in order to identify, monitor and reduce diffuse emissions of volatile organic compounds, and thus mitigate the environmental impact of the production plant in Płock and the PTA plant in Włocławek, reduce losses of raw materials and products, and improve process safety.

- **Procedure for Identifying Environmental Aspects and Determining Material Aspects –** defines the process of identification, determination of materiality and periodic reviews of environmental aspects as well as allocation of responsibility for these activities.

The **environmental objectives** are set out in PKN ORLEN's Integrated Management System Policy and the Energy Policy. Such activities are carried out based on the Integrated Management System, which includes the Quality Management System (ISO 9001: AQAP 2110), Environmental Management System (ISO 14001), Occupational Health and Safety Management System (ISO 45001), Information Security Management System (ISO/IEC 27001), Energy Management System (ISO 50001) , Certification System for Biomass and Biofuels ISCC, KZR INiG certification system for the HVO process, Factory Production Control System (ZKP) – for bitumen production, and Food Safety Management System (HACCP) according to Codex Alimentarius. The Company holds valid certificates of compliance with ISO 9001:2015, AQAP 2110, ISO 14001:2015, ISO 45001:2018, ISO/IEC 27001:2017-06, ISO 50001:2018- 09, ISCC EU, KZR INiG, and ZKP

These systems meet the highest international management standards and support the Company's day-to-day efforts to ensure professional customer service and maintain top quality, safety, health protection, climate and environmental standards. The key ORLEN Group companies have Integrated Management Systems in place, which include an Environmental Management System implemented and maintained in accordance with the ISO 14001 standard as their integral part. The Group companies also follow Integrated Management System/ Environmental Management System Policies, providing for an obligation to protect the environment, which includes pollution prevention and other specific obligations relevant to the operations of individual companies. These policies also include a requirement to comply with the law and other external and internal requirements identified together with stakeholders. All systemic activities, in particular those which are material to the safety of people and the natural environment, are aligned with the ORLEN Group Strategy, which takes into account the aim to optimise technological processes, reduce greenhouse gas emissions, achieve climate neutrality and net zero emissions, and comply with sustainable development principles.

TABLE 29 |

Environmental Management Systems	ORLEN Group companies
ISO 14001 Certificate	PKN ORLEN, ANWIL, Basell Orlen Polyolefins, ORLEN Południe Group, ORLEN Oil, ORLEN Paliwa, ORLEN Asfalt, ORLEN Serwis, ORLEN Upstream, ORLEN Laboratorium, ORLEN Eko, IKS Solino, ORLEN KolTrans, ORLEN Administracja, ORLEN Centrum Serwisowe, ORLEN Projekt, ORLEN Ochrona, ORLEN Lietuva Group, ORLEN Unipetrol Group, ENERGA Group, From August 1st to December 31st 2022: Rafineria Gdańska, LOTOS Oil, LOTOS Petrobaltic, LOTOS Kolej, LOTOS Lab, LOTOS Ochrona, LOTOS Serwis, From November 2nd to December 31st 2022, the ORLEN PGNiG Group companies
Elements of the environmental management system implemented in accordance with the JIG industry standards and HSSE Policy	ORLEN Aviation
Implemented environmental protection principles, including on waste management control	ORLEN Centrum Usług Korporacyjnych
ISCC, KZRINiG	PKN ORLEN, ORLEN Południe Group
EMAS	Energa Group

Energy

Fulfilment of REMIT obligations by PKN ORLEN – this document sets out, in particular, the rules of conduct applicable to insiders and the procedure of disclosing inside information to the public.

Rules of Conduct Relating to Regulations on Introducing Restrictions in the Supply and Consumption of Electricity in the Territory of the Republic of Poland – the objective is to safeguard the operations of PKN ORLEN if restrictions are imposed by the state authorities.

Instruction on Forecasting and Balancing requirements for Energy Utilities – MEBiP for Organisational Units Located in Płock, the PTA Plant in Włocławek and External Customers – the goal is to keep a proper balance of consumption of energy utilities in specific areas of PKN ORLEN and by external consumers connected to the power grid.

Rules for Managing and Trading in Electricity and the Related Property Rights – this document sets out the rules for managing and trading in electricity and property rights at PKN ORLEN as part of GAHE (Active Energy Trading Platform). The regulation also applies to the ORLEN Group companies operating within GAHE.

Rules for the Performance of the Energy Trading and Technical Operator Tasks – include processes involved in trading in electricity, property rights in certificates of origin for electricity, energy efficiency certificates, guarantees of origin, the related energy ranges and ancillary services.

Detailed Rules for Recognition of Qualifications Held by Persons Involved in the Operation of Power Equipment, Units and Networks at PKN ORLEN – include the types of work and positions, as well as power equipment, units and networks in the case of which the operator is required to have specific qualifications; the scope of knowledge required to obtain recognition of qualifications held by persons involved in the operation of power equipment, units and networks; and the qualifications verification procedure.

2. Key performance indicators

Energy KPIs

Indicator calculations are based on the power generation assets of the ORLEN Group. Major assets by country:

- Poland: PKN ORLEN's CHP plant in Płock, CCGT unit in Płock and CCGT unit in Włocławek; ANWIL's CHP plant; ORLEN Południe's CHP plant in Trzebinia and CHP plant in Jedlicze; Energa Group's generating units, including Ostrołęka Power Plant B, renewable energy sources (hydroelectric power plants, wind farms, solar power plants). The list of generation assets was expanded in 2022 to include the units operated by the LOTOS Group and PGNiG companies merged into the ORLEN Group, namely the CHP plants of Rafineria Gdańska and Energobaltic, and generating units owned by the Termika Group.
- Lithuania: CHP plant in Mažeikiai;
- Czech Republic: ORLEN Unipetrol Group's generating units

The 2022 data for the ORLEN Group covers the full year, except for the former LOTOS Group and the former PGNiG Group, in respect of which the 2022 data covers the period from August 1st and from November 2nd to December 31st 2022, respectively, which are the dates when the two companies joined the ORLEN Group.

For selected indicators, full-year 2022 data is presented for the relevant companies of the PGNiG TERMIKA Group and the LOTOS Group. 2021 data for the ORLEN Group includes assets owned by the Group as at December 31st 2021.

GRI 11.1.2

Energy consumption within the organisation, including fuel types used

The indicator was calculated as the difference between total chemical energy input of fuels, generation from renewable sources for which fuel consumption cannot be determined (solar, hydro and wind) plus energy purchased from the ORLEN Group's third-party suppliers and sales of electricity, heat and cooling to customers outside the ORLEN Group.

TABLE 30 | Energy consumption at ORLEN Group by type of energy source

ORLEN Group	2022		2021**	
	Value [GJ]	Value [MWh]	Value [GJ]	Value [MWh]
Energy input of fuels*	147,801,255	41,055,904	123,211,359	34,225,377
Renewable generation	5,716,981	1,588,050	5,767,247	1,602,013
Electricity purchased	107,977,350	29,993,708	102,068,032	28,352,231
Heat purchased	1,849,625	513,785	1,776,047	493,346
Cooling purchased	1,547	418	828	230
Electricity sold	106,485,149	29,579,208	111,747,048	31,040,847
Heat sold	16,784,797	4,662,444	6,776,557	1,882,377
Cooling sold	28,685	7,968	-	-
Energy consumption	**140,048127**	**38,902,245**	**114,299,908**	**31,749,973**

* The energy input of fuels was calculated based on the fuel volumes used, converted using the calorific values of the input raw materials per units of energy.

** A uniform approach was applied to 2021 data by including renewable generation and energy purchased for own needs. In addition, the data on electricity sold at PKN ORLEN was restated.

TABLE 31 | Energy consumption at PKN ORLEN by type of energy source

PKN ORLEN	2022		2021**	
	Value [GJ]	Value [MWh]	Value [GJ]	Value [MWh]
Energy input of fuels*	70,005,337	19,445,927	71,570,767	19,880,769
Renewable generation	1,470	408	642	178
Electricity purchased	11,990,398	3,330,666	8,791,662	2,442,128
Heat purchased	8,082	2,245	7,806	2,168
Electricity sold	12,941,250	3,594,792	18,208,004	5,057,779
Heat sold	3,001,478	833,744	2,298,655	638,515
Energy consumption	**66,062,559**	**18,350,710**	**59,864,218**	**16,628,949**

* The energy input of fuels was calculated based on the fuel volumes used, converted using the calorific values of the input raw materials per units of energy.

** A uniform approach was applied to 2021 data by including renewable generation and by making an adjustment regarding sales of electricity outside the organisation.

Generating capacity, broken down by primary energy source

Provided below are maximum gross generating capacities (which are not equivalent to the sources' installed capacities).

TABLE 32 | Generating capacity at the ORLEN Group, broken down by primary energy source

	ORLEN Group 2022			ORLEN Group 2021**	
	MWe (electrical capacity)	MWt (thermal capacity)	MWc (cooling generation capacity)	MWe (electrical capacity)	MWt (thermal capacity)
Natural gas	1,618	1,777	-	1193	876
Multi-fuel	650	4,540	19.6	519	3,695
Hard coal	1,744	4,536	-	705	506
Lignite	106	768	-	106	768
Biomass	77	141	-	25	59
Wind power plants	353	-	-	353	-
Solar power plants	36	-	-	11	-
Hydroelectric power plants	381	-	-	381	-
TOTAL	**4,965**	**11,762**	**19.6**	**3,293**	**5,905**
Power plants	1,460	220	-	1,435	220
CHP plants*	3,505	10,133	19.6	1,858	5,510
Heat plants	-	1,410	-	-	175
Total	**4,965**	**11,762**	19.6	**3,293**	**5,905**

* Generating units of PGNiG TERMIKA Energetyka Rozproszona (PTER), all classified as CHP plants.

** The data has been restated. Starting with this Report, achievable capacities are presented instead of the previously presented installed capacities

TABLE 33 | Generating capacity at PKN ORLEN, broken down by primary energy source

	PKN ORLEN 2022		PKN ORLEN 2021*	
	MWe (electrical capacity)	MWt (thermal capacity)	MWe (electrical capacity)	MWt (thermal capacity)
Natural gas	1,095	641	1,095	641
CCGT Płock	630	519	630	519
CCGT Włocławek	465	122	465	122
Fuel oil/natural gas	429	2,153	359	2,153
Płock CHP plant	429	2,153	359	2,153
Solar energy	2	-	-	-
PV at CCGT Włocławek	2	-	-	-
TOTAL	**1,526**	**2,794**	**1,454**	**2,794**
Power plants	2	-	-	-
CHP plants	1,524	2,794	1,454	2,794
Heat plants	-	-	-	-
Total	**1,526**	**2,794**	**1,454**	**2,794**

* The data has been restated. Starting with this Report, achievable capacities are presented instead of the previously presented installed capacities.

TABLE 34 | Provided below is the 'Maximum generating capacity by primary energy source' indicator for the full year 2022 for the Termika Group and the former LOTOS Group.

	TERMIKA GROUP[1] 2022			
	Mwe (electrical capacity)	MWt (thermal capacity)	MWc (cooling generation capacity)	Compressed air [thousand m3/h]m3/h]
Natural gas, coal mine methane	446	828	18.5	-
Fuel oil	-	583	-	-
Hard coal	1,038	4,072	-	-
Biomass	52	82	-	-
Other	-	-	1.1	240
Total	**1,537**	**5,565**	**19.6**	**240**

[1] Including TERMIKA S.A. PTEP. PTER. PTP

TABLE 35 |

	LOTOS Group[2] 2022	
	MWe (electrical capacity	MWt (thermal capacity)
Natural gas	11	15
Multi-fuel	29	164
Total	40	179

[2] The data covers the CHP plant of Rafineria Gdańska and Energobaltic

Net energy output broken down by primary energy source

The indicator is calculated as net energy output broken down by primary energy source.

TABLE 36 | Net energy output at the ORLEN Group, broken down by primary energy source

Fuel	ORLEN Group 2022[3]		
	Electricity [MWh]	Heat [GJ]	Cooling [GJ]*
Natural gas	4,728,699	11,093,150	-
Multi-fuel	1,877,423	27,916,865	28,685
Biogas	7,311	5,998	-
Lignite	570,040	5,205,247	-
Hard coal	3,450,097	11,383,480	-
Biomass	106,794	887,225	-
Wind power plants	746,967	-	-
Solar power plants	20,215	-	-
Hydroelectric power plants	820,868	-	-
Total	12,328,414	56,491,965	28,685

* Cooling production at PGNiG TERMIKA Energetyka Przemysłowa, excluding cooling production at PGNiG TERMIKA Energetyka Rozproszona.

[3] Total gross electricity output of the ORLEN Group in 2022 was 13,408,701 MWh.

TABLE 37 | Net energy output at the ORLEN Group, broken down by primary energy source

Fuel	ORLEN Group 2021	
	Electricity [MWh]	Heat [GJ]
Natural gas	5,161,380	7,103,206
Multi-fuel (fuel oil/natural gas)	1,609,237	26,089,673
Biogas	3,391	-
Lignite	583,753	6,244,240
Hard coal	2,392,367	3,122,378
Biomass	76,128	695,298
Wind power plants	661,897	-
Solar power plants	5,050	-
Hydroelectric power plants	935,067	-
Total	11,428,269	43,254,796

TABLE 38 | Net energy output at PKN ORLEN, broken down by primary energy source

Fuel	PKN ORLEN[4] 2022		PKN ORLEN 2021	
	Electricity [MWh]	Heat [GJ]	Electricity [MWh]	Heat [GJ]
Natural gas	4,449,403	4,644,365	5,156,952	4,376,858
Multi-fuel units (Fuel oil/natural gas)	1,480,748	24,527,637	1,501,122	23,314,970
Solar energy	408	-	178	-
Total	5,930,560	29,172 002	6,658,252	27,691,828

[4] Including data from the following generating units: CCGT Płock, CCGT Włocławek, CHP plant Płock, PV at CCGT Włocławek, and rooftop PV at service stations.

Provided below is the 'Net energy output broken down by primary energy source' indicator for the full year 2022 for the Termika Group and the former LOTOS Group.

TABLE 39 |

	TERMIKA GROUP[5] 2022		
	Electricity [MWh]	Heat [GJ]	Cooling[6] [GJ]
Natural gas	1,413,901	8,193,993	-
Coke gas/coal mine methane	161,747	568,723	211,143
Fuel oil	4,009	27,994	-
Hard coal	2,649,146	32,312,508	-
Biomass	166,611	1,612,849	-
Total	4,395,415	42,716,067	211,143

[5] Data for the full year 2022. The data includes energy generation at: TERMIKA S.A., PTEP, PTER, PTP

[6] Cooling production at PGNiG TERMIKA Energetyka Przemysłowa, excluding cooling production at PTER.

TABLE 40 |

Breakdown by primary fuels	LOTOS Group[7] 2022	
	Electricity [MWh]	Heat [GJ]
Natural gas	56,985	2,719,600
Natural fuel gas (dry)	28,349	119,761
Hydrodesulfurised diesel oil	22,393	1,010,571
LPG	391	391
Fuel oil	-	51
TOTAL	108,118	3,850,374

[7] Data for the full year 2022. The data covers the CHP plant of Rafineria Gdańska and Energobaltic.

Average generation efficiency of CHP plants by energy source and regulatory requirements

The total generation efficiency was calculated as the quotient of total net energy output and the volume of fuel supplied, broken down by primary energy source.

The electricity generation efficiency was calculated as net electricity output divided by the volume of fuel supplied for electricity generation (in the case of cogeneration units, established based on the physical division, i.e., in proportion to the energy volumes generated), broken down by primary energy source.

Average generation efficiency of CHP plants by energy source

TABLE 41

	2022		2021*	
	ORLEN Group	PKN ORLEN	ORLEN Group	PKN ORLEN
Efficiency of electricity generation by thermal plants (%)	55.04%	66.18%	56.06%	66.76%
Total generation efficiency of thermal plants (%)	64.38%	72.17%	60.44%	72.18%
Efficiency of electricity generation by thermal plants (%) broken down by primary fuel:				
Multi-fuel	76.00%	80.84%	79.93%	80.42%
Lignite	55.39%	None	59.38%	None
Natural gas	62.41%	62.41%	63.61%	63.61%
Hard coal	42.92%[8]	None	37.98%	None
Biomass	65.92%	None	70.29%	None
Efficiency of electricity generation by CHP plants (%)	55.04%	66.18%	56.06%	66.76%
Efficiency of electricity generation by power plants (%)	59.09%	None	64,13%	None

* A restatement has been made to take account of a change in the method of determining the volume of fuel supplied to produce electricity at cogeneration units.

[8] The volume of fuel supplied includes the fuel used by PTEP's heating plants.

Total investments in renewable energy

TABLE 42

	2022	
	ORLEN Group	PKN ORLEN
Investments in renewable energy [PLN thousand]	121,391	42,575

Energy sold by source

TABLE 43

	2022**		2021*	
	ORLEN Group	PKN ORLEN	ORLEN Group	PKN ORLEN
Electricity from own sources [MWh]	4,120,739	684,182	6,181,159	3,363,634
Electricity purchased from third-party suppliers (outside the ORLEN Group) [MWh]	25,458,469	2,568,216	24,859,688	1,694,145
Heat from own sources [GJ]	16,580,370	2,113,959	6,766,290	2,297,765
Heat purchased from third-party suppliers (outside the ORLEN Group) [GJ]	204,427	804	10,267	890
Cooling from own sources [GJ]	28,685	-	-	-

* A restatement has been to data on electricity sales at PKN ORLEN and changes to the volume and allocation of electricity sold by source at the ENERGA Group.

** Electricity sold includes sales from PGNiG S.A., PGNiG OD and PST of the PGNiG Group for the period from the acquisition date.

Provided below is the 'Energy sold by source' indicator for the full year 2022 for the former PGNiG Group and the former LOTOS Group.

TABLE 44

	2022	
	PGNiG Group*	LOTOS Group**
Electricity from own sources [MWh]	1,043,620	-
Electricity purchased from third-party suppliers (outside the ORLEN Group) [MWh]	9,616,416	1,773
Heat from own sources [GJ]	42,323,022	90,571
Heat purchased from third-party suppliers (outside the ORLEN Group) [GJ]	690,842	-
Cooling from own sources [GJ]	211,144	-

* PGNiG Group includes data from: TERMIKA SA, PTEP, PTER, PTP, PGNiG SA, PGNiG OD, PST.

** LOTOS Group includes data from the CHP plant in Gdansk Refinery, Energobaltic

Net energy output from renewable energy sources

The indicator includes electricity produced by wind, solar, biomass-fired and biogas-fired sources and hydroelectric power plants. Production from the Żydowo pumped-storage power plant has not been included.

TABLE 45

	2022		2021	
	ORLEN Group[9]	PKN ORLEN	ORLEN Group	PKN ORLEN
Electricity [MWh]	1,607,766	408	1,614,333	178
Heat [GJ]	893,223	-	695,298	-

[9] Total gross renewable electricity output at the ORLEN Group (excluding Żydowo pumped-storage power plant) in 2022 was 1,672,570

Provided below is the 'Net energy output from renewable energy sources' indicator for the full year 2022 for the Termika Group and the former LOTOS Group.

TABLE 46

	2022	
	PGNiG Group[10]	LOTOS Group[11]
Electricity [MWh]	166,611	-

[10] PGNiG Group: includes data from Termika S.A., PTEP, PTER, and PTP.

[11] LOTOS Group: includes data from the CHP plant of Gdansk Refinery and Energobaltic.

GHG emissions

GRI 11.1.1

Management of material topic: greenhouse gas emissions

Direct greenhouse gas (GHG) emissions at the ORLEN Group include CO_2 emissions reported under the EU Emissions Trading Scheme (EU ETS) and non-EU ETS emissions.

GRI 11.1.5

Direct (Scope 1) GHG emissions, by weight

Emissions of all greenhouse gases totalled **20,243,200 Mg, or 20,643,083 Mg** of CO_2 equivalent. The data is presented in the table below.

Greenhouse gas emissions at the ORLEN Group

TABLE 47 |

Substance	Emissions [Mg]		Emissions [Mg CO_2e][12]	
	2022	2021	2022	2021
carbon dioxide	20,230,972	17,652,018	20,230,972	17,652,018
methane (CH4)	11,934	1,958	334,156	54,827
sulfur hexafluoride (SF6)	0.00	0.33	0.00	7,837
nitrous oxide(1)	292	227	77,489	60,107
HFCs (total)	0.30	1.61	46,616	3,041
Total	**20,243,200**	**17,654,205**	**20,643,083**	**17,777,829**

[12] Calculated based on 100-year time horizon Global Warming Potential (GPW) values from the IPPC Fifth Assessment Report; 2022 data covers the companies of the former PGNiG Group and the former LOTOS Group incorporated into the ORLEN Group (for the periods from the date of their incorporation into the ORLEN Group, that is five months for the former LOTOS Group and two months for the former PGNiG Group).

[13] The emissions of HFC-125 (CHF2CF3), HFC-134 (C2H2F4), HFC-134a (CH2FCF3) and HFC-32 (CH2F2) were reported for the first time in 2022, with their value represented by the HFCs (total) indicator.

The amount of greenhouse gas emissions (as well as other substances) is provided without limiting values by share size in the companies reporting these emissions. This approach secures the accuracy of data presentation and is also indicated in the draft of European Sustainability Reporting Standards (ESRS) of the EFRAG EU body. The data was calculated according to the time horizon of the presence of the incorporated companies into the ORLEN Group.

PKN ORLEN's greenhouse gas emissions totalled **8,319,879 Mg**, or **8,321,594 Mg CO_2e**. The data is presented in the table below.

Greenhouse gas emissions at PKN ORLEN[14]

TABLE 48 |

Substance	Emissions [Mg]		Emissions [Mg CO_2e][15]	
	2022	2021	2022	2021
CO_2	8,319,815	8,017,579	8,319,815	8,017,579
methane (CH4)	64	4	1,778	109
sulfur hexafluoride (SF6)	0.00	0.00	0.00	0.00
N_2O	0.00	0.00	0.00	0.00
HFCs (total)[16]	0.28	-	0.63	-
Total	**8,319,879**	**8,017,583**	**8,321,594**	**8,017,688**

[14] PKN ORLEN includes assets located in Płock, Włocławek, fuel terminals and service stations, as well as the former PGNiG branches incorporated into PKN ORLEN;
[15] Calculations based on 100-year Global Warming Potential (GPW) values from the IPPC Fifth Assessment Report;
[16] As total HFC emissions comprise a mixture of different hydrofluorocarbons, converting them with the use of a global warming potential (GWP) conversion factor would be impracticable.

The greenhouse gas emissions of the former PGNiG Group and the former LOTOS Group as a percentage of the full-year 2022 emissions is presented in the table below.

TABLE 49

Substance	Emissions [Mg] 2022		Emissions [Mg CO_2e] 2022	
	LOTOS Group	PGNiG Group	LOTOS Group	PGNiG Group
CO_2	2,130,820	6,207,004	2,130,820	6,207,004
methane (CH4)	0.00	36,034	0.00	1,008,963
N_2O	0.00	56	0.00	14,845
HFCs (total), of which:	**0.00**	**0.22**	**0.00**	**365**
HFC-125 (CHF2CF3)	0.00	0.06	0.00	200
HFC-134a (CH2FCF3)	0.00	0.10	0.00	124
HFC-32 (CH2F2)	0.00	0.06	0.00	41
Total	**2,130,820**	**6,243,094**	**2,130,820**	**7 231177**

Calculated based on 100-year time horizon Global Warming Potential (GPW) values from the IPPC Fifth Assessment Report; the data presents full-year 2022 emissions of the companies of the former PGNiG Group and the former LOTOS Group, calculated using the operational control method.

In December 2022, PKN ORLEN published data on its Scope 3 emissions (for 2019–2021), which are other indirect emissions generated across the value chain, for instance from the use of products by end users, production of raw materials or intermediate products, waste management, transport of raw materials and products, or business travel. For the ORLEN Group, Scope 3 makes up about 80% of total emissions. More information is available at: ORLEN Group discloses its total carbon footprint. **Scope 2 and 3 emissions data for 2022 will be published in the second half of 2023.**

Air emissions

GRI 11.3.1

Management of material topic: air emissions

Air emissions are monitored through periodic and continuous measurements, so that compliance with emission limits defined in the relevant environmental permits is controlled on an ongoing basis. Emissions parameters are monitored by accredited laboratories using reference methodologies.

Substances accounting for the largest percentage of total air emissions from the ORLEN Group's installations include: sulfur dioxide, nitrogen oxides, carbon monoxide and dioxide, as well as particulate matter.

They are generated mainly from the combustion of fuels to produce electricity and heat, as well as in the refining and chemical processes. There are also emissions of volatile organic compounds (VOCs) and others emissions typical of industrial processes, including persistent organic pollutants (POPs) and hazardous air pollutants (HAPs).

GRI 11.3.2

Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions

In 2022, the ORLEN Group's total air emissions, including of carbon dioxide, were in excess of 20.2 million Mg.

The ORLEN Group's estimated air emissions of SO_2, NOx, CO and particulate matter in 2022 totalled nearly 41 thousand Mg, while CO_2 emissions were over 20 million Mg (mainly emissions from EU ETS installations).

The emission estimates for individual substances will be reviewed and the finally determined amounts will be published in the ORLEN Group's Integrated Report for 2022.

Air emissions of all ORLEN Group companies broken down by type of substance [in tonnes] are provided in the table below.

TABLE 50 |

	2022[17]	2021
Carbon dioxide	20,230,972	17,652,018
Sulfur dioxide	18,532	17,615
Nitrogen oxide	12,021	11,096
Carbon monoxide	8,289	6,880
Particulate matter, including	1,276	1,017

[17]The 2022 data covers the companies of the former PGNiG Group and the former LOTOS Group incorporated into the ORLEN Group (for the periods from the date of their incorporation into the ORLEN Group, that is five months for the former LOTOS Group and two months for the former PGNiG Group).

Following incorporation of the former PGNiG Group companies into the ORLEN Group, a new business segment, Gas, was identified in 2022.

Segment emissions data is provided in the table below.

TABLE 51 |

Substance	2022		2021	
	ORLEN Group[17]	PKN ORLEN[18]	ORLEN Group[17]	PKN ORLEN[18]
Carbon dioxide	20,230,972	8,370,987	17,652,018	8,017,579
Energy	10,157,237	4,661,400	7,411,618	4,616,438
Refining	6,943,221	2,626,618	5,059,243	2,556,613
Petrochemicals	2,940,860	1,031,797	5,136,824	844,528
Gas	95,707	51172	0	0
Upstream	92,076	0	2	0
Retail	205	0	225	0
Corporate functions	1,666	0	1,319	0
other	0	0	42,788	0

[17]PKN ORLEN includes assets located in Płock, Włocławek, fuel terminals and service stations, as well as the former PGNiG branches incorporated into PKN ORLEN;
[18]The 2022 data covers the companies of the former PGNiG Group and the former LOTOS Group incorporated into the ORLEN Group (for the periods from the date of their incorporation into the ORLEN Group, that is five months for the former LOTOS Group and two months for the former PGNiG Group).

TABLE 51 |

Substance	2022		2021	
	ORLEN Group[17]	PKN ORLEN[18]	ORLEN Group[17]	PKN ORLEN[18]
Sulfur dioxide	18,532	4,923	17,615	4178
Energy	4,877	1,409	5,090	947
Refining	13,412	3,493	12,277	3,228
Petrochemicals	241	21	238	3
Gas	2	0	0	0
Upstream	0	0	0	0
Retail	0	0	0	0
Corporate functions	0	0	0	0
other	0	0	10	0
NOx	12,021	4,363	11,096	4,197
Energy	5,993	2,321	5,412	2,226
Refining	3,360	1165	2,978	1,376
Petrochemicals	2,530	824	2,703	595
Gas	64	53	0	0
Upstream	70	0	0	0
Retail	1	0	1	0
Corporate functions	2	0	1	0
other	0	0	3	0
Carbon monoxide	8,289	2,785	6,880	3,430
Energy	2,646	346	1,759	182
Refining	2,214	1,231	3,282	2,355
Petrochemicals	3,342	1,162	1,836	893
Gas	48	45	0	0
Upstream	35	0	0	0
Retail	1	0	2	0
Corporate functions	3	3	0	0
other	0	0	0	0

TABLE 51 |

Substance	2022		2021	
	ORLEN Group[17]	PKN ORLEN[18]	ORLEN Group[17]	PKN ORLEN[18]
Total particulate matter	1,276	195	1,017	163
Energy	676	101	445	82
Refining	211	81	163	69
Petrochemicals	383	13	403	12
Gas	2	0	0	0
Upstream	2	0	0	0
Retail	1	0	1	0
Corporate functions	0	0	0	0
other	0	0	5	0

[17]PKN ORLEN includes assets located in Płock, Włocławek, fuel terminals and service stations, as well as the former PGNiG branches incorporated into PKN ORLEN

[18]The 2022 data covers the companies of the former PGNiG Group and the former LOTOS Group incorporated into the ORLEN Group (for the periods from the date of their incorporation into the ORLEN Group, that is five months for the former LOTOS Group and two months for the former PGNiG Group)

Other substance emissions from ORLEN Group companies' installations include volatile organic compounds (VOCs), which amounted to **10,559 Mg** in 2022. Persistant organic pollutant emissions totalled **0.04 Mg,** and hazardous air pollutant emissions amounted to -**780.3 Mg.**

For comparison, the table below shows full-year 2022 VOC, POP and HAP emissions data for the former PGNiG Group and LOTOS Group companies only.

TABLE 52 |

Compound emitted into the air	Emissions [Mg] in 2022"[19]	
	LOTOS Group	PGNiG Group
VOCS	104.00	1,314.00
POPS	0.00	0.01
HAPS	0.47	327

[19] the data covers the full year 2022

Waste

GRI 11.5.1

Management of material topic: waste

GRI 11.5.2

Waste generation and significant waste-related impacts

GRI 11.5.3

Management of significant waste-related impacts

The ORLEN Group is implementing a **Circular Economy Programme.** To this end, it is consolidating the ORLEN Group's operations related to waste recycling and waste processing into high-margin products and energy, for instance by **implementing a polymer recycling technology with an installed capacity of 300 thousand tonnes by 2030.**

Circular economy promotes rational use of resources and mitigation of adverse environmental impacts of manufactured goods, which – in common with materials and raw materials – should remain in the economy as long as possible, with waste reduced to a minimum.

PKN ORLEN engages in various projects and programmes designed to utilise alternative and waste materials. These include:

- **PIGOZ – a project to increase the use of waste materials in the circular economy system,** which focuses on recycling and reuse of plastic materials; It was launched in June 2020 and rolled out in close coordination with ORLEN Unipetrol under a parallel initiative of 'Spolu-Razem'. The project primarily aims to implement on an industrial scale and integrate chemical recycling of waste plastic at PKN ORLEN into traditional oil refining for the petrochemical industry, particularly polymers; obtain new products, new margins and new markets for circular polymers, including LDPE; implement pro-environmental policy contribute to the achievement of new levels of recycling; and decarbonise petrochemical production (final products). In 2022, work was in progress on the following workstreams:
- Research and Development (R&D)
- Development and Technology
- Sales and Market
- External Environment.

- **COMBO – a project seeking to use all municipal waste components** through deployment of technology that would be properly scaled to the morphological composition of waste. The project will use the following technologies:
  - Pyrolysis of plastic as feedstock for refining and petrochemical processes;
  - Thermal treatment of waste, e.g. gasification to produce hydrogen or generate electricity;
  - Biogas plants using biogas to generate electricity or as biofuel (biohydrogen).

Some of the tasks completed in 2022 were:

- Consultations concerning a waste sorting plant were held with the Technical Advisor.
- Work on a report concerning feedstock for a Waste Gasification, Pyrolysis and Sorting Plant was completed.
- A legal analysis of the possibility of purchasing land for the COMBO plant was commenced.
- An environmental analysis of the land to be used for the development of the COMBO plant was performed, which found no reasons against the construction of the plant.

The Group is also implementing the circularity project **Blue Bridge,** which will help to reduce raw water withdrawal from the Vistula river by around 25%. The project will also improve water quality in the Vistula owing to reduced water withdrawal as well as reduced municipal wastewater discharged into the river by the Płock municipal water works, Wodociągi Płockie.

The Blue Bridge project provides for the treatment of pre-treated municipal wastewater at the municipal treatment plant operated by Wodociągi Płockie, and transport of the treated wastewater to the water intake point of PKN ORLEN's production plant in Płock for use in industrial processes. In 2022, relevant agreements were signed between representatives of PKN ORLEN and the City of Płock. The project is due to be placed in service in 2025.

The initiatives planned as part of the circular economy programme also have a significant decarbonisation potential since mechanical and chemical recycling of plastics is a way to save significant amounts of energy and raw materials used in the manufacturing process.

GRI 11.5.4

Waste generated

GRI 11.5.5

Waste diverted from disposal

GRI 11.5.6

Waste directed to disposal

Waste generated by the ORLEN Group includes primarily waste from processing of crude oil, production of organic chemicals and fuel combustion, as well as sludge from treatment of industrial wastewater, waste oils and post-repair waste.

The total volume of waste other than municipal waste generated in 2022 by the Group companies exceeded 373 thousand Mg. Of the total waste volumes generated last year, 316 thousand Mg was transferred to licensed third parties for recovery or disposal, while 18.7 thousand Mg was transferred to licensed collection companies within the ORLEN Group. Group companies recovered almost 109 thousand Mg of waste generated internally and collected from third parties, and disposed of almost 153 thousand Mg of waste in their own facilities.

Water and effluents

GRI 11.6.1

Management of material topic: water and effluents

GRI 11.6.7

Water withdrawal

GRI 11.6.6

Water consumption

The ORLEN Group companies use water resources rationally in compliance with the required water permits or integrated permits. The companies conduct qualitative and quantitative monitoring of the water drawn and the wastewater discharged. The main source of water for the ORLEN Group companies is fresh surface water from the Vistula, the Elbląg, the Prosna, the Motława, the Jasiołka, the Łaba and other rivers.

To a lesser extent, the companies draw water from underground intake points, the water supply networks of ORLEN Group companies and third-party water supply networks

The volume of surface water, groundwater and mains water withdrawn by the ORLEN Group in 2022 totalled nearly 630 million m³, of which the largest amount was withdrawn by Energa Elektrownie Ostrołęka (499 million m³ of surface water and 365 thousand m³ of groundwater). The volumes are within the limits defined in the relevant permit. PKN ORLEN withdrew a total of 27.6 million m³ of water in 2022 for its Płock production plant, service stations and fuel terminals (including 27.1 million m³ of surface water and 0.5 million m³ of groundwater).

Water consumption across the ORLEN Group by source is presented in the table below.

TABLE 53 |

Water intake point	Water withdrawal [m³]	
	2022[20]	2021
surface water	623,959,655	512,998,351
groundwater	1,637,517	1,611,673
mains water	4,290,517	4,729,875
Total	**629,887,689**	**519,339,899**

[20]The 2022 data covers the companies of the former PGNiG Group and the former LOTOS Group incorporated into the ORLEN Group (for the periods from the date of their incorporation into the ORLEN Group, that is five months for the former LOTOS Group and two months for the former PGNiG Group).

In addition, Energa Wytwarzanie S.A. (formerly ENERGA OZE) withdrew 30.2 billion m³ of water for the operation of hydroelectric power plant turbines, and returned the same volume of water in unimpaired condition. Hydroelectric power generation involves returning of water, i.e. the water that flows through the power plant turbines is returned to the environment in the same amount and without any significant change in its physical and chemical parameters.

The reported rise in water intake in 2022 was an effect of the incorporation of the former PGNiG Group and former LOTOS Group companies into the ORLEN Group.

The table below presents total water withdrawal by the former PGNiG Group and the former LOTOS Group for the full year 2022.

TABLE 54 |

Water source	2022 [m³]	
	LOTOS Group	PGNiG Group
Groundwater intake	230,152	494,535
Surface water intake	4,518,339	233,704,864
Supply network water	10,876	1,706,509
Total	**4,759,367**	**235,905,908**

GRI 11.6.2

Interactions with water as a shared resource

GRI 11.6.3

Management of water discharge-related impacts

The ongoing climate change is taking a toll on the water resources in Poland and wider Europe. Recently, Poland has seen more frequent precipitation but of extreme nature causing flash floods and other extreme weather events, alternating with long periods of drought that can cause water shortages, calling for the need to protect water resources and carry out measures for their rational management.

The deficit of water resources has a direct impact on the activities and operations of plants in the ORLEN Group, including those related, for example, to the use of water for energy purposes.

The Group operates facilities located in areas characterised by water scarcity risks (source WWF Water Risk Filter – Maps). Among these installations, it is important to point out:

- installations in Kalisz (high risk),
- installations in Przemyśl (high risk),
- installations in Jedlicze (high risk),
- installations in Trzebinia (high risk),
- installations in Inowrocław (medium risk),
- installations in Ostrołęka (medium risk),
- installations in Włocławek (medium risk),
- installations in Płock (medium risk),
- installations in Mażeikiai (medium risk),
- installations in Litvinov (high risk).

GRI 11.6.5

Water discharge

Effluents from all ORLEN Group companies are directed to industrial and rain water sewage systems and then undergo treatment. The discharge of industrial wastewater after treatment is mainly into surface waters, while in the case of domestic wastewater, it is mainly discharged into the sewage facilities of external entities, and to a lesser extent into the environment. **Discharged wastewater is monitored. In 2022, the ORLEN Group's overall discharge volumes were over 599 million m³, including 598 million m³ of industrial wastewater.**

A detailed summary is provided in the table below.

TABLE 55 |

Effluent type	Receiver type	2022[21] [m³]
Domestic wastewater	**Total**	**436,385**
	third-party sewerage system	364,941
	surface water	40,595
	ground	30,849
Industrial wastewater	**Total**	**598,594,589**
	third-party sewerage system"=	423,046
	seawater	71,210
	surface water	598,082,070
	ground	18,263

[21]The 2022 data covers the companies of the former PGNiG Group and the former LOTOS Group incorporated into the ORLEN Group (for the periods from the date of their incorporation into the ORLEN Group, that is five months for the former LOTOS Group and two months for the former PGNiG Group).

With regard to the production plant in Płock and PKN ORLEN's fuel stations and terminals, the volume of wastewater in 2022 totalled 15.5 million m³, of which about 15.3 million m³ was industrial wastewater.

All wastewater undergoes a treatment process which includes mechanical, physical, chemical and/or biological treatments. Once wastewater is treated in accordance with the companies' integrated permits, it is discharged into rivers: Vistula, Oder, Narew, Elbląg, Elbe, Bílina, Dubulis, Obelaukis, Vltava, Jasiołka, Prosna, Brzeźnica, Ropa and Sowlina, and to the Baltic Sea. The remaining wastewater streams are directed to licensed operators engaged in professional wastewater management.

The volume of wastewater transferred to third parties (outside the ORLEN Group) was 787,987 m³, of which 423,046 m³ was industrial wastewater.

The total volume of treated wastewater discharged into the environment by all ORLEN Group companies amounted to more than 605 million m³ in 2022. Detailed data are shown in the table below.

TABLE 56 |

Effluent type	Volumes of treated effluents discharged into the environment [m³]	
	2022[22]	2021
industrial wastewater	598,171,543	494,392,004
other (including rainwater and meltwater)	7,595,521	8,198,390
Total	605,767,064	502,590,394

[22]The 2022 data covers the companies of the former PGNiG Group and the former LOTOS Group incorporated into the ORLEN Group (for the periods from the date of their incorporation into the ORLEN Group, that is five months for the former LOTOS Group and two months for the former PGNiG Group).

The presented increase in the volume of wastewater discharged into the environment was related to the incorporation of companies from the former PGNiG Group and the former LOTOS Group into the ORLEN Group structure in 2022.

The table below shows the volume of wastewater discharged only by the former PGNiG Group and the former LOTOS Group for the entire year 2022.

TABLE 57 |

Effluent type	Receiver type	LOTOS Group 2022 [m³]	PGNiG Group 2022 [m³]
Domestic wastewater	**Total**	**4,574**	**317,809**
	third-party sewerage system	4,574	317,809
	surface water	0	0
	ground	0	0
Industrial wastewater	**Total**	**1,610,458**	**232,354,300**
	third-party sewerage system	0	315,896
	surface water	1,610,458	232,019,738
	ground	0	18,666

Activities related to both water intake and wastewater discharge are closely monitored by ORLEN Group companies, as a result of their permits, implemented management systems and contracts with water and wastewater suppliers/consumers. This monitoring affects the rational and sustainable use of a resource such as water, and results in companies not reporting exceedances in the volume of water withdrawn and wastewater discharged. Monitoring of the above parameters is carried out using reference methodologies by accredited laboratories.

ORLEN Group companies carry out activities aimed at reducing the amount of water withdrawn, e.g. Energa Elektrownie Ostrołęka S.A. carries out the above task by using neutralised wastewater from the Process Water Preparation Station and partially rainwater-industrial wastewater to supplement losses in hydro-ash removal circuits.

Another example is Energa Centrum Usług Wspólnych Sp. z o.o., which conducts rational water consumption and a series of measures to reduce water consumption (e.g., automatic touchless faucets in sanitary rooms, dishwashers in kitchen areas, automatic drinking water dispensers). Another example is Rafineria Gdanska Sp. z o.o., which is also taking a number of measures to reduce environmental use in the area of water management, such as recovering and returning steam condensate. This has the effect of reducing both the amount of water drawn and the amount of wastewater discharged.

Treated wastewater at the ORLEN Lietuva refinery and at the production plant in Płock is partly reused, which reduces the amount of water withdrawn from the environment for utility and fire-fighting purposes. In 2022, ORLEN Lietuva and PKN ORLEN returned for reuse close by 4.6 million m³ and over 3.1 million m³ of wastewater, respectively.

In 2022, PKN ORLEN implemented the innovative Blue Bridge project, a pioneering venture in Poland **designed to reduce the amount of water abstracted from the Vistula River for industrial processes of the Company's production plant in Płock. A detailed description of the project can be found in the section on the circular economy.**

The table below summarises the volumes of water withdrawn and wastewater discharged into the environment by ORLEN Group and PKN ORLEN.

TABLE 58 |

Water and effluents	UoM	ORLEN Group[23]		PKN ORLEN	
		2022	2021	2022	2021
Total withdrawal of surface water, groundwater and mains water	mln [m³]	**629.9**	**519.3**	**27.6**	**24.1**
surface water		623.9	513.0	27.1	23.7
groundwater		1.6	1.6	0.5	0.4
Supply network water		4.3	4.7	0.0	0.0
Effluents discharged to the environment, including:		605.8	502.6	13.2	13.8
industrial wastewater		598.2	494.4	13.2	13.7

[23]The 2022 data covers the companies of the former PGNiG Group and the former LOTOS Group incorporated into the ORLEN Group (for the periods from the date of their incorporation into the ORLEN Group, that is five months for the former LOTOS Group and two months for the former PGNiG Group).

The table below ilustrates all environmental indicators with breakdown to ORLEN Group and PKN ORLEN.

TABLE 59 |

Environmental KPIs	UoM	ORLEN Group[24]		PKN ORLEN[25]	
		2022	2021	2022	2021
Total withdrawal of surface water, groundwater and mains water	mln [m³]	**629.9**	**519.3**	**27.6**	**24.1**
Surface water[26]		623,9	513.0	27.1	23.7
Groundwater[27]		1.6	1.6	0.5	0.4
Supply network water[28]		4.3	4.7	0.0	0.0
Effluents discharged to the environment, including[29]:	mln [m³]	**605.8**	**502.6**	**13.2**	**13.8**
industrial wastewater		598.2	494.4	13.2	13.7
Summary of selected substances[27]:	[tony]	**20,271,091**	**17,688,626**	**8,383,253**	**7,989,052**
Sulfur dioxide		18,532	17,615	4,923	4178
NOx		12,021	11,096	4,363	4197
Carbon monoxide		8,289	6,880	2,785	3,430
Particulate matter[28]		1,276	1,017	195	163
Carbon dioxide (EU ETS installations and other units)		20,230,972	17,652,018	8,370,987	7,977,084

TABLE 59 |

Environmental KPIs	UoM	ORLEN Group[24]		PKN ORLEN[25]	
		2022	2021	2022	2021
Total waste, including[29]	mln [m³]	**952,248**	**731,270**	**61,254**	**59,957**
Waste generated		373,464	295,710	39,623	35,173
Waste recovered[30]		108,821	86,068	0	0
Waste disposed of[31]		153,478	120,482	0	0
Waste transferred[32]		316,485	229,010	21,631	24,783

[17]PKN ORLEN includes assets located in Płock, Włocławek, fuel terminals and service stations, as well as the former PGNiG branches incorporated into PKN ORLEN;

[22]The ORLEN Group includes companies of the former PGNiG Group and LOTOS Group in the periods since they were incorporated into the ORLEN Group (two and five months, respectively);

[23]Surface water – total withdrawal from surface intakes fed by sources of water with a dry matter content 1,000 mg/l and with a dry matter content > 1,000 mg/l;

[24]Groundwater – total withdrawal from underground intakes fed water by sources of water with a dry matter content 1,000 mg/l and with a dry matter content > 1,000 mg/l;

[25]Withdrawal of supply network water from external suppliers;

[26]Wastewater discharged into surface water or the ground, excluding wastewater discharged into sthird-parties sewerage system or ORLEN Group companies;

[27]Emission volumes for 2022, not verified. The verified data will be published in 2023 in the ORLEN Group's Integrated Report for 2022;

[28]Particulate matter – total emissions of PM10 and PM2.5 fractions;

[29]Waste generated and managed during the reporting year, excluding municipal waste;

[30]Waste recovered at own facilities;

[31]Waste disposed of at own facilities through thermal treatment, landfilling and other disposal operations;

[32]Waster transferred to licensed operators outside the ORLEN Group for further management.

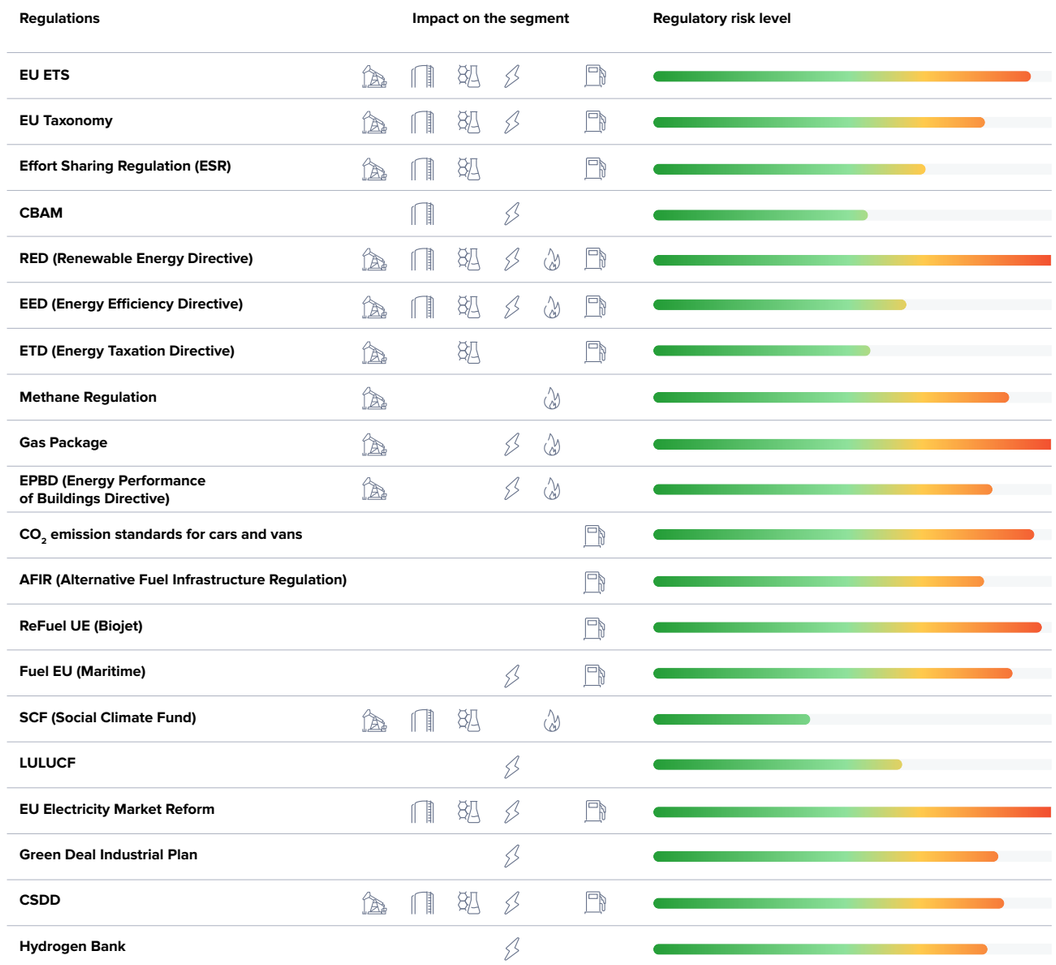
3. Due diligence procedures

Compliance with laws and regulations

Impact of regulations

The ORLEN Group analyses new regulations resulting from the European Green Deal on an ongoing basis and adjusts its business models accordingly. The ORLEN2030 strategy is designed to capture the opportunities created by Europe's economic transformation which aims to meet the obligations under of the Paris Agreement and implement the UN Agenda 2030.

SCHEME 9 |



Key external regulations affecting the ORLEN Group's business

European Green Deal

Regulation establishing the framework for achieving climate neutrality and amending Regulation (EU) 2018/1999 (European Climate Law). The Regulation sets out a binding objective of climate neutrality, including the achievement of net-zero greenhouse gas emissions (relative to 1990 levels) by 2050 at the European Union level, and requires the European Parliament, the Council, the European Commission and Member States to take measures both at Union and national level to enable the achievement of this objective.

Under the provisions of the Regulation, the European Commission (EC) is to assess the EU's 2030 climate target of reducing greenhouse gas emissions by at least 40% compared with 1990 levels in light of the objective of achieving climate neutrality by 2050. In particular, the EC will examine the possibility of setting the greenhouse gas emission reduction target for 2030 at 55% compared with 1990 levels and will consider adopting appropriate legislative proposals in this respect.

EU ETS

Implementation of secondary legislation for the fourth phase of the GHG emissions trading scheme, including the decision approving free allocations for 2021–2025. Issuance of the European Commission's guidelines amending the system of compensation for indirect emission costs for 2021–2030, which started a process to amend the Act on the Compensation Scheme for Energy-Intensive Sectors and Subsectors. Establishment of a dedicated state fund – the Energy Sector Transformation Fund following an amendment to the Act on the GHG Emission Allowance Trading System

EU Taxonomy

Regulation of the European Parliament and of the Council of June 18th 2020 on the establishment of a framework to facilitate sustainable investment (the EU Taxonomy). The Regulation establishes a framework for determining whether an economic activity qualifies as environmentally sustainable.

It introduces, among other measures, harmonised and transparent funding rules and support criteria for green investment projects, as well as provisions to prevent investing EU funds in carbon-intensive technologies.

Fit for 55

The Fit for 55 package of draft amendments to EU directives and regulations is to serve as a basis for implementing the EU's revised target to reduce greenhouse gas emissions by 55% by 2030. The new target is a major challenge, but also an opportunity for a fair economic transformation in Poland and across the European Union. If the proposed solutions are adopted, they will have a significant impact on the Polish and EU economy, which will directly affect PKN ORLEN's operations in the coming years. Key objectives: reduction of GHG emissions in the EU by 55% relative to 1990 levels by 2030, inclusion of the transport and construction sectors into the EU emissions trading scheme (EU ETS), raising the target for the share of renewables in energy generation from the planned 32% to 38%–40% by 2030, raising the energy efficiency target from 32.5% to approximately 38%–39% by 2030, introduction of the carbon border adjustment mechanism (CBAM), increase in the transport emission reduction targets.

GRI 2-27

Compliance with laws and regulations

The operation of units used by ORLEN Group companies is regulated by **integrated or sectoral permits**. The permits define emission limits which are safe for the environment and human health. Observance of those limits is monitored based on continuous and periodic measurements. Compliance with the requirements and obligations under applicable environmental laws and with the terms of applicable permits was also assessed through inspections carried out by environmental protection authorities.

In 2022, a total of **32 cases of non-compliance with environmental standards**, including those specified in the permits, were identified at ORLEN Group companies. They involved occasional incidents that did not result in any significant long-term negative environmental impacts.

In 2022, ORLEN Group companies underwent inspections by environmental authorities, which assessed their activities in terms of their impact on various components of the natural environment. Inspections were carried out in various areas, including waste management, wastewater management, use of natural resources, examination of the quality of surface water and discharged wastewater, analysis of air emissions, compliance with requirements applicable to operators of installations that require an integrated permit, scale of noise emissions and noise impact distance, management of green areas, compliance with requirements applicable to users of emission allowances, compliance with requirements for the safe storage and use of chemicals, compliance with fire regulations and requirements for the prevention of major accidents.

A total of **158 inspections were carried out, including: 123 scheduled inspections, 15 inspections made at the request of a Group company, and 20 emergency inspections** initiated on the basis of a notification from a third party. During 28 inspections, violations of the terms of applicable permits or decisions, and/or non-compliances with environmental standards were found.

The respective companies were required to implement post-inspection measures. In two cases a fine was imposed. Where possible, appropriate mitigation measures were promptly implemented to ensure that the companies' activities do not cause excessive environmental emissions of pollutants and do not result in exceeding the limits set by the applicable regulations, permits and decisions.

Based on the inspection findings, the respective companies were required to implement post-inspection measures. In only two cases fines were imposed, totalling PLN 53,940. PKN ORLEN's Płock and Włocławek production plants underwent 7 scheduled inspections and 2 emergency inspections.

PKN ORLEN's service stations, fuel depots and fuel terminals underwent 20 scheduled inspections, 8 inspections conducted at the Company's request, and 7 emergency inspections. In the case of 12 inspections, the following violations of applicable decisions and permits were identified: operation of units in breach of the terms of the relevant notification; exceeding permissible noise levels in connection with the operation of a car wash; exceeding the permissible pollutant volumes in sanitary sewage discharged into the ground; inaccuracy of information contained in the documentation of an upper-tier establishment; failure to update a service station notification with respect to air emissions; failure to review the notification of the accident prevention programme, safety management system, safety report and accident prevention programme before making changes to plant and process units; no manual describing safe operation of hydrocarbon recovery units; withdrawal of underground water from a well for a service station without the required water permit; local contamination of the aquatic environment with petroleum substances; no valid decisions on water permits for the discharge of car wash wastewater and rainwater into the sewerage system. As part of post-inspection measures, operators of the respective service stations, fuel depots and fuel terminals undertook to remove the identified deficiencies, for instance by providing the missing documentation (including technical documentation), obtaining the required decisions (including water-law permits), removing contamination, and reducing the scale of noise emissions and noise impact distance.

Opportunities and risks of the energy transition

TABLE 60 | Identification, assessment and management of climate-related risks and opportunities

Type of opportunity	Opportunity description	Financial impact
Energy efficiency	• Reduction of GHG emissions • Lower energy consumption at refining and petrochemical production facilities • More efficient and less carbon-intensive power and heat generation • More efficient and less carbon-intensive extraction of hydrocarbons • Reduction of water consumption • Recycling as an important business stream	• Less spending on EU ETS greenhouse gas emission allowances • Reduced energy consumption at refining and petrochemical production facilities • Less spending on imported energy supplies • Productivity gains generating higher revenue and profits • Investments in energy efficiency boosting the value of production facilities
Energy sources	• Diversified energy sources • Increased energy production from own sources, including RES • Improved energy independence through lower imports of traditional energy supplies • Development and scaling up of new technologies (e.g. SMR and CCUS)	• More stable and predictable revenue thanks to power and heat generation activities • Lower operating costs thanks to RES and nuclear energy activities • Less financial dependence on imports of fossil fuels and on prices of greenhouse gas emission allowances • Greater access to financing thanks to low- and zero-carbon energy activities
Products and services	• Delivery of zero- and low-carbon energy (clean electricity, low-carbon heat, green hydrogen, biomethane, biofuels, synthetic fuels) • Development of non-energy-intensive products and services, including petrochemicals • Business diversification driven by new technologies (e-mobility) • Shift in consumer preferences following business model change	• Zero-carbon products do not carry the cost of greenhouse gas emissions (lower carbon footprint) • Low- and zero-carbon products, preferred by consumers, generate higher profits than high-emission counterparts
Markets	• Activities in new sectors (energy, e-mobility, ORLEN Parcel) • Opening up to new markets in other countries • Ability to raise funding for projects supporting the energy transition (green finance)	• Ability to attract new customers through more diversified business • Development of new technologies (RES, hydrogen, recycling) as an opportunity for the ORLEN Group to enter new markets in other countries
Resilience	• Multi-utility group operating across multiple business segments • Diversification of profit sources • Diversification of costs	• Improved financial resilience thanks to more diversified revenue sources

TABLE 61 | Identification, assessment and management of climate-related issues – energy transition risks

Type of risk	Risk description	Financial impact
Regulatory risks	• Revision of the ETS (European Emissions Trading System) • ETS for the construction and transport sectors • End to free greenhouse gas emission allowances • Faster than expected increase in EU ETS carbon prices • Revision of the EED (Energy Efficiency Directive), which increases the energy efficiency target from 32.5% to 36-39% and sets out a number of measures and tools to reach it • Proposal for REDIII Directive (Renewable Energy Directive), providing for a 40% or 45% share of renewables in the EU energy mix • Revision of the ETD Directive (Energy Taxation Directive) • Much more stringent environmental standards for new combustion-engine vehicles: fewer cars and lower fuel consumption, possible ban on the sale of new combustion-engine cars in the EU as of 2035 • EU Taxonomy Regulation • Increased reporting requirements	• Lower revenue from fuel sales due to smaller number of permitted vehicles • Higher costs of GHG emission allowances increase cost of operations • Possible financial penalties for failure to meet the revised objectives of the EED and REDIII • Lower revenue from fuel sales due to increased taxation • Difficulties in financing projects that do not qualify as sustainable under the EU Taxonomy • Higher cost of operations due to the need to meet increased reporting requirements
Market risks	• Increased costs of traditional raw materials due to greater pressure on decarbonisation • Changing consumer preferences and mobility habits • Increased competition in the mobility market due to the electrification of transport (EVs and chargers) • Rapid growth of private competition (prosumers) in solar photovoltaics • International players as competitors in offshore power generation	• Increased and less predictable costs of energy supplies • Lower revenue in Refining and Petrochemicals due to a radical shift towards electric mobility and recycling • Lower revenue in the Energy segment and gas distribution business due to a significant decline in demand for electricity and heat, for instance as a result of the uptake of distributed generation • Lower revenue in the Energy segment due to increased activity of international competitors in low- and zero-carbon power generation • Decline in asset value due to lower attractiveness of companies engaging in high-emission business

Type of risk	Risk description	Financial impact
Technological risks	• Underdeveloped power infrastructure in Poland that does not align with the ambition to develop renewable-based power generation • Greater demand for hydrogen, biomethane and alternative fuels in energy, transport and industry • Insufficient battery production and electricity storage capabilities • Faster-than-expected technological change in electric mobility and power generation • Uncertainty as to the reliability and scalability of new technological solutions	• Inability to achieve the financial objectives because of inadequate power grid infrastructure • Too rapid development of alternative drives may reduce profits • Larger investments required in R&D&I and in adaptation to new technologies • Failure to achieve the expected return on investment in innovative technologies
Reputational risks	• Increased stakeholder concerns about valuations and the industry responsibility for climate change • Deteriorating image of the fuel and petrochemical sectors in the context of climate change – industry stigmatisation	• Constrained access to financing • Revenue decline on reputational issues • Increased costs of employee acquisition and retention

ORLEN Group as the leader of energy transition

By the end of this decade, the ORLEN Group will spend PLN 120bn on green projects encompassing its oil refining business, petrochemicals, conventional and renewable power generation, and retail operations. Under the updated strategy, the Company is pursuing a decarbonisation policy. By 2030, we will reduce greenhouse gas emissions in absolute terms by 25% in the refinery, petrochemical and mining segments, we will reduce the intensity in the energy segment by 40% and we will reduce the net intensity factor (NCI) by 15%

Management of climate-related issues has become an important goal of the Group's activities. For projects concerning renewable energy sources and new energy, the company will allocate PLN 70 billion. Pro-ecological activities developed within the Group include the development of the renewable energy sector, investments in biogas and biomethane plants and the development of assets producing and distributing renewable hydrogen. ORLEN is upgrading its traditional areas of business to improve the energy efficiency of production, reduce carbon emissions and minimise their environmental impacts.

The ORLEN2030 strategy includes the ambitious goal of achieving climate neutrality by 2050, in line with the Paris Agreement.

Development of wind power generation

Offshore wind farm projects are a key component of the ORLEN Group's transition, set to play a major role in the development of Poland's energy sector. The Company has submitted applications for seven new licences to develop offshore wind farms in the Baltic Sea. Once the next stage of the administrative procedure is launched, it will apply for the other four licences up for award in the region. The total capacity that could be developed in the areas covered by the applications is estimated at around 7 GW.

Wind farm development plans also provide for the ORLEN Group's involvement in projects carried out in Baltic states.

The Group companies ORLEN Neptun I and Energa Wytwarzanie have signed a letter of intent to cooperate with Klaipėdos Nafta AB in developing and implementing a strategy to operate and maintain offshore wind farm projects in Lithuania. As part of the preparation for work on the future construction site of Lithuania's first offshore wind farm, new investments are being made in equipment to support that work. The ORLEN Group company LOTOS Petrobaltic has uniquely equipped Poland's first vessel with a drilling system for geoengineering seabed surveys at depths of up to 120 metres. The investment will open up more advanced applications in the offshore wind sector and will enable seabed surveys for wind power developments, including the Group's own and third-party projects.

Preparations are under way for the construction of the Baltic Power offshore wind farm, a joint project between the ORLEN Group and Northland Power. The farm, with a capacity of up to 1.2 GW, will be located about 23 kilometres off the coastline, near Choczewo and Łeba. It will be able to generate clean energy for more than 1.5 million households. In connection with the project, Poland's first installation terminal is being built in Świnoujście, scheduled to be operational in early 2025. The facility, together with a second installation port to be built in Gdańsk, will be able to provide a comprehensive range of services for all wind projects in the Baltic Sea. In addition a new factory of Vestas, the world's largest manufacturer of wind turbines, will be built in Szczecin. These processes prove that offshore wind farms promise not only to revolutionise the national energy system, but can also provide a major boost to economic development of the whole region. Construction works on the Baltic Power wind farm will begin in 2024 and last until 2026. In July, Baltic Power signed an agreement with Cadeler of Denmark to support the transport and installation of some 76 turbines for offshore wind farm. The company also signed system support agreements for the supply of onshore export cables and the construction of an onshore substation.

It also secured all key elements necessary to execute the project, with a supply chain that includes local content.

Investing in solar PV projects

The ORLEN Group has completed a project to construct one of Poland's largest solar PV farms, located near Wielbark (Province of Olsztyn). The 62 MW solar farm will generate clean energy sufficient to power more than 30 thousand households.

Clean energy from small nuclear sources

PKN ORLEN in partnership with Synthos Green Energy is at an advanced stage of preparation for the implementation of the small and micro modular reactor (SMR and MMR) technology. The Company has exclusive rights to use GE Hitachi Nuclear Energy's BWRX-300 in Poland. Building such a reactor takes only about one-third of the time needed to construct a traditional large-scale nuclear power plant. Also, construction costs per MW are roughly 30% lower compared with conventional nuclear projects. A small nuclear reactor with a capacity of ca. 300 MWe is capable of generating sufficient energy to power a city with a population of about 150,000. The estimated generation costs per MWh of electricity will ultimately be about 30% lower compared with gas-fired generating sources.

What is equally important, a single modular reactor of about 300 MWe can reduce emissions by some 0.3 to 2.0 million tonnes of carbon dioxide per year, depending on the type of fuel being replaced (for example, hard coal or lignite).

Biomethane as a green alternative to natural gas

At the beginning of 2022, PKN ORLEN was the first company in Poland to import from RWE Supply & Trading certified biomethane, a renewable substitute for natural gas, as part of a pilot project. Having similar quality characteristics, such biomethane is produced from organic waste, thus reducing the usage of fossil fuels. It is produced in a process of purifying biogas, mainly by removing carbon dioxide as well as sulfur and nitrogen compounds. It can be used as fuel for the production of biohydrogen and has applications in transport or – when mixed with natural gas – can be delivered by pipeline to end consumers of traditional gas fuel. It is also possible to store it in gas storage facilities.

The ORLEN Group's biomethane capabilities are mainly being built through ORLEN Południe. The company has already acquired three agricultural biogas plants that will convert agricultural substrates, waste and processing industry residues into environmentally friendly biomethane, which may find application in industry or in the energy sector. ORLEN Południe, jointly with PGNiG, will establish a special purpose vehicle to invest in the development of a network of modern biomethane production plants.

The Office of Competition and Consumer Protection has given its clearance for the establishment of the SPV. PKN ORLEN has also signed an agreement for the development of the biogas and biomethane sector with the Ministry of Climate and Environment, a Government Representative for Renewable Energy, the Ministry of Agriculture and Rural Development, the Ministry of State Assets, the Ministry of Education and Science, the Ministry of Development and Technology, as well as representatives of investors, trade organisations, scientific institutions, etc.

ORLEN as a future leader of hydrogen economy in Europe

Involvement in projects to develop alternative fuels is another element of the strategy aligned with PKN ORLEN's goal to achieve carbon neutrality by 2050. By 2030, the Company will spend PLN 7.4bn by 2030 on low- and zero-carbon hydrogen development projects based on renewable energy sources and municipal waste conversion technology. The ORLEN Group Hydrogen Strategy will be implemented in four key areas: mobility, refining and petrochemicals, research and development, and industry and energy. As a result, ten hydrogen hubs will be developed by the end of the decade, with motorists in Poland, the Czech Republic and Slovakia provided with access to a network of over 100 hydrogen refuelling stations. The projects will support the ORLEN Group's transformation into a carbon-neutral multi-utility group.

Hydrogen Valley

In the pursuit of its hydrogen strategy, PKN ORLEN signed an agreement with 37 entities, representing business, science and finance, to establish the Mazovian Hydrogen Valley. Collaboration on the project aims to create a centre for research, development, improvement and education seeking to harness the economic opportunities of hydrogen. It will encompass the production, storage and use of zero- and low-carbon hydrogen in transport, power generation, utility services and agriculture, among other applications. The Mazovian Hydrogen Valley will function based on four pillars. The main pillar will be to build a hydrogen value chain in the region of Mazovia, as exemplified by the first hydrogen projects planned by PKN ORLEN, including hydrogen hubs in Płock and Ostrołęka, a prototype hydrogen-powered locomotive and hydrogen refuelling stations. The other pillars will involve implementing research and development projects, putting in place systemic solutions to train specialised personnel, and engaging in activities to support regulatory processes. According to Poland's Hydrogen Strategy, at least five hydrogen valleys will be established throughout the country to develop technologies based on this fuel.

E-mobility

As at the end of 2022, the ORLEN Group had a network of 470 electric vehicle charging stations in Poland. Currently, the charging stations available on the Polish market are predominantly based on low-power alternating current (AC) systems, but the Group is seeking to gain an advantage by expanding its range of direct current (DC) charging infrastructure. Nearly 140 fast charging stations with a power output between 50 and 150 kW and 2 with a power output up to 50 kW are currently in operation within the ORLEN Group's Polish station network. Chargers deployed at the Group's service stations are equipped with DC connectors (CHAdeMO, CCS) and AC Type 2 connectors, accommodating almost all types of electric vehicles available globally. In Germany and the Czech Republic, there are 86 fast charging stations with a power output ranging from 50 to 150 kW and 8 with a normal power output up to 50 kW. To implement its electric mobility plans, in 2022 PKN ORLEN issued a request for proposals to commission a feasibility study for multiple-point electric vehicle charging stations. The tender is open to all companies meeting the formal requirements. In the coming months, PKN ORLEN will also explore the market for a range of services including engineering consultancy, construction works and delivery of equipment. Planned procurement of such services is in line with the strategy, aiming to strengthen the ORLEN Group's position in the sector of Polish operators of public EV charging stations.

Mobility

June 2022 saw the launch in Kraków of Poland's first mobile hydrogen refuelling station, operated by PKN ORLEN. Hydrogen from the ORLEN Group's biorefinery in Trzebinia powers the cells of a zero-emission bus tested on public transport routes in Kraków. In Poznań PKN ORLEN and the Municipal Transport Company (MPK) signed a contract for the supply of hydrogen fuel to power zero-emission city buses.

It is Poland's largest hydrogen project of that type to date, and one of very few such projects in Europe. As regards private transport – in early 2023, ORLEN launched its first publicly available hydrogen refuelling station in Prague, the Czech Republic, soon to be followed by the first public stations in Poland, including in Wałbrzych, Poznań, Katowice, Bielsko-Biała, Gorzów Wielkopolski, Kraków, Warsaw and Piła. They are being deployed as part of the flagship project 'Hydrogen Eagle', approved by the European Commission under the IPCEI (Important Project of Common European Interest) Hy2Use programme.

ORLEN's future investments in hydrogen are expected to cover the marine, aviation and rail fuel sectors. PKN ORLEN and PESA Bydgoszcz have already signed a strategic cooperation agreement to develop a comprehensive offering for public rail transport. Under the agreement, PKN ORLEN will provide hydrogen fuel and refuelling infrastructure for PESA-manufactured shunting locomotives and passenger trains. The cooperation will facilitate development of a carbon-neutral commercial offering for public transport organisers and operators of logistics centres, transshipment terminals and ports.

Circular economy investments

PKN ORLEN is always on the lookout for innovative solutions that can strengthen the competitive position of its business with a positive impact on the environment. For instance, as a pioneer in Poland, it is implementing the innovative 'Blue Bridge' project, designed to enable a 25% reduction in the amount of water abstracted from the Vistula River to support industrial processes of the Company's Production Plant in Płock. Together with its partner Wodociągi Płockie, the local water utility company, PKN ORLEN signed a letter of intent with the State Water Management Agency PGW Wody Polskie providing for the construction of a recycling system for wastewater streams coming from the municipal treatment plant for reuse by the Company. The project, which is in line with the circular economy concept, will be put into operation in 2025.

Upgrades to reduce air pollutant emissions

The ORLEN Group's green transition is also based on low-carbon refining and petrochemical production. In March 2022, the construction of a new unit commenced on the premises of the production plant in Płock, which will enable further reduction of sulfur compound emissions into the atmosphere. The value of the project, which is consistent with the objectives of the ORLEN2030 strategy, is estimated at about PLN 346m. The construction of the TGTU III unit will make it possible to reduce pollutant emissions, which means that gas with about half the sulfur dioxide content will ultimately enter the atmosphere from the unit. At the level of the entire production plant in Płock, the project's implementation will bring about a reduction in sulfur dioxide emissions by more than 20%. The unit is scheduled for commissioning in the middle of 2024.

Petrochemical recycling to help replace crude oil

ORLEN Unipetrol's Czech plant in Litvínov has obtained certification enabling petrochemical production using hydrogenated vegetable oils (HVO). HVOs are a recycled bio-based material that can partly replace crude oil as feedstock for the production of biocomponents for fuels and monomers and polymers. HVO can be produced from such raw materials as the widely available used cooking oils from the hospitality industry, until recently treated as waste. Tests carried out at the ORLEN Unipetrol plant in Litvínov confirmed that products obtained using HVO have the same properties as materials made entirely from conventional inputs. Produced in the Czech Republic, bio-circular polypropylene is a plastic widely applied in the construction, automotive and packaging industries, which will be used for further testing and research.

Aviation fuel from used cooking oils

In parallel with the launch of HVO processing in the Czech Republic, the ORLEN Group is developing an innovative technology for hydrogenation of used cooking oils at its refinery in Płock.

An HVO unit will be built at the plant by 2024, with hydrogenation technology for rapeseed oil, used cooking oil (UCO) or their mixtures introduced on an industrial scale. The end product will be used as an additive to diesel oil or JET aviation fuel.

In line with the ORLEN2030 strategy, the Group is implementing a number of biofuel, biomaterial and recycling projects aligned with circular economy goals. The hydrotreated vegetable oil plant currently under construction in Płock will enable PKN ORLEN to offer a low-carbon sustainable aviation fuel (SAF) to airlines starting from 2025. The innovative product will offer a reduction of up to 80% in carbon emissions over the lifecycle of the fuel compared to traditional jet fuel and is suitable for jet engines used in aircraft today. PKN ORLEN and PLL LOT have signed an agreement on cooperation in implementing pro-environmental solutions helping to meet the requirements of the EU's Fit for 55 package.

ORLEN betting on innovative bio-based products

The ORLEN Group has launched Poland's first pilot plant for the production of organic lactic acid using microorganisms.

It is a bioproduct that is steadily growing in demand around the world. The PLN 10m project is sited at ORLEN Południe's refinery. The annual output of 5 thousand tonnes would cover more than half of domestic demand for the bioproduct, which has a broad range of modern industrial applications, including in the chemical, food production (as an acidulant, preservative and agent improving the texture and volume of baked products), cosmetic and pharmaceutical industries. The organic lactic acid can also be used to make materials serving as an alternative to plastic. Polylactic acid (PLA) made from lactic acid is an input in the manufacture of biodegradable packaging and other products. PLA is applied in construction, engineering, optics and automotive industries. Due to its properties, including transparency, it is also used to make PV solar cells. The green project implemented by ORLEN Południe will mark another big step on the way to transform the company into a state-of-the-art biorefinery.

GRI 11.4.1

Management of material topic: biodiversity

Both PKN ORLEN and the other ORLEN Group companies make every effort to ensure that their activities have no direct or indirect impacts on local biodiversity, and if such impact is nevertheless identified – that it is contained to the smallest possible area, with mitigation and ecological restoration measures taken in each case. The ORLEN Group's main production and administrative facilities are located outside protected areas and do not meet the criteria to be considered relevant to ichthyofauna (marine areas), which means they do not affect the cohesion and integrity of such areas, changing habitat conditions or affecting protected species.

GRI 11.4.3

Significant impacts of activities, products, and services on biodiversity

All projects undertaken by the ORLEN Group have relevant permits required by the Polish law, and assessments of their potential impacts on areas with a high biodiversity value or protected areas are reviewed by authorities competent to issue environmental decisions. The procedure involves an environmental or Natura 2000 site impact assessment, covering potential impacts on protected habitats, as well as plant and animal species. The terms of environmental decisions are such as to limit to the extent possible the potential impact of implemented projects on protected areas, but also areas with a high biodiversity value located outside of protected areas.

The ORLEN Group companies operate based on environmental permits obtained, which strictly define the framework conditions for use of the environment, including use that may involve biodiversity impacts. The conditions of such permits are complied with through close monitoring of the impact of a plant's operations on various components of the environment. In addition, the ORLEN Group companies initiate all kinds of activities designed to protect biodiversity.

Noteworthy examples include: **avifauna monitoring in accordance with the guidelines of relevant environmental decisions (Energa Elektrownie Ostrołęka S.A.), mounting fish passes at successive facilities for fish and other aquatic organisms to move around man-made barriers, participation in restocking of rivers and lakes with fish, environmental education among contractors (Energa Wytwarzanie S.A.), educational activities held as part of the Blue School project (Rafineria Gdańska Sp. z o.o.), or process upgrades, e.g. involving the flare discharge process, to reduce pollutant emissions (Rafineria Gdańska Sp. z o.o.).**

GRI 11.4.4

Habitats protected or restored

GRI 11.4.5

IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk

The principal business sites of the ORLEN Group, namely PKN ORLEN's production plant in Płock, ANWIL plant in Włocławek, facilities owned by the Energa Group, ORLEN Unipetrol and Spolana, are wildlife-rich areas, being home to rare species, in some cases protected by Polish and international law. Many of them are included in the International Union for Conservation of Nature's Red List of Threatened Species. This was confirmed by experts conducting wildlife surveys, consisting in field observations of local flora and fauna species. A notable fact is that the list of species living near the ORLEN Group's plants includes many animals that are sensitive to the quality of the environment.

Despite the practice adopted at the ORLEN Group that new projects and infrastructure should not be sited within protected areas, sometimes there are no alternative options.

This is for example the case with gas networks (Polska Spółka Gazownictwa) or hydropower projects (Energa Wytwarzanie). Protected areas where facilities operated by those ORLEN Group companies are located or through which they run include: Natura 2000 sites, nature reserves, national/landscape parks, and landscape protection areas.

Presented below are detailed biodiversity characteristics of those areas, as described by the respective ORLEN Group companies.

PKN ORLEN – The production plant in Płock is located outside of protected areas, but in its immediate vicinity is the Nature and Landscape Complex of the Brzeźnica River Ravine, Vistula River Landscape Protection Area and the buffer zone of the Brudzeński Landscape Park.

Activities of the **former LOTOS Group** companies are not carried out in protected areas with a high biodiversity value. Exploitation of oil and gas deposits in offshore areas (B3 and B8 fields) is conducted in the vicinity of a special bird protection area, but such activities do not change habitat conditions or affect protected species, nor do they affect the cohesion and integrity of those areas.

ORLEN Aviation's activities are conducted within the buffer zone of the Bielańsko-Tyniecki Landscape Park, buffer zone of the Tri-City Landscape Park, the Warsaw Landscape Protection Area and the Forty Modlińskie Natura 2000 site (code: PLH140020).

Hydropower facilities owned by **Energa Wytwarzanie S.A.** are located within bird and habitat areas of the Natura 2000 network, and some of them are also located within landscape protection parks.

The company minimises the impact of its hydropower facilities on biodiversity of rivers and lakes by, among other measures, constructing fish passes, restocking these water bodies with fish, cooperating with external entities in scientific research on selected fish species, and – in the case of wind farms – detailed monitoring of bird and bat interactions with the wind turbines. There are 35 protected areas affected by the company's activities, including Natura 2000 habitat sites, Natura 2000 bird sites, landscape protection areas, nature reserves, the Dolina Słupi Landscape Park with its buffer zone, and the Słowiński National Park (buffer zone). The protected areas listed above are home to about 200-500 species included in the International Union for Conservation of Nature's Red List of Threatened Species.

Energa Elektrownie Ostrołęka S.A.'s non-hazardous and inert waste landfilling operations are located within the boundaries of the Lower Narew Valley Natura 2000 site.

In accordance with the guidelines set out in the relevant environmental decisions, the company conducts avifauna monitoring within the landfill area. In 2022, bird species included in the Red List of Polish Birds were spotted at the landfill, including the ruff, wood sandpiper (critically endangered birds), black tern, and tawny pipit (birds at risk of extinction); during the breeding season, a breeding habitat of two pairs of tawny pipits was observed; resting birds spotted included 21 specimens of Eurasian curlew (endangered), up to 10 specimens of wigeon (critically endangered) and pintail (critically endangered); among migratory birds were the black tern and tawny pipit, as well as the ruff and wood sandpiper.

Operations of the **former PGNiG Pakistan Branch** are located approximately 80 km away from Kirthar National Park, where animal species from the IUCN Red List have been observed, including the golden eagle, graceful prinia, imperial eagle, rosy starling, tawny pipit, white browed pied wagtail, Balochistan pygmy jerboa, Indian pangolin and striped hyena.

ANWIL S.A. operates in the vicinity of two Natura 2000 sites, namely Włocławska Dolina Wisły (Włocławek Vistula River Valley, code: PLH040039) and Dolina Dolnej Wisły (Lower Vistula River Valley, code: PLB040003). **A wildlife survey undertaken in 2018 for the site of the ANWIL S.A. plant and its surroundings revealed the presence of more than a dozen protected species, including one plant species.**

Rafineria Gdańska conducts its operations within the Żuławy Gdanskie area, on the southern bank of the Martwa Wisła River. The nearest protected areas are the Ostoja w Ujściu Wisły Natura 2000 site, which is about 800 m away, as well as the Ujście Wisły Special Bird Protection Area and the Ptasi Raj Nature Reserve, located about 2 km away. **Rafineria Gdańska Sp. z o.o. is making upgrades to its processes on a continual basis, including the flare discharge process, thereby reducing pollutant emissions**

Initiatives supporting biodiversity and endangered species include peregrine falcon protection efforts, with a nesting box hung in 2008 by the SOKÓŁ Wildlife Protection Association on the company's CHP plant stack, in which new falcon hatchlings have been observed since 2013, also online. In partnership with the Gdańsk University Development Foundation and the Hel Marine Station of the Gdańsk University, Rafineria Gdańska Sp. z o.o. is also participating in the 'Headed for the Baltic' environmental project.

The project included a set of initiatives to protect biodiversity of the Baltic Sea, including the porpoise, an endangered species also known as the Baltic dolphin, and the grey seal. Strong emphasis was also placed on environmental education and awareness of the problem related to the presence of plastics and microplastics in the Baltic Sea. In 2022, educational activities of the Blue School were attended by about 15,000 students, while the outdoor educational events in the Pomerania region attracted some 13,000 participants. A place where local biodiversity is concentrated and where rare and protected species have been found is the Martwa Wisła River. Following a wildlife survey carried out in 2014, 15 sites of five natural habitats covered by European and Polish regulations were identified at the Lotos Group's refinery and within the surrounding area. As a result of the survey, 14 species of protected plants were catalogued in the plant's vicinity (including the broad-leaved marsh orchid Dactylorhiza majalis, sea milkweed Glaux maritima, sea arrowgrass Triglochin maritimum, and adder's tongue Ophioglossum vulgatum). The presence of two species included in Annex II to the Habitat Directive, namely the European beaver Castor fiber and the European otter Lutra Lutra, was also recorded. 123 species of birds were identified, of which 83 were breeding and likely breeding taxa, and the remaining 40 were migratory, nomadic or visiting species.

The breeding species include the white stork (C. ciconia), Western marsh harrier (C. aeruginosus), peregrine falcon (F. peregrinus), crane (G. Grus), woodlark (L. arborea), tawny pipit (A. campestris) and red-backed shrike (L. collurio). The survey also identified the presence of three endangered and protected saltwater fish species (the broadnosed pipefish, straightnose pipefish and sand goby).

Polska Spółka Gazownictwa Sp. z o.o. – in 2022, it obtained seven environmental decisions for projects sited within protected areas or within a 500 m distance from protected areas.

- Gas Company Branch in Kraków – the nearest protected area is the Natura 2000 special habitat protection site code PLH120091; **direct impacts on biodiversity: destruction of a part of calaminarian grassland habitat (6130), cutting of trees in the assembly line;**

- Gas Company Branch in Gdańsk – the project site crosses protected areas, i.e. the Natura 2000 sites: Studzienieckie Torfowiska (code: PLH220028), Bory Tucholskie (code: PLB2200009) and Wielki Sandr Brdy (code: PLB220001), the Zaborski Landscape Park, Lipuski Landscape Protection Area, and Chojnicko-Tucholski Landscape Protection Area. Also located in the vicinity are the Las nad Jeziorem Mądrzechowskim Nature Reserve, Dolina Słupi (code: PLH220052) and Sand Brdy (code: PLH 220026) Natura 2000 sites, as well as 10 ecological use areas. **direct impact on biodiversity: cutting of trees and shrubs in the assembly line, habitats exposed to disturbance: 2330 Inland dunes with open Corynephorus and Agrostis grasslands, 6510 Lowland and mountain hay meadows, 91T0 Lichen pine forest.**

- Gas Company Branch in Gdańsk – the project site is located within the boundaries of the Żuławy Gdańskie Landscape Protection Area, Central Żuławy Landscape Protection Area, Nogat River Landscape Protection Area, and Lower Vistula Valley Natura 2000 site (code: PLB040003); **direct impact on biodiversity: cutting of trees.**

- Gas Company Branch in Olsztyn – 'Construction of an LNG regasification station on plot No. 842, Piecki cadastral district' project implemented within the Puszcza Piska Natura 2000 site (code PLB280008); no direct or indirect impacts on biodiversity.

- Gas Company Branch in Olsztyn – 'Construction of the Konopki – Ełk – Mrągowo high-pressure gas pipeline with infrastructure (...)' project implemented within protected areas: the Natura 2000 site Bagna Nietlickie (code: PLB280001), Orzyskie Lakes Landscape Protection Area, Land of Great Mazurian Lakes Landscape Protection Area, Krzyżany Landscape Protection Area, Legińsko-Mrągowskie Lakes Landscape Protection Area, Natura 2000 sites: Ostoja Orzysz Poligon (code: PLB280014), Bagna Nietlickie (code: PLB280001), Mazurskie Bagna (code: PLH28005), Nietlickie Bagno Nature Reserve, Mazurian Landscape Park, and Ełk Lake District Landscape Protection Area. **Direct impact on biodiversity: cutting of trees.**

- Gas Company Branch in Jasło – the project is located near the Wspólnoty nad Husowem Site of Community Importance (code: PLH180025); **direct impact on biodiversity: cutting of trees outside forest area.**

- Gas Company Branch in Białystok – the planned project site is located within the boundaries of the Northern Suwalszczyzna Lake District Landscape Potection Area, and Jeleniewo Natura 2000 special habitat protection site (code: PLH200001); no direct or indirect impact on biodiversity.

Activities of GEOFIZYKA Toruń S.A. have a short-term direct impact on biodiversity only during a project's implementation. Protected areas in the vicinity of the company's projects include: Lupa Reserve, Natura 2000 sites: Lasy Sieniawskie (code: PLH180054), Bory Babimojskie (code: PLH080063), Rynna Jezior Obrzańskich (code:PLH080002), Pojezierze Sławskie (code: PLB300011), Jeziora Pszczewskie i Dolina Obry (code: PLB080005), Barycz Valley Landscape Park, Natura 2000 sites: Barycz Valley (code: PLB020001), Ostoja nad Baryczą (code: PLH020041), Chłodnia w Cieszkowie (code: PLH020001), Milice Ponds Nature Reserve, Natura 2000 sites: Uroczyska Płyty Krotoszyńskiej (code: PLH300002), Dąbrowy Krotoszyńskie (code: PLB300007); Natura 2000 sites: Dolny Dunajec (code: PLH120085), Biała Tarnowska (code: PLH120090), Natura 2000 site: Walaszczyki in Częstochowa (code: PLH240028), buffer zone of the Upper Liswarta River Forest Landscape Park; Natura 2000 sites: Dolina Mogielnicy (code: PLH300033), Ostoja Wielkopolska (code: PLH300010), Będlewo-Byczyny (code: PLH300039), Ostoja Rogalińska (code: PLB300017), buffer zone of the Wielkopolski National Park.

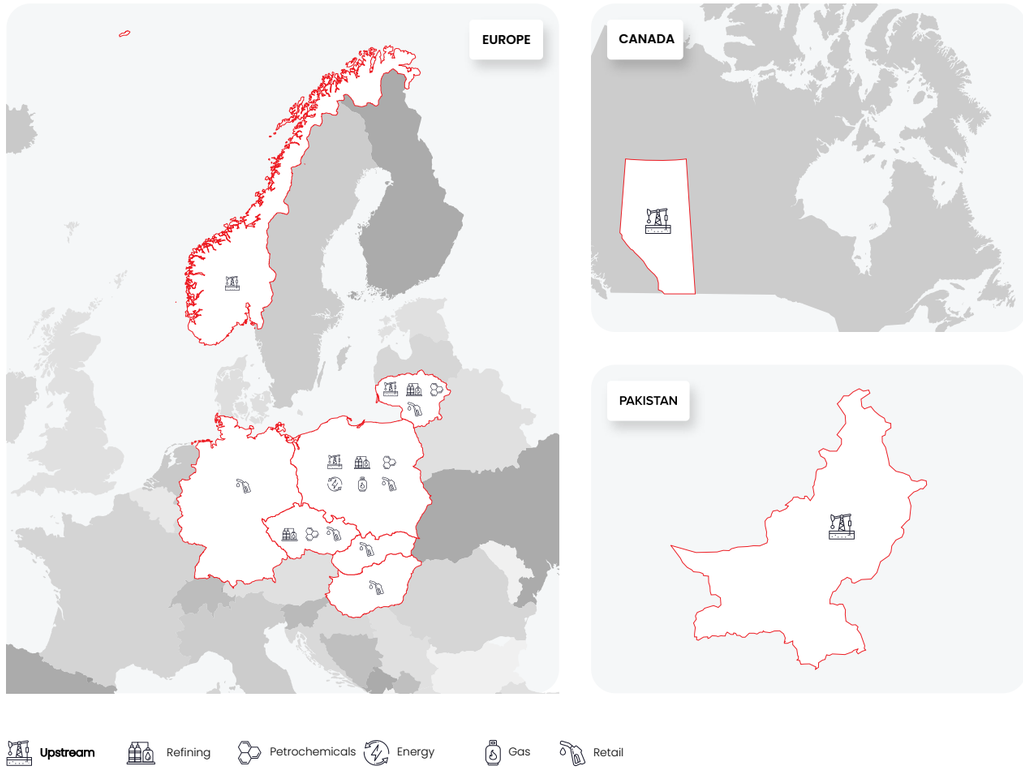
The ORLEN Group takes a number of initiatives to promote biodiversity and support protected species. These include: joining the project to restore the peregrine falcon population (PKN ORLEN, ANWIL, UNIPETROL, Rafineria Gdańska), protection of the white stork species in Poland (Energa Group), measures to preserve the honeybee (PKN ORLEN, former LOTOS Group, ORLEN Eko, UNIPETROL), sowing of flower meadows (PKN ORLEN, ENERGA, ORLEN Laboratorium, ORLEN KolTrans, ORLEN Południe), planting of forests (PKN ORLEN, ORLEN KolTrans, ORLEN Lietuva), reclaiming land and landfill sites, including for sports and recreation (Energa, PGNIG TERMIKA), waste collection and clean up the world campaigns (PKN ORLEN, ANWIL, ORLEN Eko, ORLEN Południe), and many lesser initiatives that significantly support the preservation of biodiversity and environmental education of local communities.

4. Management of environmental and climate risks

TABLE 62 | Identification, assessment and management of climate-related risks and opportunities – physical risks

Type of risk	Risk description	Financial impact	Mitigation measures
Acute climate risks	• Increased probability of local floods caused by rainfall irregularities • Coastal floods • Heat waves (at least three consecutive days with temperatures above 30 degrees) • Fires • Storms, winds, tornadoes • Significant changes of temperature • Sudden changes of atmospheric pressure • Sudden • freezing and thawing of water and ground • Landslides	• Water shortages hamper the operation of equipment and affect productivity, which has an impact on income as additional investments are required to ensure water supply • Increased costs caused by the need for frequent repair of equipment damaged by extreme weather conditions • The frequency of fires and heat waves increases the cost of maintaining fire-fighting units at production facilities • Increased cost of operations due to impaired employee productivity • Increased costs caused by the need for frequent repair of equipment damaged by higher temperatures • Increased costs of insurance due to higher climate risks	**Floods and access to water:** • PLN 25m investment in new water and sewage system technologies • Implementation of flood protection standards • Reduction of water consumption in 2020 by 55% relative to 1980 • Implementation of best practices and instruments in water management at industrial plants **Fires and extreme temperatures:** • Implementation of alert systems and improvement of fire protection technologies • Incorporation of climate risks into fire protection management • Introduction of summer protective clothing
Chronic climate risks	• Rising water level • Sustained high temperatures • Droughts • Reduction of water available for withdrawal from rivers and groundwater		**ORLEN2030 / ORLEN Net-Zero 2050:** Reduction of emissions to improve air quality and limit global warming

SCHEME 10 | Possible more serious climate change impacts on the markets where the ORLEN Group operates after 2030:



Poland and Central and Eastern Europe:

- limited access to water
- rising temperatures
- intensive precipitation in winter

Norwegian Continental Shelf and the Baltic Sea:

- rising water level
- coastal floods
- storms, winds, tornadoes

Canada:

- fires
- rising temperatures
- intensive precipitation in winter

Pakistan:

- rising temperatures
- droughts
- heat waves

Climate-related risks integration into PKN ORLEN corporate risk management system

TABLE 63 | Energy transformation risks

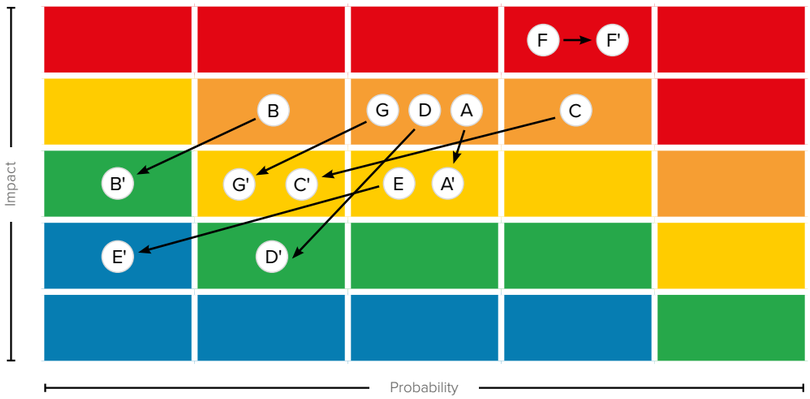
Risks/processes	Risk description	Risk mitigation methods	Risk development trend
A. Development of onshore renewable energy sources (RES)	• Failure to implement RES initiatives and strategic projects contemplated in the Group's strategy: - Development of a RES portfolio based on wind and solar projects - Construction of the Wisła hydroelectric power plant	Coordination of the Group's activities concerning legal and regulatory issues; monitoring changes in the legal environment; participation in the legislative process, including monitoring and providing opinions on legislative initiatives Establishment of Energa Green Development, a dedicated company responsible for development of renewable energy sources involving the Wisła hydroelectric power plant: providing expert support to the project sponsor in project development and in obtaining administrative decisions	↔
B. Implementation of decarbonisation initiatives in power generation	• Failure to implement power generation decarbonisation initiatives and strategic projects contemplated in the Group's strategy	Appointment of the NEW team; daily reporting on the progress of projects and initiatives	↔
C. Development of offshore wind farms	• Failure to obtain permits to construct and use artificial islands, structures and facilities (PSZW) • Failure to win offshore auctions	Monitoring and analysis of the regulatory environment of the offshore wind industry Taking active steps to obtain new location permits in award procedures	↔
D. Development in gas-based power generation	• Delays in the commissioning of investment projects; unplanned budget overruns; failure to meet performance targets for individual units • Failure to obtain financing from the capacity market; problems with securing the required administrative decisions in a timely manner or with concluding connection contracts with fuel suppliers and energy consumers	Oversight of ongoing investment processes with the necessary external consultants Ongoing monitoring of project progress against schedules Mitigation of the regulatory risks by ongoing analysis of the capacity market regulatory environment and proposing amendments to the relevant legal acts where necessary	↔
E. PKN ORLEN hydrogen programme	• Regulatory risks (Construction Law, Office of Technical Inspection (UDT) • Inaccurate market development forecasts for hydrogen fuel • Emergence of other major players in the market • Risk of insufficient funding	The project is at an early stage of development, and so is the hydrogen sector in Poland ORLEN Group employees are involved in regulatory processes concerning the hydrogen industry	↔

Risks/processes	Risk description	Risk mitigation methods	Risk development trend
F. Decarbonisation projects	• No defined projects to meet the 2030 Strategy objective • Further proposals of regulatory changes (Green Deal Fit for 55 package)	The decarbonisation project is in its early stage Taking steps to identify and operationalise further decarbonisation projects/initiatives (feasibility study for decarbonisation of the Płock production plant, CCU feasibility study)	↔
G. Failure to secure bio-based and recycled products for the portfolio as required by the market and regulations	• Risk of loss of the market position and growth opportunities due to insufficient investment in sustainable development projects	Ongoing monitoring of the activities, economic analysis of projects	↔

Table key

Risk materiality for the organisation	critical	high	medium	low	very low
Risk level after taking into account the controls	critical	high	medium	low	very low
Risk development trend year on year	↓ Falling	↑ Rising	↔ Stable		

Effects of application of controls in risk management



A, B, C, D, E, F, G
Climate transition risks – risk materiality

A', B', C', D', E', F', G'
Risk level after taking into account the controls

TABLE 64 | Physical risks

Risks/processes	Risk description	Risk mitigation methods	Risk development trend
A. Reliability of raw water supply to the production plant	• Faulty flood protection system • No flood prevention committee / flood prevention committee does not cover all required locations • No monitoring or ineffective monitoring of flow pressure in manifolds • Faulty anti-flood valves • Equipment replacement schedules are not aligned with failure statistics and results of technical condition surveys	Lack of raw water supply will result in disruptions to the operation of all units of the PKN ORLEN production plant Raw water supply is continuously monitored by the technical and plant maintenance staff	↔
B. Reliability of water supply to the fire-fighting system	• Hydraulic tests/analyses are not performed • The Company Fire Brigade does not conduct drills / manoeuvres using existing fire-fighting infrastructure • Emergency pumping station – pumping station tests, flushing, etc. are not performed as scheduled • Fire hydrants are not regularly inspected by the fire service • Preventive replacements of worn-out parts of the system are not performed • No protection or insufficient protection of water against corrosion and living organisms	Measures taken, such as hydraulic tests, Company Fire Brigade's drills, pumping station tests, fire hydrant inspections, quality tests of water for fire-fighting purposes, and replacement projects, eliminate the risk of disruptions in water supply to the Company's fire-fighting system	↔
C. Risk of failure to supply circulating water with the required thermal, quantitative and qualitative parameters to the production plant units	• Circulating water in the required quantity and with the required pressure cannot be supplied to the production plant units • Circulating water with the required temperature cannot be supplied to the production plant units • No protection or insufficient protection of water against corrosion and living organisms	The availability of cooling water with appropriate quality parameters and required pressure enables the proper operation of the production units: 24-hour supervision over the process of water treatment and supply, 24-hour monitoring of the quantity and pressure of circulating water supplied to the production units, 24-hour monitoring of the water cooling process	↔
D. Maintenance of the logistics infrastructure (fuel terminals, transmission pipelines)	• Failure of storage infrastructure • Failure of loading and unloading infrastructure • Product pipeline leakage	Concluded contracts for the servicing and maintenance of equipment and facilities at the terminals and long-distance pipelines significantly reduce the probability of the risk materialising and its possible financial consequences	↔

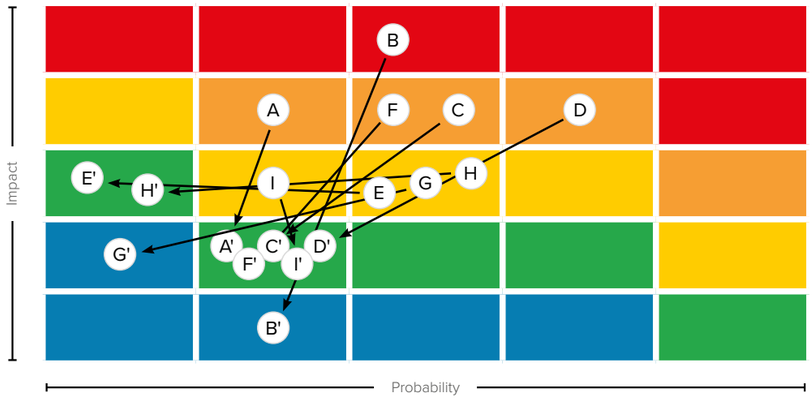
Risks/processes	Risk description	Risk mitigation methods	Risk development trend
E. Availability of energy for the production plant units and other customers	• External constraints on the availability of fuel, electricity, and natural gas in the long term • Machinery, equipment or network/grid failures resulting in supply interruptions • Electricity or heat supply interruptions due to equipment malfunctions	Appropriate plant maintenance policy in place and reporting on key technical indicators, including availability of turbines and boilers, reduce the risk of losses due to disruptions in the refinery's operation caused by lower than expected availability of resources such as electricity, process steam and useful heat	↔
F. Implementation of technical solutions which fail to deliver the expected outcomes	• Lack of quality products • High production losses • High energy intensity of processes	Analysis of licence provider's documentation; analysis of the adopted solutions and proposing steps to be taken to increase energy efficiency of a project and/or improve product quality Deployment of proven solutions at the ORLEN Group; project and process prediction These measures help to mitigate the risks, including risks associated with high energy intensity of processes or products of insufficient or poor quality Plant's energy intensity must be optimised for the existing infrastructure	↔
G. Failure to implement a low-temperature heat utilisation programme	• No low-temperature heat utilisation programme is implemented	Monitoring the effects of the implemented SIZI initiatives; managing the effects taking into account the current macroeconomic conditions Implementation of the project as planned – project monitoring based on reports from the area of implementation and PEI reports The solutions implemented at the units operate properly and deliver the expected results Given the risk of delay in the implementation of the planned solutions, additional weekly monitoring with the participation of the contractor has been introduced	↔
H. Lack of thermal integration of the key refinery units	• Thermal integration of the key refinery units is not ensured	Monitoring the effects of the implemented SIZI initiatives; managing the effects taking into account the current macroeconomic conditions Activities completed in two out of three units selected for implementation No risk of failure to implement the last project by the set deadline	↔

Risks/processes	Risk description	Risk mitigation methods	Risk development trend
I. Efficiency improvement at key ORLEN Group units	• No improvement of the energy intensity at the Olefins unit at PKN ORLEN and ORLEN Unipetrol • No improvement of the energy intensity at the PX/PTA units • Excessive losses and own consumption in petrochemicals • Ineffective utilisation of the Olefins production capacity	All key energy efficiency improvement projects planned in the strategy for 2013–2017 have been completed Further optimisation projects are being implemented under the current ORLEN 2030 strategy	↔

Table key

Risk materiality for the organisation	critical	high	medium	low	very low
Risk level after taking into account the controls	critical	high	medium	low	very low
Risk development trend year on year	↓ Falling	↑ Rising	↔ Stable		

Effects of application of controls in risk managementt



A, B, C, D, E, F, G, H, I
Climate risks – risk materiality

A', B', C', D', E', F', G', H', I'
Risk level after taking into account the controls

TABLE 65 | Environmental risks

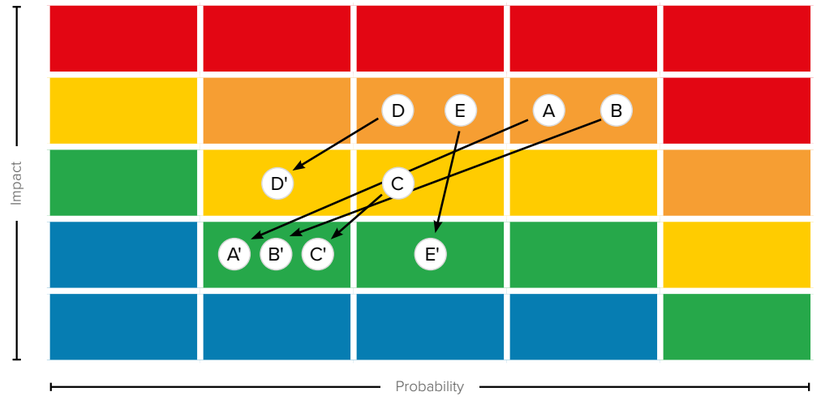
Risks/processes	Risk description	Risk mitigation methods	Risk development trend
A. Environmental protection regulations	• New stricter requirements, standards, financial and technical safeguards • Failure to identify material environmental aspects in the operations • Lack of valid environmental permits required by law • Unavailability of measurement results and data to prepare the legally required reports and/or failure to submit the reports to governmental authorities	Actively participating and providing opinions, for example through industry associations and technical working groups, on new legislation issued at the EU and national levels Effectively delegating duties and responsibilities related to identification of the environmental aspects of regulations Monitoring the validity of provisions and effective dates of decisions issued by public administrative bodies A clear procedure to be followed in case new permits need to be secured or existing permits need to be updated in connection with a project Monitoring changes in emissions measurements, packaging records, waste records and calculation of environmental charges Reviewing of reporting templates and deadlines	↔
B. Effectiveness of internal corporate environmental regulations	• Unexpected introduction of national regulations resulting in the need to update internal corporate regulations • Direct transposition and entry into force on the date of publication of new EU legal requirements (with continuous operation maintained) • Non-compliance of internal procedures with the law or failure to include clauses required by law in procedures • Prolonged internal regulation implementation process due to complexity of the organisational structure	Identification of enacted or proposed legal requirements, and periodic assessments of legal compliance of internal regulations Implementation of the ORLEN Group Compliance Policy Defining rules for the preparation and issuance of internal regulations	↔
C. Monitoring and reporting of companies' environmental impacts	• Failure to meet the requirements and specific guidelines for monitoring CO_2 and greenhouse gas emissions • Lack of an annual CO_2 emissions report, or negative result of verification of an annual CO_2 emissions report • Lack of periodic emission measurement results and automatic emission measurements required by law • Unlawful packaging and waste management • Improper collective waste record keeping • Lack of water and wastewater quality testing required by law • Lack of records or measurement results and, consequently, lack of input data for legally required reporting to public authorities	• Approval of CO_2 monitoring methodology plans for all process units • Clear rules for balancing CO_2 emissions, operating hours of emitters, and reporting of air emissions to government authorities Ensuring that the necessary accredited emission measurements are performed and that the results are made available Delegating responsibilities in the packaging and waste management process in accordance with applicable procedures and the Standard Monitoring volumes and types of waste to ensure compliance with relevant decisions of public administration bodies Increasing the share of recovered and recycled waste in waste management processes (circular economy) Training staff in maintaining waste databases Controlling the process of quantitative and qualitative wastewater discharge and water withdrawal Monitoring production processes in terms of raw materials, materials, fuel, water and energy consumption Environmental noise monitoring and protection against noise Clear rules for submitting measurement results, reporting, and calculating and payment of charges for gas and dust emissions and fees for water services (implementing instructions regarding the performance of obligations imposed under integrated permits)	↔

Risks/processes	Risk description	Risk mitigation methods	Risk development trend
D. Soil and water contamination and remediation costs	• Failure to properly respond in case of groundwater contamination events/accidents • Issuance of a decision with stricter protected area requirements • Tightening of general regulatory requirements for remediation • Excessive remediation costs • Inadequate provision for land remediation at fuel production and distribution facilities	Identification of the extent and degree of soil and water contamination for each event, and determination of geological and hydrogeological conditions of the site Agreeing the rules for the remediation process across various business segments, and oversight of the scope and progress of remediation work Monitoring (including piezometric monitoring) and reporting in accordance with applicable procedures Maintaining and accounting for a land remediation provision and ensuring the provision is efficiently used	↔
E. Perception of companies in terms of their environmental impact	• Negative perception of companies/brand by external stakeholders • Growing market/public expectations regarding environmental protection • Lack of public awareness of the companies' involvement in environmental initiatives	Delegating responsibilities in information flow and communication processes in the event of deviations in operating parameters of production and logistics facilities, including for planned maintenance and emergencies affecting the natural environment Providing environmental information and data for reporting purposes (including integrated reporting) Partnering with non-governmental organisations on environmental protection, environmental education, environmental compensation, and organisation of environmental volunteering campaigns Implementing and overseeing the LDAR leak detection and repair system and the Responsible Care Management Framework	↔

Table key

Risk materiality for the organisation	critical	high	medium	low	very low
Risk level after taking into account the controls	critical	high	medium	low	very low
Risk development trend year on year	↓ Falling	↑ Rising	↔ Stable		

Effects of application of controls in risk management



A, B, C, D, E
Environmental risks

A', B', C', D', E',
Risk level after taking into account the controlst

08

Occupational health and safety

Initiatives aimed at ensuring safe working conditions for employees of the ORLEN Group and any external contractors working on the premises of its production facilities play an important role in all aspects of the Group's business. With this in mind, the ORLEN Group initiates, develops, and implements multifaceted activities designed to continuously improve its work safety culture and maintain and develop effective safety standards.

SAFETY FIRST

TOGETHER WE BUILD SAFE ORLEN.
CONTINUED IMPROVEMENT OF WORK SAFETY CULTURE.
UNIFORM SAFETY STANDARDS.
DEVELOPMENT OF SEGMENT-BASED OCCUPATIONAL SAFETY MANAGEMENT SYSTEM AT THE ORLEN GROUP.

0.81 TRR (for employees and contractors) at the ORLEN Group in 2022

1.70 TRR for employees at the ORLEN Group in 2022

0.16 TRIR (for employees and contractors) at the ORLEN Group in 2022

Sustainable Development Goals 2030

Sustainable Development Goals 2030 pursued by the occupational health and safety measures implemented by PKN ORLEN and the ORLEN Group in 2022:

GRI indicators

GRI 11.9.1 Management of material topic: occupational health and safety

GRI 11.9.2 Occupational health and safety management system

GRI 11.9.3 Hazard identification, risk assessment, and incident investigation

GRI 11.9.4 Occupational health services

GRI 11.9.5 Worker participation, consultation, and communication on occupational health and safety

GRI 11.9.6 Worker training on occupational health and safety

GRI 11.9.7 Promotion of worker health

GRI 11.9.8 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships

GRI 11.9.9 Workers covered by the occupational health and safety management system

GRI 11.9.10 Work-related injuries

GRI 11.9.11 Work-related ill health

1. Occupational health and safety management

Overview

The **Occupational Health and Safety (OHS) Office** is responsible for supervising the operation of the occupational health and safety system at PKN ORLEN. It carries out a complete range of activities across the Company to ensure the required high level of prevention of work safety hazards, which includes performing the duties of an in-house OHS function. One part of the Office is the **Company Fire Brigade**, whose core responsibility at PKN ORLEN is to carry out rescue and firefighting activities on the Company's premises, as well as in the entire territory of Poland as part of the National Rescue and Firefighting System and the Assistance System for the Transport of Hazardous Materials (SPOT), and to supervise the readiness of the Company's facilities for rescue and firefighting activities. The Company Fire Brigade also carries out chemical and technical rescue operations and performs fire prevention functions. In addition, the Occupational Health and Safety Office is engaged in activities to ensure compliance with ADR and RID regulations during storage, handling, and carriage of dangerous goods, and participates in nuclear safety and radiation protection activities.

Another responsibility of the Occupational Health and Safety Office is to supervise the operation of the segment-based system for the management of occupational health and safety, fire safety, and safety of dangerous goods storage and transport at the ORLEN Group. In this respect, the Office undertakes work to initiate, create and monitor measures aimed at harmonising and continuously improving the solutions used across the companies in the context of their occupational safety standards and occupational safety management systems.

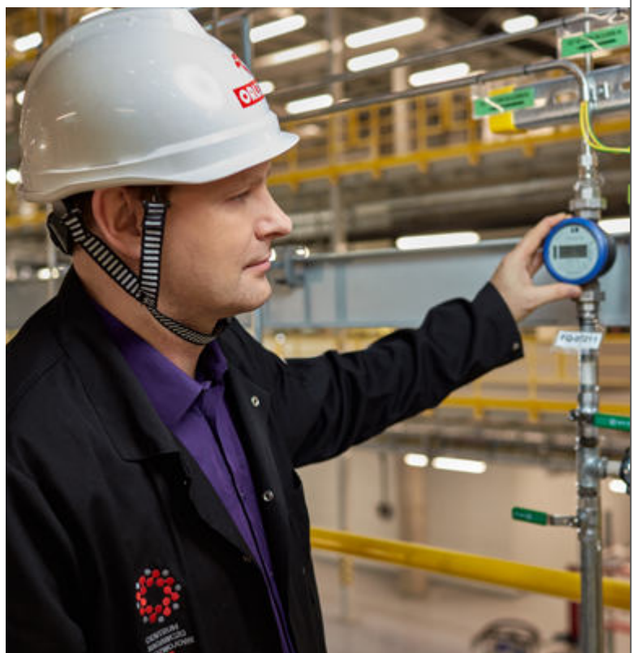
GRI 11.9.1

Management of material topic: occupational health and safety

Healthy and safe working conditions are considered a human right. Occupational health and safety includes the prevention of physical and mental harm to workers and promotion of healthy lifestyles.

The development of the multi-utility group poses a new challenge: how to integrate the former LOTOS and PGNiG Group into the ORLEN Group's joint occupational safety management system. In this respect, the key is to implement projects aimed at harmonising and refining their safety standards.

The ORLEN Group's priority is to ensure safe working conditions to all employees. It is crucial for development of the occupational safety area to build and enhance behavioural safety by fostering awareness of proactive attitudes and appropriate employee behaviours that support work safety.



GRI 11.9.2

Occupational health and safety management system

GRI 11.9.9

Workers covered by the occupational health and safety management system

A vast majority of the ORLEN Group companies have an **ISO 45001 compliant occupational health and safety management system** in place. The certification obtained by the companies extends to their individual business lines, covering all employees of the organisations which have the system in place. For PKN ORLEN, it covers the storage and sale of refining and petrochemical products, generation and sale of electricity and heat, as well as value added functions. The ISO 45001 compliant occupational health and safety management systems of the companies are subject to regular external audits in order to maintain the certification.

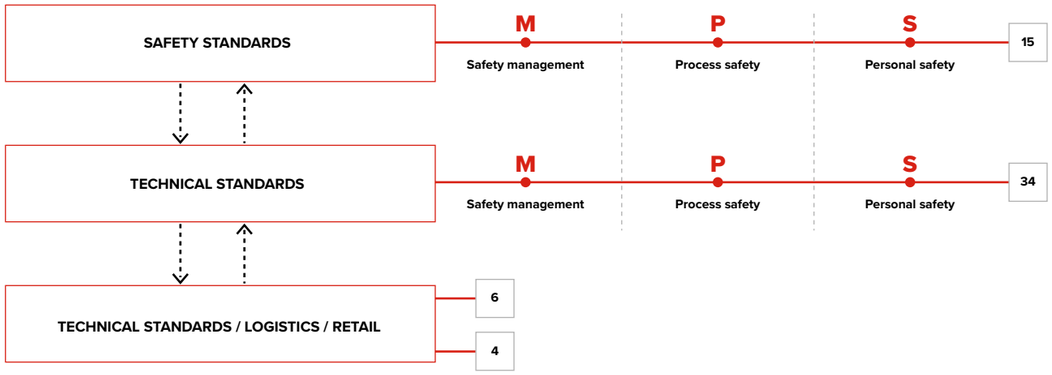
The ORLEN Group's production companies have implemented a **process safety management system conforming to US OSHA 1910.119 standard**. The system provides an effective framework for achieving operational excellence, as it improves technical safety of the process, storage and auxiliary units, and thus prevents any undesirable incidents that could affect the safety of staff and/or production processes. The process safety management system, as a component of PKN ORLEN's overall management and organisational system, has been introduced to ensure the highest safety standards in the workplace and meet the national requirements of Art. 252 of the Environmental Protection Law of April 27th 2001 with respect to systemic process safety management and further improvement of the effectiveness and efficiency of measures aimed at preventing major industrial accidents.

Key policies

The existing policies and internal regulations regarding occupational health and safety include:

- Occupational safety at the ORLEN Group is governed by national legislation, European Union regulations, harmonised **national standards and principles resulting from best practices for safe work and process execution.**
- The ORLEN Group companies have **systems of internal by-laws** in place that include personal, process and fire safety policies, rules, internal orders, procedures, manuals, work instructions etc. On the other hand, initiatives implemented at the corporate level of the entire ORLEN Group involve initiating, creating and monitoring measures aimed at harmonising and continuously improving the solutions used across the companies in the context of their occupational safety standards and systems.
- **Development directions for the personal and process safety area at the ORLEN Group 2022–2026** – an OHS management concept, based on building and developing a uniform safety framework for the ORLEN Group, while enhancing excellence in operations and preventive measures related to personal and process safety.
- **ORLEN Group Safety Standards and Technical Standards** – uniform requirements for work safety, process safety, fire safety, and safety of operations involving handling of dangerous goods. The ORLEN Group has established and follows about 59 occupational safety standards, which are aligned with the best practices in the fuel and energy industry. The PKN ORLEN OHS Office coordinates identification of the needs for new standards or updates to current ones on an ongoing basis

SCHEME 11 |



- **Comprehensive prevention system of PKN ORLEN** – the key component of the occupational health and safety management system, which consists of internal organisational documents related to occupational health and safety, fire and chemical safety, radiation protection, technical and process safety, and safety of operations involving handling of dangerous goods. These include: PKN ORLEN process safety management system, Radiation Safety Instruction for the Płock Production Plant and Włocławek PTA Plant, PKN ORLEN Fire and Chemical Safety Rules, and company regulations concerning road transport of dangerous goods. ORLEN Group companies have set up similar systems within their own organisational structures.

- **PKN ORLEN Safety Points** – a set of basic principles required to be observed together with all applicable regulations and standards. **Safety Points for PKN ORLEN company-owned service stations a**re the key rules that must be adhered to on the premises of the service stations owned by PKN ORLEN. ORLEN Group companies have similar rules in place within their organisational structures, adapted to the specific nature of their processes.

2. Key performance indicators

Personal safety KPIs at the ORLEN Group and PKN ORLEN in 2021 and 2022:

- TABLE 66 | **Total Recordable Rate (TRR[1])**

Personal safety, including:	UoM.	2022	2021
Total Recordable Rate (TRR)[1]			
ORLEN Group	[number]	0,81*	1,10**
PKN ORLEN	[number]	0,46	0,77

* In 2022, companies of the former LOTOS Group and former PGNiG Group did not report on all data components of the TRR (i.e. they did not report on data relating to contractors), therefore these companies have not been included in the reported TRR information. However, data for the former LOTOS Group and former PGNiG Group companies have been included in the **TRR for employees[2]** for reporting purposes. **Hence, the ORLEN Group's TRR for employees in 2022 was 1.70**, which is largely on a par with the figure reported for 2021 (1.74).

** In 2021, this indicator was reported exclusive of ORLEN Transport Sp. z o.o. and Polska Press Grupa since those companies did not report on all data components of the TRR (i.e. they did not report on data relating to contractors). TRR for the ORLEN Group inclusive of the ORLEN Transport Sp. z o.o. and Polska Press Grupa data will be reported for 2022.

[1] Total Recordable Rate (TRR) – an internationally recognised metric of a company's rate of workplace accidents = number of workplace injuries involving employees and contractors that result in days lost in a reference period / number of man-hours worked by employees and contractors in the same period x 1,000,000.

KPI information for the PKN ORLEN work safety area excludes data on the PGNiG Branch Complex, which has been part of the Company since November 2nd 2022, due to its status as a separate employer. In the period from November 2nd to December 31st 2022, no work-related injuries or ill-health were reported for branch employees. In the period under review, the Branch Complex did not report on data relating to contractors.

- TABLE 67 | **Total Recordable Incident Rate (TRIR)[3]**

Total Recordable Incident Rate (TRIR)[3], including:	UoM.	2022	2021
TRIR[3] for employees			
ORLEN Group	[number]	0.34	0.35
PKN ORLEN	[number]	0.17	0.26
TRIR[3] for contractors* **			
ORLEN Group	[number]	0.07	0.10
PKN ORLEN	[number]	0.07	0.13

[2] TRR for employees = number of workplace injuries involving employees that result in days lost in a reference period / number of man-hours worked by employees in the same period x 1,000,000.

[3] Total Recordable Incident Rate (TRIR) = number of workplace injuries resulting in days lost in a period * 200,000 / number of man-hours worked in the period.

Total Recordable Incident Rate (TRIR)[3], including:	UoM.	2022	2021
TRIR[3] for employees and contractors* **			
ORLEN Group	[number]	0,16	0,22
PKN ORLEN	[number]	0,09	0,15

*** In 2022, the former LOTOS Group and former PGNiG Group companies did not report on all data components of TRIR for contractors and TRIR for employees and contractors, therefore these indicators will be reported for the ORLEN Group including the former LOTOS Group and former PGNiG Group companies starting from 2023.

In 2021, ORLEN Transport and Polska Press Grupa did not report on all data components of the TRIR for contractors and TRIR for employees and contractors (i.e. they did not report on data relating to contractors), therefore the TRIR for contractors and TRIR for employees and contractors inclusive of the ORLEN Transport and Polska Press Grupa data have been reported starting from 2022.

[2] TRR for employees = number of workplace injuries involving employees that result in days lost in a reference period / number of man-hours worked by employees in the same period x 1,000,000.

[3] Total Recordable Incident Rate (TRIR) = number of workplace injuries resulting in days lost in a period * 200,000 / number of man-hours worked in the period.

- **Safety Culture Indicator[4]**

In order to steadily improve the effectiveness of measures fostering a safe work culture, the ORLEN Group has put in place a Safety Culture Indicator, which combines the TRR, a reactive metric, with a proactive element in the form of management of any reported work safety hazards. The Safety Culture Indicator enables monitoring of injury rates and of proactive measures, such as systems for reporting work safety hazards the purpose of which is to eliminate at source the risk of accidents.

TABLE 68 |

Safety Culture Indicator[4]	UoM.	2021	2020
TRR accident rate (Total Recordable Rate)			
ORLEN Group	[number]	100****	100*****
PKN ORLEN	[number]	100	100

**** In 2022, companies of the former LOTOS Group and the former PGNiG Group did not report on all data components of the TRR (i.e. they did not report on data relating to contractors), therefore the TRR for the ORLEN Group inclusive of data for those companies will be reported starting from 2023

***** In 2021, ORLEN Transport Sp. z o.o. and Polska Press Grupa did not report on all data components of the TRR (i.e. they did not report on data relating to contractors), therefore the TRR for the ORLEN Group inclusive of ORLEN Transport Sp. z o.o. and Polska Press Grupa data has been reported starting from 2022.

[4] The Safety Culture Indicator is a sum of:
- the product of the percentage showing achievement of the target for the combined TRR (company and contractors) by a company and 0.7 (injury rate weight in the Safety Culture Indicator),
- The product of the percentage showing achievement of the target for the Risk Notification and Handling Indicator by a company and 0.3 (risk notification weight in the Safety Culture Indicator).

GRI 11.9.10

Work-related injuries

Work-related injuries involving ORLEN Group employees and contractors

TABLE 69 |

GENDER	ORLEN Group				PKN ORLEN			
	2022		2021		2022		2021	
	Women	Men	Women	Men	Women	Mężczyźni	Women	Men
Total number of work-related injuries involving employees[5]	19	101	12	93	1	8	1	12
Total number of work-related injuries involving contractors[6]	9	14	11	22	8	6	10	13
Total number of work-related injuries involving employees and contractors	28	115	23	115	9	14	11	25

In 2022, 120 work-related injuries involving ORLEN Group employees were recorded, 14 of which were accidents involving employees of the former LOTOS Group companies (recorded between August 1st and December 31st 2022) and 26 were accidents involving employees of the former PGNiG Group companies (recorded between November 2nd and December 31st 2022).Hence, the total number of work-related injuries involving ORLEN Group employees and contractors increased in 2022, which was attributable to the acquisition of control over new companies / groups of companies. In 2022, the former LOTOS Group and PGNiG Group companies did not report on contractor injury rates.

TABLE 70 |

REGIONS[7]	ORLEN Group										PKN ORLEN	
	2022					2021					2022	2021
	Poland	Czech Republic	Lithuania	Germany	Canada	Poland	Czech Republic	Lithuania	Germany	Canada	Poland	Poland
Total number of work-related injuries involving employees[5]	101	16	1	2	0	91	11	3	0	0	9	13
Total number of work-related injuries involving contractors[6]	15	7	1	0	0	33	0	0	0	0	14	23
Total number of work-related injuries involving employees and contractors	116	23	2	2	0	124	11	3	0	0	23	36

[5] Number of acknowledged work-related injuries resulting in days lost and involving ORLEN Group employees.

[6] Number of acknowledged work-related injuries resulting in days lost and involving employees of the ORLEN Group's contractors who performed work for a Group company on premises owned or leased by a Group company. The definition of 'contractor' covers also employees of the PKN ORLEN service stations.

[7] Regions – markets in which the ORLEN Group has assets.

TABLE 71 |

GENDER	ORLEN Group				PKN ORLEN			
	2022		2021		2022		2021	
	Women	Men	Women	Men	Women	Men	Women	Men
Number of fatal work-related injuries involving employees	0	4	0	1	0	2	0	0
Number of minor work-related injuries involving employees	19	91	12	88	1	6	1	12
Total number of work-related injuries involving employees	19	101	12	93	1	8	1	12

TABLE 72 |

REGIONS[7]	Grupa ORLEN										PKN ORLEN	
	2022					2021					2022	2021
	Poland	Czech Republic	Lithuania	Germany	Canada	Poland	Czech Republic	Lithuania	Germany	Canada	Poland	Poland
Number of fatal work-related injuries involving employees	3	1	0	0	0	0	1	0	0	0	2	0
Number of minor work-related injuries involving employees	96	11	1	2	0	88	10	2	0	0	7	13
Total number of work-related injuries involving employees	101	16	1	2	0	91	11	3	0	0	9	13

[7] Regions – markets in which the ORLEN Group has assets.

In 2022, there were six severe workplace injuries involving employees (four at the ORLEN Unipetrol Group, one at the ORLEN Ochrona Group, and one at the Energa Group). In 2021, there were four severe workplace injuries involving employees (three at the Energa Group, and one at ORLEN Lietuva).

Furthermore, seven collective accidents at work involving employees were recorded in 2022 (two collective accidents involving employees of the Energa Group, one collective accident involving employees of each of PKN ORLEN, ANWIL, the ORLEN Ochrona Group, the ORLEN Unipetrol Group, Polska Spółka Gazownictwa), while in 2021, two collective accidents involving employees were recorded (ORLEN Serwis, ORLEN Eko).

TABLE 73 |

GENDER	ORLEN Group				PKN ORLEN			
	2022		2021		2022		2021	
	Women	Men	Women	Men	Women	Men	Women	Men
Number of fatal work-related injuries involving contractors	0	1	0	2	0	0	0	1
Number of minor work-related injuries involving contractors	9	12	11	20	8	6	10	12
Total number of work-related injuries involving contractors	9	14	11	22	8	6	10	13

TABLE 74 |

REGIONS[7]	Grupa ORLEN										PKN ORLEN	
	2022					2021					2022	2021
	Poland	Czech Republic	Lithuania	Germany	Canada	Poland	Czech Republic	Lithuania	Germany	Canada	Poland	Poland
Number of fatal work-related injuries involving contractors	0	1	0	0	0	2	0	0	0	0	0	1
Number of minor work-related injuries involving contractors	14	6	1	0	0	31	0	0	0	0	14	22
Total number of work-related injuries involving contractors	15	7	1	0	0	33	0	0	0	0	14	23

[7] Regions – markets in which the ORLEN Group has assets.

One severe work-related injury involving a contractor was recorded in 2022 (at ORLEN Paliwa). In 2021, the Group did not record any severe work-related injuries involving contractors. In 2022, there were no collective accidents at work involving contractors, while in 2021 two such accidents were recorded (at PKN ORLEN).

Every work-related injury at the ORLEN Group is investigated using the event tree analysis, determining the causes of the accident and corrective measures. Moreover, regular meetings of the ORLEN Group OHS personnel are organised to discuss the analyses of work-related injuries. In 2022, a collective accident at work involving employees was reported at PKN ORLEN. Investigation teams were set up to investigate all possible causes of the accident and to make recommendations for corrective measures. Work schedules were drawn up to implement these corrective measures within the corporate structure. In addition, lessons learned were developed.

TABLE 75 | Work-related injuries involving ORLEN Group employees, by type of injury

TYPE OF INJURY (employees)	UoM.	ORLEN Group		PKN ORLEN	
		2022	2021	2022	2021
cuts	[%]	11.67	17.14	22.22	15.385
bruises		16.67	16.19	0	7.69
burns		15	10.48	33.33	7.69
fractures		20	23.81	0	30.77
dislocations and sprains		30.83	21.90	44.45	15.385
other		5.83	10.48	0	23.08

TABLE 76 | Work-related injuries involving ORLEN Group contractors, by type of injury

TYPE OF INJURY (contractors)	UoM	ORLEN Group		PKN ORLEN	
		2022	2021	2022	2021
cuts	[%]	13.04	15.15	14.29	8.70
bruises		0.00	15.15	0	21.74
burns		13.04	0	7.14	0
fractures		34.78	21.21	28.57	17.39
dislocations and sprains		17.39	12.12	21.43	8.70
other		21.74	36.36	28.57	43.48

TABLE 77 | Work-related injuries involving employees of the ORLEN Group, by type of activity

TYPE OF INJURY (employees)	UoM	ORLEN Group		PKN ORLEN	
		2022	2021	2022	2021
day-to-day operation of plant and equipment	[%]	14.17	16.19	0	15.38
movement		50	40.00	55.56	69.23
plant maintenance and repairs		11.67	21.90	33.33	0
road collisions		7.50	8.57	0	7.69
other activities		16.66	13.33	11.11	7.69

TABLE 78 | Work-related injuries involving contractors of the ORLEN Group, by type of activity

TYPE OF INJURY (contractors)	UoM	ORLEN Group		PKN ORLEN	
		2022	2021	2022	2021
day-to-day operation of plant and equipment	[%]	4.35	3.03	0	0
movement		8.70	33.33	0.00	30.43
plant maintenance and repairs		26.09	21.21	14.29	17.39
road collisions		0	3.03	0	4.35
other activities		60.86	39.39	85.71	47.83

TABLE 79 | TRR for ORLEN Group employees[2]

GENDER	ORLEN Group			PKN ORLEN		
	Total	Women	Men	Total	Women	Men
2022	1.70	0.96	1.98	0.85	0.35	1.04
2021	1.74	0.69	2.15	1.31	0.42	1.58

[2] Total number of work-related injuries involving employees of ORLEN Group companies and resulting in the injured person taking sick leave in a given period x 1,000,000 / number of man-hours worked by the employees in this period.

REGIONS[7]	ORLEN Group						PKN ORLEN					
	Total	Poland	Czech Republic	Lithuania	Germany	Canada	Total	Poland	Czech Republic	Lithuania	Germany	Canada
2022	1.70	1.66	2.69	0.42	7.06	0	0.85	0.85	0	0	0	0
2021	1.74	1.94	1.20	0.80	0	0	1.31	1.31	0	0	0	0

[7] Regions – markets in which the ORLEN Group has assets.

A slight decrease in the TRR for ORLEN Group employees was recorded in 2022 relative to 2021.

TABLE 80 | Severity rates[8] for work-related injuries involving ORLEN Group employees in 2022

GENDER	ORLEN Group			PKN ORLEN		
	Total	Women	Men	Total	Women	Men
2022	52.13	29.79	56.33	49.78	16.00	54.00

[8] Quotient of the number of days lost due to post-injury absence of ORLEN Group employees and the number of employer-acknowledged work-related injuries of ORLEN Group employees resulting in days lost.

REGIONS[7]	ORLEN Group						PKN ORLEN	
	Total	Poland	Czech Republic	Lithuania	Germany	Canada	Total	Poland
2022	52.13	48.09	71.50	247	3.50	0	49.78	49.78

[7] Regions – markets in which the ORLEN Group has assets..

TABLE 81 | Number of days lost due to post-injury absence[9] at the ORLEN Group in 2022

GENDER	ORLEN Group			PKN ORLEN		
	Total	Women	Men	Total	Women	Men
2022	6,255	566	5,689	448	16	432

REGIONS[7]	ORLEN Group						PKN ORLEN	
	Total	Poland	Czech Republic	Lithuania	Germany	Canada	Total	Poland
2022	6,255	4,857	1,144	247	7	0	448	448

[7] Regions – markets in which the ORLEN Group has assets

[9] Number of days of absence from work of an ORLEN Group company employee due to sick leave resulting from an employer-acknowledged work-related injury in a period..

Ensuring work safety and health protection for employees of contractors performing work on the ORLEN Group premises is one of the strategic priorities of the ORLEN Group. In order to continuously enhance their safety, a consistent long-term approach has been taken to raising their awareness of the importance of proper risk assessment, potential hazards, risk mitigation methods, OHS rules and procedures, proper use of protective systems and equipment, and the need to report potentially dangerous situations. Apart from investigating work-related injuries involving contractors, the ORLEN Group also analyses the data on sick leave resulting work-related injuries suffered by contractors working on the premises of the companies. However, the Group is not legally authorised to publish such data.

GRI 11.9.11

Work-related ill health

Number of work-related illnesses at the ORLEN Group, by employee category[10]

TABLE 82 |

EMPLOYEE CATEGORIES	ORLEN Group		PKN ORLEN	
	2022	2021	2022	2021
Office and administrative staff	0	0	0	0
Higher-rank and mid-level technical staff	0	0	0	0
Operators of process units and equipment	2	3	0	0
Employees performing maintenance and repair work	1	1	0	0
Transport and storage employees	0	1	0	0
Total ****** ORLEN Lietuva (5) ******* ORLEN Lietuva (1), ANWIL (1), ORLEN Unipetrol Group (1)	3*******	5******	0	0

[10] Number of acknowledged occupational illnesses is the number of decisions issued by the State Sanitary Inspector to confirm recognition of an occupational illness of a current or former employee of an ORLEN Group company.

The occupational illnesses recorded in 2021 were caused by factors relating to noise, lifting and carrying loads, mechanical vibration, forced body position during work, causing workers to suffer from: spinal disease, carpal tunnel syndrome, or hearing impairment. In 2022, on the other hand, occupational illnesses were associated with workplace exposures recognised as carcinogenic in humans, noise and load handling /lifting, causing workers to suffer from: haematopoietic cancer, hearing impairment, or spinal disease..

The ORLEN Group does not report on the incidence of work-related ill-health in contractors' employees due to the absence of tools or legal regulations that would enable it to obligate third parties to report such data. This is also the case with obtaining information on third party and ORLEN Group employee deaths from work-related ill-health.

Workers with high incidence or high risk of work-related ill-health

The ORLEN Group constantly monitors and identifies factors that may cause work-related ill-health among its employees. Work environment surveys are performed on a regular basis and their results are analysed to assess the risk of potential impact on the employees' health. With respect to all factors identified for jobs with a high risk of work-related ill-health, systemic preventive measures have been implemented in the form of technical and organisational solutions offering personal and collective protection. The use of such solutions eliminates the risk of employees developing a work-related illness as a result of harmful factors in their work environment.

As a result, the number of work-related illnesses in ORLEN Group employees declined in 2022-2021.

OHS training

In 2022, more than 15,386 training sessions in occupational safety were provided at the ORLEN Group, which covered 35,098 employees of the ORLEN Group companies. Out of this number, 575 training sessions were provided at PKN ORLEN to 725 administrative and office staff members and 2,512 process unit and equipment operators. Likewise, at the ORLEN Group, the largest group of employees to whom such training was provided were process unit and equipment operators.

3. Due diligence procedures

GRI 11.9.8

Prevention and mitigation of occupational health and safety impacts directly linked by business relationships

In 2022, a process was started to implement the **ORLEN Group Development Directions in Personal and Process Safety** for 2022–2026. They provide a concept for strategic activities aimed at delivering occupational safety excellence and development at the ORLEN Group. An important part of these activities is supporting the **ORLEN Group's transformation** process **by integrating the newly incorporated companies into the Group's occupational safety management system**.

The progress was monitored via a dedicated app. It included the following initiatives:

- Implementation of further Technical Standards in the Logistics+ area.
- Introduction of minimum uniform standards for the execution of operations involving dangerous goods.
- Verification of the status of the effective change management orders, procedures and records.
- Designing incentive schemes for employees and contractors linked to the Report a Safety Hazard system, the near miss reporting system and other incentive programmes.
- Implementation of activities related to the cooperation and exchange of experience by the fire prevention unit of the Company Fire Brigade at the ORLEN Group.
- Implementation of activities to determine the rank of segment-based personal and process safety management within the ORLEN Group, taking into account the companies and groups of companies incorporated into the Group.

One of the key targets is to maintain the following occupational safety KPI levels: TRR[1]) no higher than 1.70 and T1PSER[11]) no higher than 0.3, while implementing the processes of acquisition of equity control over new companies and groups of companies.

Supporting transformation processes – integrating companies into the ORLEN Group's occupational safety management system

Due to the processes of incorporating companies and groups of companies into the ORLEN Group that were carried out in previous years, multi-dimensional measures were undertaken to integrate them into the occupational safety management system. These measures were designed to refine and develop the emerging occupational safety systems at the ENERGA Group, Polska Press Grupa, RUCH Group, and ORLEN Transport. In the case of the ENERGA Group companies, the focus was on implementing general measures planned for 2021–2023.

[1] Total Recordable Rate (TRR) – an internationally recognised metric of a company's rate of work-related injuries calculated as follows: (number of work-related injuries involving employees and contractors that result in days lost in a reference period / number of man-hours worked by employees and contractors in the same period) x 1,000,000.

[11] Tier 1 Process Safety Events Rate – number of events of greater consequence related to substance release into the atmosphere x 1,000,000 / number of man-hours..

In August 2022, the ORLEN Group was expanded to include: Rafineria Gdańska, LOTOS Straż, LOTOS Serwis, LOTOS Oil, LOTOS Ochrona, LOTOS Lab, LOTOS Kolej, and LOTOS Petrobaltic. In this context, work commenced to develop implementation schedules for the ORLEN Group Safety Standards and Technical Standards. At the end of the year, 2023–2025 implementation schedules for the standards were prepared for the companies in consultation with the PKN ORLEN OHS Office. As a next step, the companies will be fully integrated into the system for reporting occupational safety KPIs. In 2022, the data was monitored by the PKN ORLEN OHS Office.

A similar process of adaptation to the segment-based occupational safety management system was prepared for the former PGNiG Group companies, which joined the ORLEN Group in November 2022. The process started by defining the rules for reporting workplace injuries and emergencies. In 2023, the former PGNiG Group companies will have implementation schedules for the ORLEN Group Safety Standards and Technical Standards developed in a process similar to that implemented in respect of the former LOTOS Group companies.

The incorporation processes within the ORLEN Group posed challenges for PKN ORLEN's occupational safety area. As part of these processes the structure of PKN ORLEN is also changing, which is why steps were taken to harmonise health and safety management systems within the single organisation. Some examples were the development and oversight of delivery of an implementation schedule for the PKN ORLEN Comprehensive Prevention System and harmonisation of internal occupational safety regulations.

GRI 11.9.3

Hazard identification, risk assessment, and incident investigation

The ORLEN Group companies carry out ongoing hazard identification, risk assessment and incident investigation. The process includes: developing and updating the **Occupational Risk Assessment** for individual positions, carrying out work environment studies, identifying hazards in work instructions, and monitoring of working conditions.

The **OHS Committees** functioning within ORLEN Group companies and implementation of **Report a Safety Hazard** systems are both important aspects of this process. These systems are a tool supporting the system of inspections, audits, job reviews and safety walks.

Report a Safety Hazard at PKN ORLEN – the OHS incentives scheme

The OHS incentives scheme is addressed to the Company's employees. Its component is the Report a Safety Hazard competition, where employees or their line managers report safety hazards and propose remedial actions via an electronic system. Best entries are rewarded. Similar Report a Safety Hazard competitions are run by other ORLEN Group companies.

There are structured systems in place at ORLEN Group companies to eliminate any reported and identified hazards, and the respective conclusions inform the **Plans for Improvement of Occupational Health and Safety Conditions** and other documents. The implementation of preventive and corrective measures is verified based on the existing inspection, audit, job review and safety walks systems.

For contractors, this process is executed through, inter alia, an existing system of written authorisations and training (including hazard training) for third party employees, and through the development of safe working manuals by contractors. Some ORLEN Group companies have also launched a **Report a Safety Hazard system for contractors**.

Report a Safety Hazard for contractors at PKN ORLEN

The system has been introduced for third party employees. Anyone who identifies an occupational safety hazard may report it by sending a text message to a designated telephone number.

The companies have procedures in place that allow employees and contractors to **abandon their work if they identify a potential hazard to their health and life**. Conclusions formulated in the process of hazard identification, risk assessment and incident investigation are used as inputs for the continuous improvement of the ORLEN Group's occupational safety system.

Execution of the hazard identification, risk assessment and incident investigation process at the ORLEN Group level.

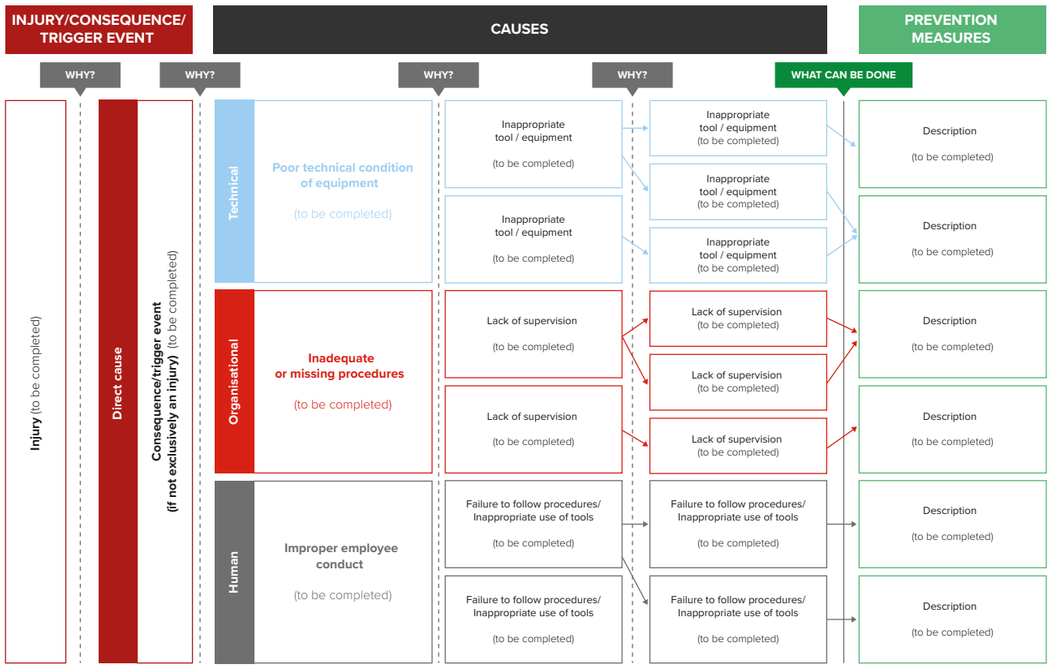
The process of hazard identification, risk assessment and incident investigation is carried out at the company level and the ORLEN Group level. In the latter case, it uses the following tools: safety alerts, lessons learned, event tree analysis of accidents at work, and safety meeting.

Safety alerts and lessons learned at the ORLEN Group. Any incidents or emergencies that occur at the ORLEN Group are analysed and assessed in terms of the likelihood of their recurrence. Communication of near misses and emergencies is based on **safety alerts**. In the case of emergencies, **lessons learned** actions are organised based on checklists designed to identify preventive measures in different ORLEN Group locations. Special tools have been implemented for analysing the potential risk of accidents at work and emergencies, and the findings of such analyses serve as the basis for taking preventive measures. Process hazards are reviewed at the ORLEN Group using a range of methods, including HAZOP, which is used to establish the probability of hazards in industrial facilities. HAZOP consists in a systematic review of designs and processes for potential deviations from predetermined parameters.

Event tree analysis of accidents at work. A uniform methodology for analysing accidents at work at ORLEN Group companies. It is a chart representing a set of information about the accident, its causes and effects and decisions taken in view of the conclusions reached.

Safety meeting.
At the corporate level, the PKN ORLEN OHS Office maintains a safety meeting tool. Responsibilities of the Safety Meeting team are to analyse incidents, emergencies, and fires which are significant in the context of the ORLEN Group's business area. The causes of such incidents are identified and information is gathered on their consequences, available remedies and implementation of remedies. Additionally, the risk of a similar incident occurring at another company is assessed. Based on the collected information and available source materials, recommendations for possible remedies are developed together with the PKN ORLEN Technology Office, which are then sent to the relevant areas of individual companies. The purpose of this tool is to register and analyse incidents, capture lessons learned and minimise the risk of similar incidents in the future. All information on the work of the Safety Meeting team is collected in an internal database of the PKN ORLEN OHS Office.

SCHEME 12 |



GRI 11.9.4

Occupational health services

Employees of the ORLEN Group companies are provided with access to basic medical care, which includes occupational health services, for instance preventive care examinations. The services include issuance of medical opinions and assessment of employees' capacity to work, monitoring the health of employees in risk groups, examinations for diagnostics of occupational diseases and other work-related illnesses. An occupational medicine doctor is involved in the process of identifying workplace hazards in particular positions as part of the Occupational Risk Assessment, which is developed and then updated as necessary, attends OHS Committee meetings, and is consulted on the contents of first aid kits. In some cases, the scope of services is extended to include additional benefits, e.g. occupational psychology advice. Work environment tests are carried out for particular work posts.

GRI 11.9.7

Promotion of worker health

The companies carry out additional worker health campaigns and initiatives, such as: preventive vaccinations (against influenza and COVID-19, tetanus, typhoid, tick-borne encephalitis, and hepatitis), preventive tests in a range of programmes, such as ANWIL for Health (e.g. blood tests, including TSH, Lyme disease, anti-TPO, anti-TG), densitometry tests, ultrasound or mammography tests, computer diagnostics of peripheral vascular diseases, dermatoscopy, sight and hearing tests, workshops with physiotherapists, cardiology consultations, dietary and healthy lifestyle advice, first aid workshops, and assistance with the cost of eyeglasses for employees.

In addition, ORLEN Group employees and their families are offered additional healthcare packages and benefit from various initiatives organised by the companies (ultrasound scans for employees' children, etc.).

A **research programme** is conducted across the ORLEN Group to investigate the i**mpact of the working environment on worker health** in relation to a specific control group. The programme is carried out by the Military Institute of Medicine in Warsaw and the PZU Zdrowie Medical Centre in Płock. The programme is open to employees and their families.

During annual **Occupational Safety and Health Protection Days** at the ORLEN Group companies, preventive health care initiatives are offered to employees.

GRI 11.9.5

Worker participation, consultation, and communication on occupational health and safety

OHS Committees are in place at ORLEN Group companies (PKN ORLEN, ORLEN Laboratorium, Basell Orlen Polyolefins, ANWIL, ORLEN OIL, ORLEN Południe, ORLEN Serwis, ORLEN Ochrona, IKS Solino, ORLEN KolTrans, ORLEN Eko, ORLEN Centrum Usług Korporacyjnych, ORLEN Centrum Serwisowe, ORLEN Administracja, Polska Press, ORLEN Transport, ENERGA Group companies in which establishment of an OHS Committee is required.) There is an equal representation of the employer, including a doctor responsible for preventive health care, and trade unions, including Company Social Labour Inspector, on each OHS Committee.

Responsibilities of the Committees include:

- Issuing opinions on proposed changes in workplace organisation and equipmen;
- Analysing conclusions from the Occupational Risk Assessment;
- Issuing opinions on standards for employee personal protective equipment, clothing and footwear;
- Reviewing periodic assessments of health and safety at work;
- Issuing opinions on measures to prevent work-related injuries and ill-health;
- Preparing conclusions and issuing opinions on the Plan for Improvement of Occupational Health and Safety Conditions, and assessing its implementation.

OHS Committee proceedings are held regularly, at least once a quarter. In addition, committees with a similar scope of responsibilities operate at the ORLEN Unipetrol companies, Public Company ORLEN Lietuva, ORLEN Deutschland and ORLEN Baltics Retail. OHS Committees are also being set up at companies integrated into the ORLEN Group in 2022, including Rafineria Gdańska, LOTOS Serwis, LOTOS Petrobaltic, and LOTOS Kolej.

As regards consultations on occupational health and safety issues at ORLEN Group companies, employees are represented by **employee representatives and trade unions**. Employee representatives and trade unions are a party in consultations on occupational safety matters, such as development and updates of the Occupational Risk Assessment, employee entitlements to protective clothing and shoes and prophylactic meals and beverages, determination of the scope of basic medical care for employees, and identification of solutions to improve occupational safety. They are also involved in the activities of OHS Committees.

The ORLEN Group provides **access to information on occupational safety** through the Company's internal communication system, including the PKN ORLEN intranet available to employees of the ORLEN Group companies. Such information is also disseminated during **Occupational Safety Days** and **Topics of the Month**, as well as through safety alerts and programmes dedicated to employees, such as the Employee Support System.

Employees are involved in the development and improvement of work safety through the Report a Safety Hazard system.

Occupational Safety Day at PKN ORLEN and Topic of the Month

Topic of the Month is a project carried out on the first Thursday of each month. It includes self-assessment of OHS, fire protection and process safety issues by the heads of organisational units, Short Talks on Safety with employees, and discussion of a Topic of the Month. The topic to be addressed in a given month, prepared by the PKN ORLEN OHS Office, concerns a selected work safety issue or the promotion of worker health and work-leisure balance.

The project's objectives are to:

- Identify threats, including psychosocial threats, and ways to protect against them;Znalezienie bezpieczniejszych sposobów wykonywania konkretnych prac na swoich stanowiskach i dodatkowych środków ostrożności.
- Look for safer ways to perform specific work activities and additional precautions

Occupational Safety Day is an initiative aimed at raising awareness of hazards and threats, including those of a psychosocial nature.

GRI 11.9.6

Worker training on occupational health and safety

The ORLEN Group organises mandatory training programmes on safety for its employees and contractors to familiarise them with the safety standards applicable at the Group companies. The programme focuses on raising the employees' and contractors' awareness of the importance of correct assessment of the situation, knowledge of potential risks and risk mitigation methods, adherence to OHS rules and procedures, proper use of protective systems and equipment, and the need to report potentially dangerous incidents. The programme includes tools for checking the employees' and contractors' knowledge.

OHS training provided to ORLEN Group employees includes initial and periodic training on first aid, fire safety, evacuation exercises, as well as other training with elements of OHS.

The training is provided free of charge to employees during working hours and, where needed, in different language versions. Its effectiveness is assessed by holding theoretical and practical examinations.

ORLEN Group companies' contractors receive training on general OHS, fire safety and process safety issues, working methods, local hazards, and specialist training with elements of OHS. Theoretical and practical examinations are carried out to assess effectiveness of the training, with the system for auditing contractors' work serving as an additional verification tool.

PKN ORLEN and ORLEN Unipetrol RPA operate **Training Centres**.

PKN ORLEN Training Centre

The Training Centre is a concept developed to train employees of external contractors engaged in any work at the Company's production facilities, as well as the Company's own new hires in the production area. It involves detailed checking of the staff's theoretical and practical knowledge within four thematic blocks: OHS, machinery, electrical systems, and local hazards at PKN ORLEN's production facilities. Knowledge of and skills in mechanical and electric engineering are checked through practical tasks. A similar initiative addressed to employees has been implemented at ORLEN Unipetrol RPA.

Selected ORLEN Group companies have systems in place to assess the quality of training provided by Training Centres through training assessment or service provider assessment procedures.

GRI 11.9.7

Promotion of worker health

Occupational Safety and Health Protection Days is an annual event dedicated to promoting work safety and healthy lifestyles among the Group's employees and contractors. Each edition of the project and its planned events present a unique opportunity for employees of the ORLEN Group companies, as well as for external contractors, to participate in activities designed to consolidate and check their OHS knowledge.

Occupational Safety and Health Protection Days are announced annually by the Head of the PKN ORLEN Occupational Health and Safety Office for ORLEN Group companies to be held at the same time, although each company prepares its own programme of the event, in keeping with the announced main theme. Participants of the successive editions of Occupational Safety and Health Protection Days at the ORLEN Group have had an opportunity to visit the Driver Awareness site, medical booths, VR simulators, gaming and OHS competition areas, as well as exhibitions of OHS businesses and representatives of the ORLEN Group companiesspółek Grupy ORLEN.

In 2022, the event included: virtual first aid training, a safe driver zone, Gel Candles relaxation workshop, Herbal Forest, medical consultations, survival workshops, a mobile escape room, competitions with prizes, and a food zone. It was also held in Gdańsk for the former LOTOS Group companies.

GRI 11.9.8

Prevention and mitigation of occupational health and safety impacts directly linked by business relationships

The ORLEN Group companies have in place a safety standard entitled **'Classification and supervision of safety of third-party companies located on the premises of ORLEN Group companies or providing services to ORLEN Group companies'**. Implementation of the standard consists in periodic audits of external companies, which are classified into three categories:

- Companies of strategic importance, which have a significant direct impact on the Company's functioning, core business, and critical infrastructure – **Group A**.
- Companies providing contractor and execution services, such as day-to-day plant maintenance, and executing smaller investment projects, which have a direct impact on the functioning of PKN ORLEN and ORLEN Group companies located on premises owned by PKN ORLEN, which are not of strategic importance. These companies perform particularly hazardous work on premises owned by PKN ORLEN and/or are involved in the collection, storage and transport of dangerous substances produced by the Company – **Group B**.
- Companies operating ancillary or support processes, which do not have a direct impact on the Company's functioning, have indirect roles in the operation of processes, act as subcontractors to external companies of strategic importance or carrying out plant maintenance activities, which do not work on operating production facilities – **Group C**.

External companies classified in:

- **Group A** are audited at least once a year
- **Group B** are audited using the sampling method at least once every three years
- **Group C** are not audited, but may be audited at the request of the Head of the PKN ORLEN Occupational Health and Safety Office

The process includes a comprehensive audit covering, among other things: the company's certified safety management systems, risk and hazard management, accident and crisis identification systems, hazard reporting and mitigation programmes, work safety culture building and improvement, management of employee conduct, work organisation, fire, process and technical safety.

In addition, the ORLEN Group companies **regularly assess suppliers** in terms of safety of their work. In 2022, the ORLEN Group took steps to maintain and enhance the objectives of the **Safety Plus+** project that was carried out in 2017–2021 at the six largest production companies of the Group: PKN ORLEN, ANWIL, ORLEN Południe, ORLEN UNIPETROL RPA, ORLEN Lietuva and Basell ORLEN Polyolefins. The project encompassed extensive modifications in the personal safety, process safety, and fire protection areas. Furthermore, a number of initiatives were taken to introduce the Safety Standards covered by Safety Plus+ at other ORLEN Group companies.

In 2022, the companies implementing the **LOGISTICS+** and **RETAIL+** projects continued their efforts in those areas. The purpose of the projects is to put in place a uniform safety framework and improve work safety in the areas of logistics and service stations at the ORLEN Group. The Technical Standards introduced as part of LOGISTICS+ and RETAIL+ were developed in cooperation with representatives of the occupational safety functions of the companies involved. They are a set of guidelines created on the basis of best practices applied by the ORLEN Group. The process was monitored and the companies received support in the implementation of the planned activities in accordance with the schedule. The LOGISTICS+ Technical Standards were updated and follow-up visits at the companies were planned.

Improvement of the contractor safety management system

In 2022, steps were taken to improve the existing external contractor occupational safety management system, including:

- Contractor accident rates were monitored, and the accident statistics were taken into account in the calculation of the ORLEN Group occupational safety KPIs (a comprehensive analysis of contractor work-related injuries was carried out and the TRR was calculated based on this data).
- Information on work-related injuries involving contractors and on remedial actions undertaken in the case of particular accidents was communicated within the ORLEN Group (Safety Alerts; ORLEN Group Personal, Process and Fire Safety Reports).
- The tasks prescribed in the safety standard M2 'Subcontractor management' were carried out.
- Inspections and audits were conducted to check work safety and preparation of the contractors for work to be performed, including inspections and audits required under the ORLEN Group's technical standard entitled 'Classification and supervision of safety of third-party companies located on the premises of ORLEN Group companies or providing services to ORLEN Group companies'.
- Operation of the PKN ORLEN Training Centre was continued.
- Work safety workshops and webinars were organised for third party employees.
- A section dedicated to contractors was created at **orlen.pl – External contractors | ORLEN**. It contains up-to-date information on safety issues, applicable requirements, training and incentive programmes, and awareness campaigns (Report a Safety Hazard).

09

Process safety

Process facilities of the ORLEN Group are properly designed, built, operated, repaired, maintained and upgraded. They also conform to the highest standards and meet the requirements of all laws, regulations and rules.

≤0,3

T1 PSER maintained for the ORLEN Group

3

number of spills at the ORLEN Group in 2022*

ca. 31 Mg

mass of spills in 2022*

Sustainable Development Goals 2030

Sustainable Development Goals 2030 pursued by the process safety measures implemented by PKN ORLEN and the ORLEN Group in 2022:

GRI indicators

The GRI Standards 2021 disclosures described in this section:

- GRI 11.8.1 Management of material topic: Asset integrity and critical incident management
- GRI 11.8.2 Significant spills*
- GRI 11.8.3 Number of process safety events by business activity*
- GRI 11.8.4 The ORLEN Group is not involved in the oil sands business

* The reported indicators do not include data for the former LOTOS Group and PGNiG Group. Indicators based on full data will be reported for 2023.

1. Process safety management and policies in place

Overview

The Process Safety Office is engaged in the oversight of the Safety Management System at PKN ORLEN and provides relevant support to the ORLEN Group companies.

For SEVESO Establishments at PKN ORLEN, the Process Safety Office monitors compliance with the legal requirements and other regulations on major industrial accidents within its remit.

The Office is also involved in promoting and advancing the culture and idea of process safety, implementing and promoting best practice in safety management, and providing directions for the development of process safety across the ORLEN Group.

The Office collaborates with universities to raise the awareness of process safety.

Asset integrity and critical incident management

GRI 11.8.1

Management of material topic: Asset integrity and critical incident management.

Process safety – activities involving definition of methods and measures to protect people and the environment against the consequences of failures and industrial accidents; identification of existing needs before technological, process or organisational changes; organisational and technical measures undertaken at every stage of a process to guarantee safe process management, safety of the process personnel, and thus process reliability.

Any identified potential accident hazard at the ORLEN Group's plants is likely to have an adverse impact on:

- **The environment, if hazardous substances are released into the atmosphere or into the soil and groundwater in unpaved areas**.
- There is also a **potential threat to the health and life of employees, contractors and individuals subjected to physical exposures (such as thermal radiation, overpressure wave or toxic gas cloud) from industrial accidents.**
- **Impacts on human rights are effectively minimised through the implementation of Policies and standards aimed at protecting human rights at the ORLEN Group.** The goals and objectives of these Policies and standards demonstrate that they prioritise protection of the health and safety of ORLEN Group employees as an overriding value, an essential element of the ORLEN Group's organisational culture and business ethics, and a reflection of its commitment to fundamental human rights. The ORLEN Group provides a **safe and healthy work environment** for all its employees, making every effort to ensure that the workplace is free of health and life hazards and organised so as to protect employees against injuries and serious health impairment. The Group makes efforts across three dimensions, by **fostering a safety culture, developing personal and process safety, and taking a range of measures aimed at preventing workplace injuries, industrial accidents, fires and other unwanted incidents.**

Business relationships for the identification and reporting of process safety events at the ORLEN Group are based on the requirements of the countries in which the plants are located. In countries of the European Union, the leading regulation for process safety events is Directive 2012/18/EU of the European Parliament and of the Council of 4 July 2012 on the control of major accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC (the SEVESO Directive). Each EU member state has implemented the requirements of that Directive into its national law. Accordingly, relationships with respect to process safety events are built between plant operators and competent authorities (public authorities). Based on its activities and experience to date, such relationships at the ORLEN Group are built in a competent and responsible manner, with due respect for human rights and freedom of expression on both sides.

In an effort to **prevent major industrial accidents at the ORLEN Group**, relevant **Policies** have been put in place, some of them **based on the requirements of the SEVESO Directive.** The Directive obligates plant operators to draw up a major accident prevention policy and submit it to the competent authorities. PKN ORLEN has met this requirement, drawing up an equivalent of such policy: the **Declaration on Prevention of Major Industrial Accidents at Polski Koncern Naftowy ORLEN Spółka Akcyjna.** The Declaration sets out the operator's overall approach and measures, including appropriate safety management systems, for controlling major accident hazards.

To manage the topic of process safety events at the ORLEN Group, each company has adopted relevant **Internal Orders and Procedures (mechanisms) for activities involving identification, response, reporting and handling of such events, as well as remedying the damage and restoring the plant to normal operation.**

The ORLEN Group's production companies have implemented **a Process Safety Management System conforming to the US OSHA 1910.119 standard, taking into account the Guidance on meeting expectations of The Energy Institute Process Safety Management Framework.** The system provides an effective framework for achieving operational excellence, as it improves technical safety of the process, storage and auxiliary units, and thus prevents any unwanted incidents that could affect the safety of staff and/or production processes. The Process Safety Management System, as a component of PKN ORLEN's overall management and organisational system, was introduced to ensure the highest safety standards in the workplace and meet the national requirements of Art. 252 of the Environmental Protection Law of April 27th 2001 (consolidated text: Dz.U. of 2022, item 2556, as amended) with respect to systemic process safety management and further improvement of the effectiveness and efficiency of measures aimed at preventing major industrial accidents.

In addition, mechanisms were developed and implemented to allow various teams involved in an incident investigation to make recommendations aimed at preventing reoccurrence of similar incidents at the ORLEN Group and to share knowledge through **lessons learned.** These include:

- Use of dedicated and internationally recommended hazard analysis and process risk assessment methods, i.e. HAZOP, QRA, PHA, evaluation of physical effects of identified possible accident scenarios at the design stage and during the use of installations presenting accident hazards. Adoption of technical measures at the ORLEN Group facilities to detect and quickly respond to any unplanned events, as well as maintenance of Company Fire Brigades within the structures of the ORLEN Group plants, which significantly contribute to the mitigation of potential negative impacts.
- Implementation of Procedures and allocation of responsibilities to individual areas responsible for cooperation with external authorities, inspection bodies and accident investigation authorities appointed by the governments of the countries where the ORLEN Group plants are located. Establishment of mechanisms to determine the scope and type of information to be shared outside in order to investigate accidents, request corrective action or remedy the consequences.
- Development and implementation at the ORLEN Group of mechanisms of cooperation with public authorities and external institutions for drills carried out to test the effectiveness of internal procedures on the basis of applicable national legislation.

In order to **monitor the effectiveness of measures addressing safety incidents at the ORLEN Group,** the following have been implemented:

- Relevant Standards of Practice, such as: **ST S6 T1 'Reporting of personal, fire and process safety incidents at the ORLEN Group', ST M1 T3 'Technical Standard for Management of Personal and Process Safety Metrics at the ORLEN Group'.** On that basis, information about any incidents at the ORLEN Group is reported to PKN ORLEN. The information is used to generate reports summarising key process safety metrics on a monthly, semi-annual and annual basis, as well as for individual internal needs or for external auditors.

- The ORLEN Group's key process safety indicator is **T1 PSER**. The aspirational trend curve for this indicator for 2022–2026 has been defined in the **'ORLEN Group Development Directions in Personal and Process Safety'**. In addition to this indicator, there are other metrics, which are described in detail in the aforementioned ST M1 T3 standard.
- The effectiveness of measures taken and progress towards the stated goals are recorded on a year-on-year basis and reviewed against the objectives of the 'Development Directions'. Reports summarising the values of key indicators are prepared annually. On that basis, collaboration within the ORLEN Group is furthered and lines of action are defined to improve the existing Process Safety Management Systems.
- Conclusions drawn from the process safety indicators are reported and communicated within the ORLEN Group by email and during annual ORLEN Group's Personal, Process and Fire Safety Personnel Meetings. The target indicators for future reporting periods are always analysed and communicated to ORLEN Group companies.
- Stakeholder involvement may significantly contribute to indicator values thanks to appropriate classification of safety events in accordance with the PKN ORLEN Standard. The objectives set in the 'ORLEN Group Development Directions in Personal and Process Safety' will help improve the existing Process Safety Management Systems and deploy one at the remaining plants. The effectiveness of measures taken to improve Process Safety Management Systems at the ORLEN Group is best demonstrated by the fact that the **T1 PSER indicator for the ORLEN Group has been maintained at ≤ 0.3,** matching the aspiration line.

2. Due diligence procedures

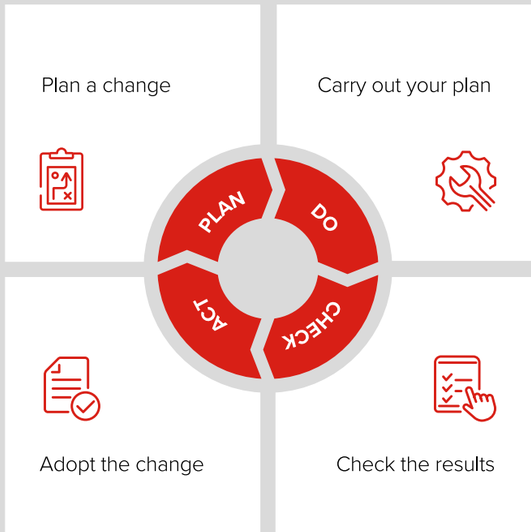
In 2022, work was carried out to maintain and improve the **Process Safety Management System** based on OSHA 1910.119 standard. It provides a more effective framework for achieving operational excellence, as it guarantees technical safety of the process, storage and auxiliary units, and thus prevents unwanted events that could affect the safety of staff or processes.

As part of maintenance and improvement of the Process Safety Management System, the following steps are required in accordance with the Deming cycle:

- Review the status quo;
- Check the existing regulations / internal policies for completeness and put in place new ones;
- Confirm that each system component has been fully implemented;
- Satisfy the system requirements based on regulations / policies and make the necessary improvements.

The review covers the company's compliance with the requirements for 14 components of the Process Safety Management System under existing regulations by which a given component has been implemented.

CHART 13 |



Components of the Process Safety Management System:

1. Safety culture – fostering safe behaviours and safety leadership at the company through management's decisions and activities aimed at ensuring the highest possible safety standards for the employees and processes.
2. Safety leadership – invariably the key aspect of building a safety management system and safety culture – strong, forward-looking leadership and prominent role of management influencing attitudes and everyday operating activities with the support of highly qualified teams.
3. Roles and responsibilities – defining roles and responsibilities in case of an industrial accident at all levels of the organisation and taking measures to build awareness of the need for continuous improvement and prevention, through developing training programmes and providing training to employees responsible for proactive and preventive activities, as well as accident response training at all levels of the organisation and to other workers present on site, including subcontractors.
4. Information – ensuring availability of information on process safety as the knowledge needed to determine and implement measures supporting the achievement of the organisation's objectives; this information must be up to date and easily available in the decision making processes.
5. Mechanisms – deployment of mechanisms facilitating systematic analysis of the risk of a major accident and probability of its occurrence, and therefore enabling its avoidance.
6. Designing – at any stage of an industrial unit's life, designing must be based on the applicable standards and guidelines, and should take into account the possibilities and ways of reducing the likelihood of an accident.
7. Instructions and procedures – defining instructions for safe operation of process units that use hazardous substances during normal operation, maintenance, shutdowns, and industrial process adjustments.
8. Supervision over mechanical integrity – continuous monitoring of the technical condition of plant and equipment, performed through periodic inspections, reviews and tests, in accordance with the regulatory requirements and industry standards.
9. Safe work practices – performing work at a unit in conformity with the highest standards and requirements in order to ensure safety at the work stations and process continuity, while preventing accidents.
10. Change and project management – using a systemic approach when changes to an industrial process are necessary, in order to identify whether and how the planned changes may impact process safety.
11. Contractor management – making and abiding by arrangements concerning safe performance of work on the PKN ORLEN premises by contractor staff so as to ensure the highest possible safety standards at all stages of such work.
12. Accident response – implementing the requirement to monitor, in accordance with best available practices, the operation of process units using hazardous substances so that corrective measures can be put in place should any deviation from normal operation occur, including due to normal wear and tear or corrosion.
13. Analysis – assessing safety events that have occurred on a systematic basis and applying the knowledge gained from such events at the ORLEN Group or other plants globally, including putting in place mechanisms that foster learning from past experience (lessons learned).
14. Auditing and compliance assessment – systematic analysis and review of the process safety system in terms of its compliance with the relevant requirements; review of the Accident Prevention Programme, being one of the key documents and a systematic programme for the implementation of the overriding goal of proactive accident prevention, and the safety management system in terms of their validity and effectiveness, including information on how the validity and effectiveness is documented and approved, as well as the internal operating emergency response plans that are mandatory for upper-tier and lower-tier establishments (i.e. establishments posing a high or increased risk of a major accident).

CHART 14 |

Process safety is becoming a specific field related to resilience engineering, which defines safety as the ability to maintain plant success under normal and emergency conditions. An important role is played by organisational systems, capable of immediate response to maintain business continuity.

29 plants/facilities of the ORLEN Group were classified as upper-tier establishments in 2022, and almost half of that number as lower-tier establishments, as per the classification framework under the Seveso III Directive applicable across Europe and implemented into national law by all EU member states in 2015. In Poland, the relevant regulations are laid down in the Environmental Protection Law. The establishments of both types have in place advanced and constantly improved process safety management systems as an organised method for managing safety, encompassing all the vital safety components referred to above.

To describe the current status of process safety at the ORLEN Group production companies, the Group uses various process safety indicators, including leading and lagging ones, in accordance with the API 754 standards. Those indicators are monitored and measured using the Company's internal application to help achieve the overarching objective of process safety management, which means preventing and minimising the risk of major accidents. These indicators also serve as the basis for benchmarking against the best industry players and thus contribute to achieving process excellence.

TABLE 83

ORLEN Group plants/facilities with a high and increased risk of a major industrial accident (upper-tier and lower-tier establishments)*

	UTE[1]	LTE[2]
Poland		
PKN ORLEN	7	10
ORLEN Paliwa	6	1
BOP	1	-
ANWIL	1	-
ORLEN Południe	2	-
ORLEN Aviation	-	1
IKS „Solino"	1	-
Czech Republic		
ORLEN Unipetrol RPA	3	-
ORLEN Unipetrol Doprava	5	-
Paramo	1	-
Spolana	1	-
Lithuania		
ORLEN Lietuva	2	-

[1] UTE – upper-tier establishments

[2] LTE – lower-tier establishments

* The reported indicators do not include data for the former LOTOS Group and PGNiG Group.
Indicators based on full data will be reported for 2023

Significant spills*

GRI 11.8.2

Total number and mass** of significant spills

2022	Number of spills **3**	Mass of spills **ca. 31 Mg****
2021	Number of spillst **6**	Mass of spills **ca. 115 Mg****

Information on each spill reported by ORLEN Group companies is presented in the table below.

TABLE 84 |

Location	Volume [Mg]	Type of substance	Comment/Accident cause
PKN ORLEN Production plant in Płock, Blending Department, slop tanks	**ca. 8**	**Fuel spill** (petroleum tar)	Release into a slop tank chamber, so there was no impact on unpaved areas and no need for site remediation. Cleaning of the concrete chamber, inlet channels, tank insulation, outer shell, fittings and associated equipment. No impact on soil or water surface. **Cause: human error** – non-compliance with prescribed procedures (a valve was not closed after a sample had been taken from an adjacent stud pipe, lack of operator control required by the manual).
SPOLANA Production plant in Neratovice, caprolactam unit	**ca. 21**	**Chemical spill** (sulfur)	On the unit's site; no impact on soil or water surface. The entire spill was collected and disposed of by an external company. **Cause: human error** – an external contractor employee did not correctly connect the unloading hose.
PKN ORLEN Production plant in Płock, Reforming V, B-T fraction pipeline	**ca. 2**	**Chemical spill** (benzene-toluene fraction)	Release into the environment. Because of the weather conditions at that time, the released substance was discharged into the sewer system without any impact on soil and water surface. The substance was fully discharged into the sewer system and neutralised at the Water and Sewage Plant. **Cause: technical failure** – broken seal..

The consequences of all of the above spills involved equipment and site contamination. In addition, most of those incidents required covering the costs of rescue operations by Company Fire Brigades as well as repair or replacement of damaged equipment. No person suffered any injuries as a result of those incidents.

* The reported indicators do not include data for the former LOTOS Group and PGNiG Group. Indicators based on full data will be reported for 2023.

** Most organisational and technical documents (Emergency Manuals/SEVESO Documents) maintained by the ORLEN Group companies and the type of substances present necessitate reporting the volume of a release in Mg rather than m3. Furthermore, in line with the requirements of API 754, a substance release is determined based on thresholds expressed in units of mass. Therefore, to standardise reporting, the volume of significant spills has been reported in units of mass rather than volume.

3. Number of process safety events, by business activity

GRI 11.8.3

TIER 1, TIER 2 and TIER 3 process safety events*

TIER 1 PROCESS SAFETY EVENTS

These are emergencies with a significant impact related to a sudden and unexpected substance release due to ineffective protection layers. Such incidents include a sudden and unexpected release of hazardous substances or non-toxic and non-flammable substances (steam, condensate, hot water, nitrogen, compressed air, CO_2) during ongoing industrial processes, having one or more of the following consequences:

- Injury to an employee of the ORLEN Group or of a contractor or subcontractor, resulting in a sick leave or death;
- Hospital admission and/or death of any other person;
- Officially announced evacuation of local residents or recommendation for them not to leave their homes;
- Fire or explosion resulting in losses in the form of direct costs of at least USD 100 thousand;
- Release of excessive pressure into the atmosphere with the use of pressure relief devices in an amount equal to or higher than the threshold amounts in any one hour period;
- Release of a substance (without causing its ignition) in an amount equal to or higher than the threshold amounts in any one-hour period, excluding release of pressure into the atmosphere with the use of pressure relief devices.

TIER 2 PROCESS SAFETY EVENTS

These are events of lesser consequence related to a sudden and unexpected substance release due to ineffective protection layers. Such emergencies include a sudden and unexpected release of hazardous substances or non-toxic and non-flammable substances (steam, condensate, hot water, nitrogen, compressed air, CO_2) during ongoing industrial processes, having one or more consequences not classified as TIER1, including:

- Injury to an employee of the ORLEN Group or of a contractor or subcontractor;
- Fire or explosion resulting in losses in the form of direct costs of at least USD 2,500;
- Release of excessive pressure into the atmosphere in an amount equal to or higher than the thresholds in any one-hour period;
- Release of a substance (without causing its ignition) in an amount equal to or higher than the threshold amounts in any one-hour period, excluding release of pressure into the atmosphere with the use of pressure relief devices.

* The reported indicators do not include data for the former LOTOS Group and PGNiG Group. Indicators based on full data will be reported for 2023.

Number of TIER 1, TIER 2 and TIER 3 events at PKN ORLEN and the ORLEN Group

CHART 3

Number of TIER 1 process safety events – PKN ORLEN and the ORLEN Group

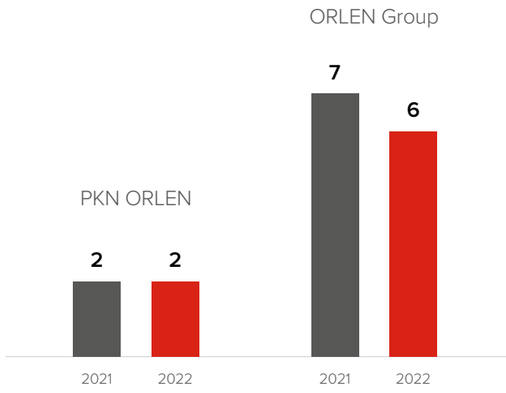


CHART 5

Number of TIER 3 process safety events – PKN ORLEN and the ORLEN Group

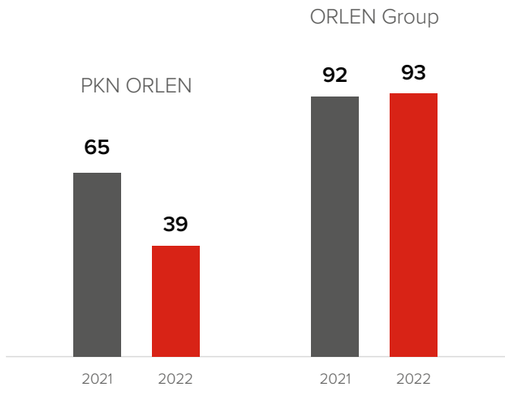
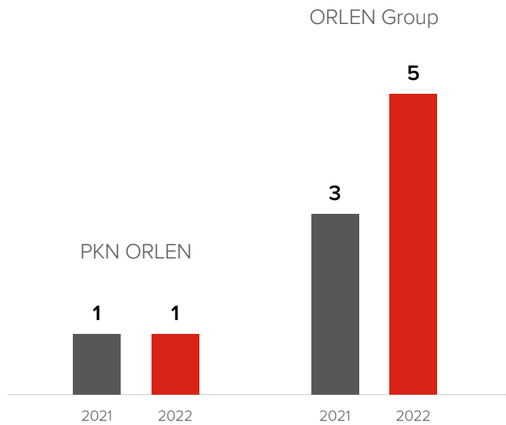


CHART 4

Number of TIER 2 process safety events – PKN ORLEN and the ORLEN Group



In 2022, the ORLEN Group continued reporting the TIER 31 process safety events rate referring to near-miss events.

TABLE 85

Number of process safety events at the ORLEN Group

2021

	Poland	Czech Republic	Lithuania
TIER 1 PROCESS SAFETY EVENTS	3	3	1
TIER 2 PROCESS SAFETY EVENTS	2	1	0
TIER 3 – Production	82	0	10

2022

	Poland	Czech Republic	Lithuania
TIER 1 PROCESS SAFETY EVENTS	2	4	0
TIER 2 PROCESS SAFETY EVENTS	2	2	1
TIER 3 – Production	79	1	13

1. It was assumed that **TIER 3 – production process safety events** are emergency shutdowns of installations or process nodes triggered by active or passive protections (automatic or mechanical).

CHART 6

T1 PSER indicator[2] at the ORLEN Group

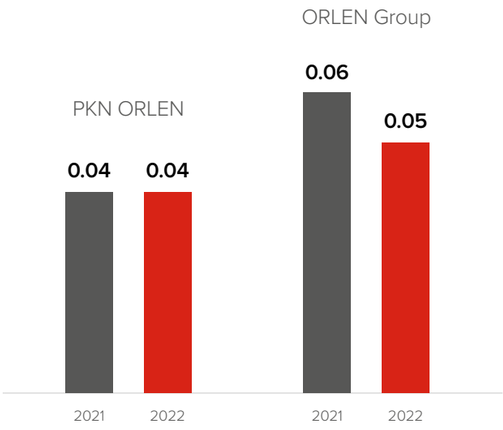
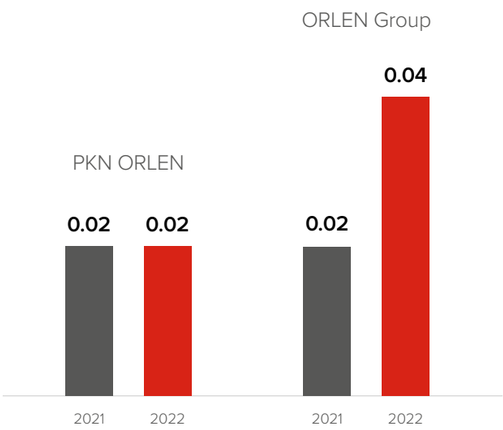


CHART 7

T2 PSER indicator[3] at the ORLEN Group



The Two of the TIER 1 events reported for 2022 had an impact on ORLEN Group employees. One of them resulted in the deaths of two employees, while four ORLEN Group employees were injured in the other. The other TIER 1 and TIER 2 events reported for 2022 involved only emissions into the environment caused by fires and spills. There were no incidents causing serious damage to the natural environment. Liquid leaks were collected and properly disposed of.

Investigation teams were set up at ORLEN Group companies for all the reported incidents, in particular those resulting in casualties and injuries. Recommendations were made and corrective actions were taken to prevent reoccurrence.

GRI 11.8.4

The ORLEN Group is not involved in the oil sands business.

2. T1 PSER = (number of TIER 1 process safety events, of greater consequence, related to substance release into the environment/ number of man-hours worked by employees and contractors) x 1,000,000

3. T2 PSER = (number of TIER 2 process safety events, of lesser consequence, related to substance release into the environment/number of man-hours worked by employees and contractors) x 1,000,000

4. Significant risks relating to the Group's business and methods of managing OHS and process safety risks.

TABLE 86 |

Risks/processes	Risk description	Risk mitigation methods	Risk development trend
A. Workplace accidents and other hazards	• Failure to identify material risks for particular jobs • Injury/death at a production plant.	Introduction of a health and safety hazard reporting system, including division of responsibilities, supervision of the hazard identification process in the Occupational Risk Assessment, introduction of procedures to follow in the event of an accident at work Introduction of a system for reporting near-miss incidents and a procedure for handling such reports.	↔
B. Process Safety / Industrial Accident Prevention at the ORLEN Group	• Major industrial accidents and accidents during transport / handling of hazardous chemicals. • Injury/death at an ORLEN Group production plant or facilities as a result of a major industrial accident. • Material, reputational, and operational losses as a result of an industrial accident/technical failure.	Introduction of and compliance with relevant procedures and manuals; acceptance/approval of process risks by Process Safety Committees. Identification of risks at each stage of a unit's lifecycle (HAZOP); use of active and passive safety systems; application of organisational and technological solutions to ensure business continuity in emergencies. Compliance with and regular implementation of elements of the Process Safety Management System.	↔
C. Chemicals management	• Non-compliance with regulations on handling of chemicals. • Accidents/failures during transport or handling of chemicals.	Implementation of the provisions of the Comprehensive Prevention System, including delegation of responsibilities; introduction of the Process Safety Management System at PKN ORLEN.	↔
D. Employees and subcontractors' activities.	• Activities of employees and subcontractors resulting in violation of OHS regulations.	Reviewing and issuing opinions on contracts with subcontractors in terms of safety certificates and safety clauses, implementation of the Comprehensive Prevention System Operation of an extensive training system, including launch of the Training Centre at PKN ORLEN Delivery of information, education and incentive schemes.	↔

TABLE KEY

Colour highlighting the risk name:
Risk materiality for the organisation

critical | high | medium | low | very low

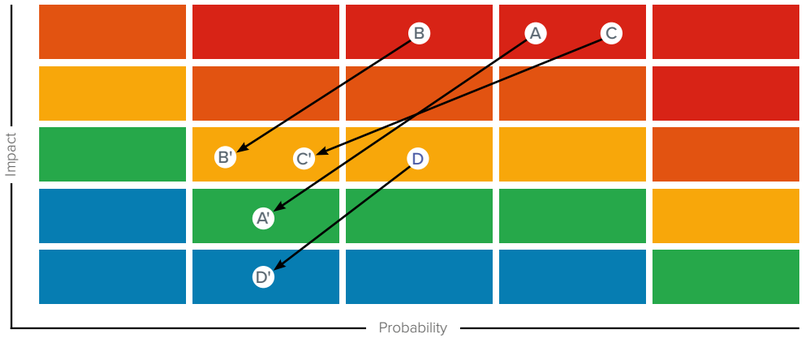
Colour of the arrows:
Risk level after taking into account the controls

critical | high | medium | low | very low

Risk development trend:
Year on year

↓ Falling ↑ Rising ↔ Stable

Effects of application of controls in risk management
– positioning of risks on the risk map



A, B, C, D
OHS and process safety risks – risk materiality

A', B', C', D'
OHS and process safety risks – risk level after taking into account the controls

10

Counteracting corruption and bribery

The ORLEN Group strives to eliminate factors that may facilitate corruption by obliging itself and its business partners to comply with the laws and market standards intended to prevent corruption and misconduct in all markets where the ORLEN Group companies, their subsidiaries and representative offices operate.

0 total number of confirmed incidents of corruption

100% of board members, employees and business partners are familiar with the organisation's anti-corruption policies and procedures

Sustainable Development Goals 2030

Sustainable Development Goals 2030 pursued by anti-corruption and anti-bribery measures implemented by PKN ORLEN and the ORLEN Group in 2022:

GRI indicators

GRI 11.20.1 Management of material topic: anti-corruption

GRI 11.20.2 Percentage and total number of operations assessed for risks related to corruption; identified risks

GRI 11.20.3 Communication and training about anti-corruption policies and procedures

GRI 11.20.4 Confirmed incidents of corruption and actions taken

GRI 11.20.5 Transparency of contracts and licences

1. Management of anti-corruption and anti-bribery

Overview

Prevention of corruption and bribery at PKN ORLEN and coordination of such activities across the ORLEN Group are the responsibilities of the **Control and Security Office**, acting in cooperation with the **Financial Control, Risk Management and Compliance Office and with the Audit Office**.

The responsibilities of the **Control and Security Office** include:

- Economic, physical, and technical security;
- Developing solutions and standards to improve performance of the internal control system;
- Implementation and coordination of measures defined in the 'ORLEN Group Anti-Corruption and Misconduct Prevention Policy', 'ORLEN Group Conflict of Interest Management Policy', 'ORLEN Group Policy for Accepting and Offering Gifts', 'Rules for Anonymous Reporting of Misconduct and Irregularities at PKN ORLEN' and 'Rules for Organising the Counterparty Screening Process at PKN ORLEN';
- Monitoring business processes, analysing information, and reporting irregularities and instances of misconduct;
- Coordinating criminal proceedings conducted by law enforcement authorities and the judiciary in which PKN ORLEN is involved in any capacity;
- Executing advanced security analyses and control processes;
- Cooperation with whistleblowers;
- Consultations regarding registration of gifts;
- Reviewing the security of cooperation with trade partners in business processes;
- Conducting internal control activities.

Financial Control, Risk Management and Compliance Office:

Financial Control Department and Regional Financial Control Team – Gdańsk

- As part of financial inspections performed at PKN ORLEN and other ORLEN Group companies – reveals irregularities and cases of misconduct of an economic nature, examines employees' compliance with the applicable laws, and assesses internal regulations; Estimates the consequences of any identified irregularities or cases of misconduct, and defines remedial measures, designating the persons responsible for their implementation;
- Provides relevant information to support decision-making processes by formulating post-inspection instructions which specify actions that must be taken to address the irregularities or improve performance of the area under review;
- Monitors the implementation of instructions issued following financial inspections at PKN ORLEN and other ORLEN Group companies.

Compliance Management Department

- 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 member of the Management Board, under the supervision of the Head of the Financial Control, Risk and Compliance Management Office. The compliance management process is regularly reported to the Management Board and Supervisory Board of the Company;
- Provides comments and prepares proposals for amendments to internal rules, procedures and regulations, both for PKN ORLEN and other ORLEN Group companies.

Enterprise Risk Management Team

- Coordinates the enterprise risk management process and provides methodology support during risk self-assessment and testing of controls put in place for PKN ORLEN and other ORLEN Group companies;
- Administers an IT tool providing information on identified risks and the relevant risk management strategies, has joint responsibility with the Control and Security Office for planning and execution of ad hoc and investigative inspections at PKN ORLEN and other ORLEN Group companies and for reporting the inspection findings to the Management Board of PKN ORLEN;.
- Prepares proposed subject matter for audits, consultancy projects, inspections and financial inspections based on an assessment of risks by the business areas;
- Provides training on the identification, definition and assessment of process, project and strategic risks, and on controls testing methodologies;
- Supports business areas, project managers and persons involved in project activities in defining and evaluating risks using the functionalities of the Magigue system and the CA Clarity PPM system;
- Actively participates in meetings aimed at improving the functionalities of the Magigue and PPM CA Clarity systems in enterprise and project risk management

Management Systems Department and Regional Management Systems Team – Gdańsk

- Supervises the proper operation and improvement of: Quality, Environmental, Food Security, Safety and Occupational Health, Information Security, Energy and ISCC and KZR INiG Management Systems, which form part of the Integrated Management System (IMS) at PKN ORLEN;
- Maintains contacts with independent certification bodies, institutions, research centres, associations and Management System users;
- Supervises implementation of the objectives adopted by the Management Board in the IMS Policy, their validity and revision in response to changing internal and external conditions;
- Supervises assessment of the implementation of the Integrated Management System Policies by the heads of organisational units;
- Organises and performs audits of existing and newly implemented Management Systems;
- Assesses operation of the Integrated Management System based on the results of internal audits, Management Reviews, and submitted complaints;

- Prepares and supervises documented IMS information;
- Analyses data relating to, and evaluates the effectiveness of, corrective/preventive measures;
- Analyses data on the Management Systems at designated ORLEN Group companies.

Audit Office

By carrying out audit tasks at PKN ORLEN and the ORLEN Group companies, the Audit Office contributes to their value growth as it:

- Identifies and assesses significant risks, threats and inefficiencies in the operation of the existing organisational system and business processes;
- Identifies and evaluates the existing controls and promotes their continuous improvement;
- Provides recommendations of solutions and standards to be implemented to enhance the probability of achieving goals by, among other things, reducing the risks, implementing new or strengthening the existing controls, improving effectiveness of the internal control system assessment, and enhancing the efficiency of business processes;
- Monitors the implementation of post-audit recommendations.

The Audit Office works with the Head of the Control and Security Office on measures to be taken by the company with respect to proceedings conducted by law enforcement authorities or competent external institutions, in order to safeguard the company's interests in such proceedings.

GRI 11.20.1

Management of material topic: Anti-corruption

The ORLEN Group seeks to eliminate any instances of corruption and bribery.

The ORLEN Group has the **Anti-Corruption and Misconduct Prevention Policy** in place and relies on organisational and procedural solutions to ensure a fair and transparent model for conducting business activities by the ORLEN Group companies. They guarantee confidence and security of business transactions, free competition and value for all ORLEN Group stakeholders.

In the event of actual negative impacts, the ORLEN Group companies are prepared, within the framework of their internal procedures and controls as well as in accordance with the applicable laws, to respond adequately and to undertake the necessary cooperation with law enforcement authorities.

As part of corruption prevention efforts, regular training is offered and campaigns promoting appropriate behaviour are carried out on the internet and intranet (International Anti-Corruption Day). An Anti-Corruption Guide for employees and trade partners of ORLEN Group companies is also available. An annual anti-corruption report covering the entire ORLEN Group is also prepared, with a summary of anti-corruption measures taken by individual companies.

Standards for policies related to anti-corruption are introduced at the ORLEN Group, their implementation and execution status monitored on an ongoing basis. The ORLEN Group Anti-Corruption and Misconduct Prevention Policy defines specific metrics to check the effectiveness of measures taken. In addition, the Control and Security Office monitors criminal cases involving ORLEN Group companies. Anti-corruption standards as well as coherent organisational and systemic solutions related to those standards have been implemented and are regularly updated at the ORLEN Group companies. Given certain differences among the companies, resulting from such things as the size of their assets, core business, number of employees or jurisdiction, anti-corruption standards are implemented to an adequate extent.

The ORLEN Group has established dedicated channels within its **Anonymous Whistleblowing System** for stakeholders to report virtually all kinds of misconduct and irregularities, including corrupt behaviour. All such reports are reviewed and then referred for follow-up.

To safeguard against potential consequences of corruption or risk of corruption within PKN ORLEN's supply chain, screening procedures are carried out and risk-mitigating controls are applied in business processes. ORLEN Group companies have been implementing standards for key business processes in which corruption and misconduct risks are identified. The standards also apply to the supervision of any proceedings that are under way and to the general evaluation and screening of suppliers. The companies do not engage in business with any entities for which the risk of corruption has been assessed as high. In addition, the ORLEN Group companies cooperate with law enforcement and judicial authorities in criminal investigations and information exchange.

Misconduct can be reported via channels forming the Anonymous Whistleblowing System, which allows stakeholders of the ORLEN Group companies to report any material irregularities (clearly observable or reasonably suspected) that lead or may lead to:

- Violation of the law or internal regulations of the ORLEN Group companies;
- Serious damage to the business of the ORLEN Group companies.

Rules for anonymous reporting of misconduct and irregularities are now a standard at the ORLEN Group, implemented at the Group companies with due account taken of their specific characteristics and the jurisdictions in which they operate. Based on them, the companies have established channels for whistleblowing, which ensure anonymity and confidentiality to whistleblowers.

At PKN ORLEN, management of anti-corruption and anti-bribery is also carried out through **financial inspections** carried out by the Financial Control Department at the Financial Control, Risk Management and Compliance Office. The Financial Control Department performs its statutory tasks through financial inspections conducted at PKN ORLEN and the ORLEN Group companies.

On the basis of the applicable internal regulations, the Financial Control Department is also authorised to conduct such inspections at companies of the former LOTOS Group and PGNiG Group.

In 2022, financial control activities were performed on the basis of annual plans approved by the President of the PKN ORLEN Management Board and requests submitted to the Head of the Financial Control, Risk Management and Compliance Office by Members of the PKN ORLEN Management Board and by individual business areas. Based on findings presented in the financial inspection reports, follow-up instructions were issued which specified and prioritised measures to be taken to eliminate irregularities or improve the performance of the inspected area.

The Financial Control Department continuously monitors the implementation of follow-up instructions, i.e. until it is satisfied that the corrective measures have been put in place. The rules and procedures for monitoring post-inspection instructions are set forth in **the Rules for financial control procedures** carried out by the Financial Control, Risk Management and Compliance Office. Twice a year, the Head of the Financial Control, Risk Management and Compliance Office presents to the PKN ORLEN Management Board and the Audit Committee of the PKN ORLEN Supervisory Board a report on the financial inspections performed and a report on the implementation status of the post-inspection instructions.

Following all the financial inspections carried out by the Financial Control Department of the Financial Control, Risk Management and Compliance Office, in 2022 a total of **177 instructions were addressed to the inspected areas, 45 of which concerned organisational units of PKN ORLEN and 132 – the ORLEN Group companies.**

In the course of each **audit**, the Audit Office reviews and assesses the risk of potential fraud and misconduct in the organisational processes under review, as well as the existence and effectiveness of safeguards against such risks. These activities cover sales, procurement, logistics and other processes in the audited business areas of PKN ORLEN and the ORLEN Group. The Audit Office produces recommendations for solutions and standards that can be implemented to reduce such risks by introducing new or strengthening existing controls.

If any irregularities are identified, including information justifying suspicion of an offence, the Audit Office is required to report that to the PKN ORLEN Control and Security Office.

Key policies

ORLEN Group Anti-Corruption and Misconduct Prevention Policy is designed to raise employee awareness of anti-corruption, encourage positive attitudes and behaviour, and streamline procedures and business process oversight. The document underscores the importance of training and awareness-raising among employees and the responsibility of companies' managements to create conditions that help to prevent and counteract corruption at the ORLEN Group. The person responsible for coordinating the implementation of the Policy objectives is the PKN ORLEN Anti-Corruption Compliance Officer. Relevant activities are based on three pillars: employees directly engaged in business processes, employees responsible for economic security support functions, and employees responsible for internal control and audit.

ORLEN Group Conflict of Interest Management Policy ensures transparency in business relationships, identifying and managing any potential or actual conflicts of interest involving employees and representatives of external stakeholders.

Anonymous Whistleblowing System allows PKN ORLEN employees and other persons to report any irregularities and violations of law related to the Company's operations. Whistleblowers can remain anonymous, thus protecting their identity and enhancing the Company's security. In the Anonymous Whistleblowing System, reports can be made either in written form or orally and whistleblowers are afforded protection.

ORLEN Group Policy for Accepting and Offering Gifts – its purpose is to prevent corruption, ensure transparency in business relationships and enable registration of gifts accepted and offered. The Policy lays down the key rules for accepting and offering gifts, and specifies employees' responsibility in this respect.

Rules for Organising the Counterparty Screening Process at PKN ORLEN – counterparty screening is a process comprising a set of actions to identify the counterparty, determine the circumstances associated with a transaction and exercise due diligence in deciding whether to enter into or continue a transaction with that counterparty.

ORLEN Group anti-money laundering and terrorist financing rules and instructions – laying down detailed procedures to be followed in counteracting money laundering and financing of terrorism at the ORLEN Group. The rules are addressed to all companies' employees in customer-facing positions and employees who have direct access to financial documents or participate in the execution of transactions.

ORLEN Group Regulatory Risk Management Policy, being a part of the Compliance Policy – governs regulatory risk management processes resulting from existing or proposed legal regulations, excluding tax risks.

Policy on corporate governance and allocation of the companies in which PKN ORLEN holds equity interests to PKN ORLEN Management Board Members in charge of business oversight of the companies – a document containing instructions on the selection of candidates for members of the ORLEN Group companies' governing bodies and the rules for setting and reviewing Individual Bonus-Related Targets for members of the ORLEN Group companies' management boards. It provides for full corporate supervision over the ORLEN Foundation.

Supplier Code of Conduct – defines ethical standards that must be met by the ORLEN Group suppliers. It includes guidance on activities related to counteracting corruption, and promotes high ethical standards in business activities.

Rules for Managing the Risk of Losing Information Security Attributes – information and guidelines on the process of managing the risk of losing security attributes.

Rules for Financial Control Procedures Carried out by the Financial Control, Risk Management and Compliance Office – set out the rules governing financial inspections at PKN ORLEN and other ORLEN Group companies.

PKN ORLEN Financial Control Standards – set out the framework for management, performance and quality assurance in financial control activities. The purpose of the Standards is to ensure and maintain a professional level of financial inspections carried out by the Financial Control Department of the PKN ORLEN Financial Control, Risk and Compliance Management Office and to standardise the approach to preparation, conduct and recording of financial inspections and assessment of their findings.

Rules for the Implementation of Audits, Consultancy and Business Analysis Assignments at PKN ORLEN – define the rules for conducting audits, consulting projects and business analyses at PKN ORLEN, other ORLEN Group companies and other entities, to the extent permitted by law.

Enterprise Risk Management Policy and Procedure – laying down the principles of Enterprise Risk Management for PKN ORLEN and the roles and responsibilities of each individual involved in the process.

Integrated Management System Policy – a document describing the working standards for quality assurance, reduction of environmental impacts, health and safety at work, information security and food safety. It is a declaration to assure quality, minimise environmental impacts, ensure employee safety and information security, and is closely related to the PKN ORLEN core values.

Companies of the former LOTOS Group and the PGNiG Group (until August 1st 2022 and until November 2nd 2022, respectively, and until the end of 2022), applied anti-corruption policies and solutions adequate for the ORLEN Group, ensuring a comparable degree of protection for their operations.

2. Key performance indicators

GRI 11.20.2

Percentage and total number of operations assessed for risks related to corruption. Identifed risks.

At PKN ORLEN and the ORLEN Group companies covered by the Enterprise Risk Management (ERM) System, the following anti-corruption and anti-bribery risks have been identified and assessed, depending on each company's specific characteristics:

- **Fraud and other misconduct** – the risk of employees acting unethically and committing fraud or other misconduct. The risk of fraud and other misconduct was identified in 37 processes in the areas of retail, wholesale, procurement, safety, finance, human resources, oil trading, marketing, and legal.
- **Employees' conduct resulting in violation of law** – risk that any activities taken by employees or subcontractors on behalf of the Company or its subsidiary may lead to a violation of national or international law. The risk was identified in 24 processes in the areas of procurement, retail, safety, finance, oil trading, marketing and legal.
- **Misconduct by customers, employees or agents involved in the sales process** – the risk of an inappropriate sales process or system or inappropriate sales system safeguards enabling customers or employees to commit financial fraud. The risk of misconduct by customers, employees or agents in the sales process was identified in 3 processes in the areas of retail and wholesale.

The risks related to anti-corruption and anti-bribery were assessed in a controls effectiveness review conducted by the relevant business areas in respect of 64 processes and in an independent review performed by the Internal Control Department based on the irregularities identified during inspections.

In 2022, the ERM System covered: PKN ORLEN, ANWIL, ORLEN Lietuva Group, ORLEN Unipetrol Group, ORLEN Deutschland GmbH, ORLEN Paliwa and ORLEN Centrum Usług Korporacyjnych, which represent close to 10% of all the ORLEN Group companies.

In 2022, as part of an annual risk self-assessment process and risk controls tests at PKN ORLEN, **629** risks were assessed based on tests of **1,027** controls in **195** business processes. The ORLEN Group companies assessed **222** risks and tested **723** controls across **89** processes.[1]

[1] The data does not include: ORLEN Lietuva Group, ORLEN Unipetrol Group, and ORLEN Paliwa Sp. z o.o. A risk self-assessment process at those companies will be carried out in the following years.

GRI 11.20.3

Communication and training about anti-corruption policies and procedures*

- Total number and percentage of board members to whom the organisation's anti-corruption policies and procedures have been communicated – 100%.
- Total number and percentage of employees to whom the organisation's anti-corruption policies and procedures have been communicated – 100%.
- Total number and percentage of business partners to whom the organisation's anti-corruption policies and procedures have been communicated – 100% Information about the anti-corruption standards in force at the ORLEN Group is provided to all trading partners at the time of contract conclusion and by posting the most important information on www.orlen.pl or websites of the ORLEN Group companies.
- Total number and percentage of board members who have received anti-corruption training – 100%. Anti-corruption training is provided to each newly appointed board member.
- Total number and percentage of employees who have received anti-corruption training – 100% (basic training in the form of e-learning). The ORLEN Group's anti-corruption training consists of two stages. Stage one is basic training, which all employees are required to take once every two years. Stage two is additional improvement training, addressed to people working in business areas with the highest risk of corruption.

* Former LOTOS Group and PGNiG Group not included.

GRI 11.20.4

Confirmed incidents of corruption and actions taken

- Total number and nature of confirmed incidents of corruption – not found.
- Total number of confirmed incidents in which employees were dismissed or disciplined for corruption – not found.
- Total number of confirmed cases of termination or non-renewal of contracts with business partners due to corruption-related violations – not found.
- Public corruption cases brought to court against the organisation or its employees during the reporting period and the outcome of such cases – not found.

GRI 11.20.5

Transparency of contracts and licences

Transparency of contracts is ensured by their digitisation, whereby any changes made to them can be traced during inspection and audit activities.

Trade contracts constitute business secrets and as such are not disclosed to the public. Contracts and licences are not expected to be disclosed to the public for reasons of security of business operations of the ORLEN Group companies and their trade partners.

PKN ORLEN has policies and regulations in place to ensure transparency of its contracts and agreements. These include: **Instruction on drafting, registering, reviewing, approving, signing and archiving contracts** concluded by PKN ORLEN, and the Procurement Instruction, which lay down the rules for preparing and concluding contracts.

The organisation has developed various types of clauses (e.g. non-disclosure, rights to inventions, sanctions, anti-corruption and other clauses), which PKN ORLEN employees are required to use when preparing draft contracts. Before a contract or agreement is concluded, its draft is consulted with other organisational units of PKN ORLEN, including Legal, Finance, Tax, and Controlling.

In the course of its audits, the Audit Office reviews the transparency of contractual provisions relating to the business processes under review and seeks to identify any risks involved.

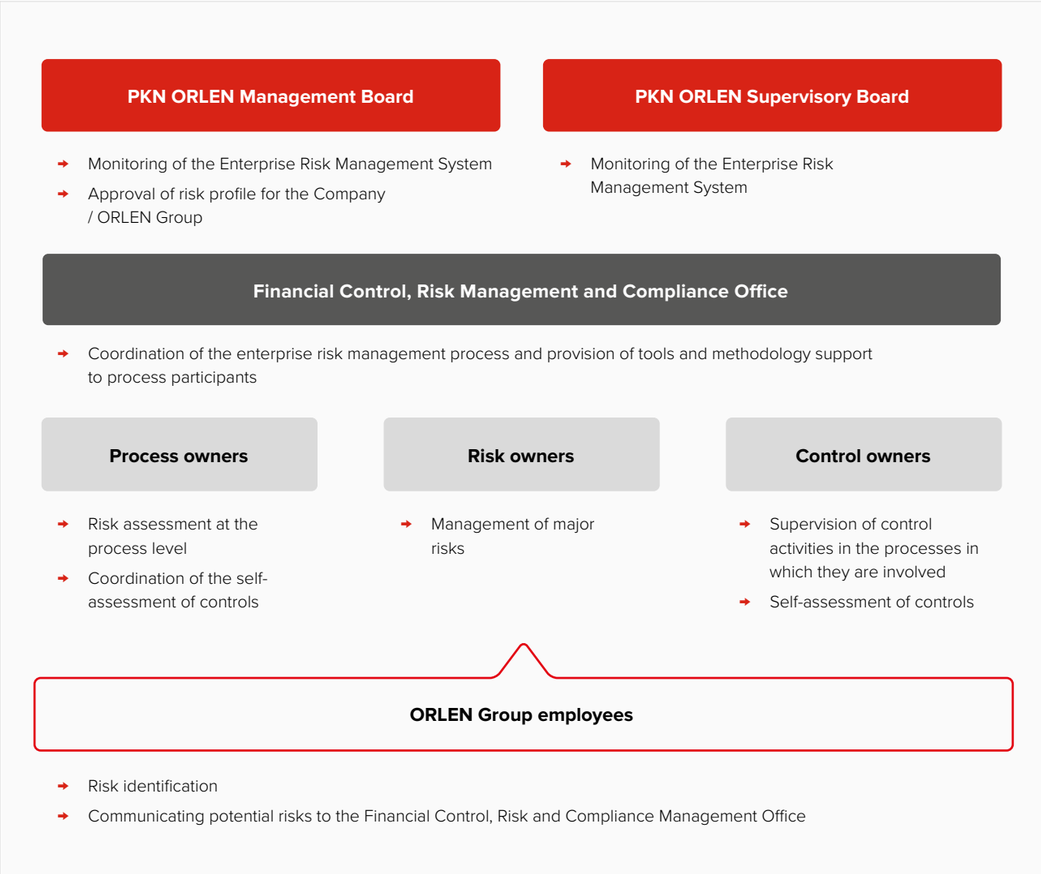
3. Due diligence procedures

In accordance with the Code of Best Practice for WSE Listed Companies, PKN ORLEN has in place effective functional control, risk management and compliance supervision systems, as well as an internal audit and control function. The simultaneous operation of all those systems and functions allows the Group to exercise ongoing and effective anti-corruption supervision.

PKN ORLEN has implemented a structured management control system, comprising a set of comprehensive procedures. The procedures are managed through a dedicated IT system which ensures their consistency through multifaceted agreements as well as approvals at each level in the organisation.

Key roles in the Enterprise Risk Management System

SCHEME 15



In order to minimise the risk of misconduct and corruption, PKN ORLEN has adopted the popular **Three Lines of Defence Model**. The first line of defence involves risk management by employees and business units, and controls related to the operational processes. The second line is compliance functions, and the third – internal audit and control, supporting the correct functioning of the specified prevention measures.

First line of defence/prevention – Integrated Enterprise Risk Management System.

Risk management is a continuous process, however it is revised in response to the ever-changing economic environment. As part of enterprise risk management, risk self-assessment processes and controls tests are carried out at PKN ORLEN and other ORLEN Group companies on a regular basis.

Second line of defence/prevention – Compliance function and Integrated Management System.

PKN ORLEN's compliance function is based on the following four elements:

- The ERM system, which supports the process of assessment of financial and operational risk compliance with regard to the effectiveness of controls and the ERM Policy and Procedure;
- The internal audit and control function – with respect to compliance of the processes with internal regulations;
- Assessment of compliance with integrated management systems (ISO);
- Managing the risk of non-compliance with legal regulations, standards and ethical norms based on the requirements of the PKN ORLEN Compliance System documentation, with a particular focus on risks related to the Company's business sector.

At PKN ORLEN, financial control is the responsibility of **the Financial Control Department of the Financial Control, Risk Management and Compliance Office**. The Financial Control Department carries out financial inspections aimed at identifying any economic irregularities and fraud, verifying if PKN ORLEN and ORLEN Group employees respect the applicable laws, internal policies and professional standards, estimating the impact of any potential irregularities or cases of misconduct, defining corrective measures and designating responsible persons, as well as assessing internal policies. The inspected area is scrutinised mainly against legal compliance, relevance, cost efficiency, reliability, efficiency and legitimacy criteria, with the interests of PKN ORLEN and ORLEN Group companies taken into consideration. Independence of the Financial Control Department is assured through appropriate functional reporting lines within the Company's organisational structure. Financial control activities are performed on the basis of annual plans approved by the President of the PKN ORLEN Management Board. Additionally, the Financial Control Department can also perform ad hoc and investigative inspections upon requests submitted to the Head of the Financial Control, Risk and Compliance Management Office by Members of the PKN ORLEN Management Board and individual business functions. On the basis of findings presented in the financial inspection reports, follow-up instructions are issued which specify and prioritise measures to be taken to eliminate irregularities or improve the performance of the inspected area.

In addition, the implementation of post-inspection instructions is monitored continuously until it is confirmed that the corrective measures have been put in place. Reports summarising the financial inspections and reports on the implementation of post-inspection instructions are drawn up for the PKN ORLEN Management Board and the Audit Committee of the PKN ORLEN Supervisory Board twice a year.

PKN ORLEN's Integrated Management System takes into account the findings of audits and reviews as well as complaints and grievances. Additionally, preventive/corrective measures are taken to address any irregularities identified in the above processes. All these activities are designed to ensure compliance with the adopted reference standards: ISO 9001 and AQAP 2110 (quality management system), ISO 14001 (environmental management system), ISO 45001 (occupational health and safety management system), ISO 50001 (energy management system) and ISO/IEC 27001 (information security management system), ISCC and KZRINiG (biomass and biofuels certification system), Factory Production Control System, and Food Safety Management System. Once a year, based on the reviews, a comprehensive report about the organisation's Integrated Management System is prepared, submitted to the Company's Management Board and posted on the intranet.

PKN ORLEN's compliance with or preparedness (alignment level) for applicable laws or draft legislation is monitored on an ongoing basis and reported to the PKN ORLEN Management Board. Where necessary, appropriate steps are taken to ensure that the Company meets the requirements of Polish and EU laws and regulations.

In the Integrated Management System a process-based approach is applied involving identification and mapping, based on an analysis of the context of the entire organisation's operations, of the processes which are necessary to ensure compliance of its products and services offered to customers with relevant requirements, while maintaining pro-environmental production methods and pro-environmental approach, and minimising the environmental impacts, continuously improving the safety of working conditions, and meeting requirements in all areas relevant to security of information processed by PKN ORLEN. A total of 54 processes/sub-processes were identified at the Company, for which 135 metrics were defined.

In line with the risk-based approach, process owners are responsible for identifying threats (risks) and opportunities that can potentially affect the operation and efficiency of the processes – meeting customers' requirements and taking appropriate and 'adequate' measures. A process-based system of internal audits is used, which checks compliance of individual areas with the adopted standards. The improvement measures we take cover internal and external factors and identify opportunities as they open to the organisation.

Third line of defence/prevention – Internal audit and control function

The audit function is performed by the Audit Office. Its purposes include independent, impartial and objective evaluation of functional control systems and analysis of business processes in accordance with the generally applicable laws and internal policies.

The activities of the Audit Office conform to the International Standards for the Professional Practice of Internal Auditing (IIA).

Independence of the Audit Office is assured through appropriate functional and administrative reporting lines within the Company's organisational structure. The Audit Office performs its functions (audits, consultancy projects and business analyses) on the basis of an annual audit plan approved by the Company's Management Board. The annual plan is presented to the Audit Committee of the Company's Supervisory Board in order to obtain its opinion, and is then submitted directly to the Supervisory Board for approval.

As part of their activities, the Audit Office and the Control and Security Office verify on an ongoing basis if processes are executed in line with the applicable internal regulations. Ad hoc audits may also be conducted by the Audit Office when and as directed by the Company's Supervisory or Management Board.

The Audit Office continuously monitors its recommendations, based on which it prepares a report containing information on their implementation status. All monitoring reports are submitted to the Company's Management Board and the Audit Committee of the Company's Supervisory Board, which is in charge of ongoing assessment of the entire organisation's functioning.

The Control and Security Office, on the basis of the ongoing monitoring of recommendations and post-audit instructions, prepares a report on the status and scope of implementation of the recommendations. Its activities consist in prevention and detection of irregularities. They are complemented by activities performed by **ORLEN Ochrona**, which has due authorisations and appropriate tools, such as an authorisation to use the services of business intelligence agencies and detectives. If any instance of corruption is suspected, relevant steps are taken in close cooperation with law enforcement agencies, including the police and Central Anti-Corruption Bureau (CBA). With simultaneous operation of all the systems and functions described above, the Group is able to exercise ongoing and effective anti-corruption supervision. Since 2018, ORLEN Group companies have appointed **Anti-Corruption Compliance Officers** or, in the case of those companies which do not have separate organisational units in charge of security, persons cooperating with the **Anti-Corruption Compliance Officer of PKN ORLEN S.A.**

The internal control process includes inspections and reviews at PKN ORLEN and the ORLEN Group companies.

Inspections are carried out at the direction of the President of the PKN ORLEN Management Board, while reviews are carried out at the direction of the Head of the Control and Security Office. In particular, such activities are designed to:

- Reveal any irregularities and misconduct;
- Verify whether the ORLEN Group companies staff respect the applicable laws, internal policies and standards as well as professional best practice;
- Review and counteract threats to the interests of ORLEN Group companies, for instance by proposing ways to eliminate adverse factors in day-to-day operations and prevent their reoccurrence.

In the pursuit of corporate governance objectives, inspections are carried out at ORLEN Group companies on the basis of PKN ORLEN's formal powers as their shareholder, without the need to conclude separate agreements and at PKN ORLEN's expense. However, rules for carrying out inspections and reviews at ORLEN Group companies registered outside of Poland must be analysed on a case-by-case basis against the local law to determine their formal, legal and tax conditions. Post-inspection recommendations are issued to eliminate any adverse factors and prevent future threats to the ORLEN Group.

4. Material risks and management approaches

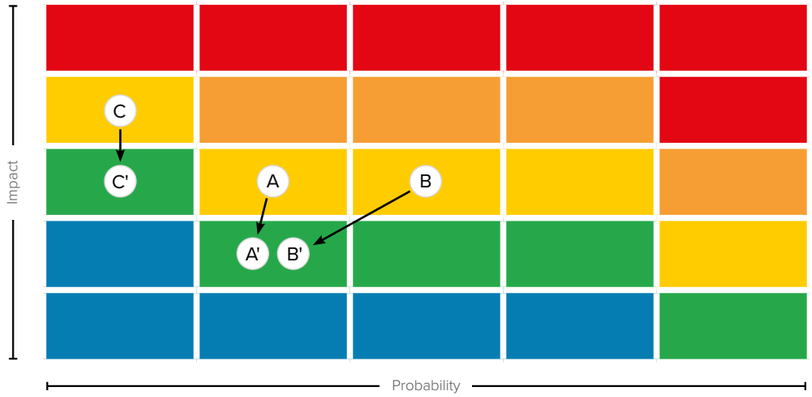
FIGURE 87 | Counteracting corruption and bribery

Risks/Processes	Risk description	Risk mitigation methods	Risk development trend
A. Fraud and other misconduct	• Accepting financial gains from potential suppliers • Conflicts of interest with respect to transactions • Disclosure of confidential information • Falsifying management information or other documents	Restricting access to supplier offers and the information they contain, monitoring impartiality towards potential suppliers, oversight of the supplier selection acceptance path; Access to Business Secrets and any confidential data regulated by internal policies, restricted to authorised personnel, and monitored on an ongoing basis; Procedures have been introduced to verify records and management information by the various company departments.	↔
B. Employees' conduct resulting in violation of law	• Involvement in illegal transactions or concealing information about illegal transactions by employees • Execution of contracts in circumstances where the law does not permit continuation of the process	Review of the correctness of contracted obligations against powers of attorney/authorisations, supervision by authorised employees of supplier contracts and protection of the ORLEN Group's interests; Providing opinions on and approval of contracts by business functions in a dedicated system.	↔
C. Misconduct on the part of customers or employees	• Theft of fuel by employees or customers • Release of products to unauthorised persons and/or for unauthorised vehicles	Regular inspections of service stations and terminals, verification and monitoring of reports on service stations' compliance with the requiremevnts; Automatic process of blocking and unblocking sales orders for customers defaulting on payments and exceeding the trade credit limit, based on the applicable PKN ORLEN instruction.	↓

Table key

Risk materiality for the organisation	critical	high	medium	low	very low
Risk level after taking into account the controls	critical	high	medium	low	very low
Risk development trend year on year	↓ Falling	↑ Rising	↔ Stable		

Effects of application of controls in risk management



A, B, C,
Anti-corruption and anti-bribery risks – risk materiality

A', B', C'
Anti-corruption and anti-bribery risks – risk level after taking into account the controls

Authorisation of the Non-financial Statement of the ORLEN Group and PKN ORLEN S.A. for 2022

This Non-financial Statement of the ORLEN Group and PKN ORLEN S.A. for 2022 has been authorised by the Parent's Management Board on April 27th 2023.

Daniel Obajtek
President
of the Management Board

Armen Artwich
Member
of the Management Board

Adam Burak
Member
of the Management Board

Patrycja Klarecka
Member
of the Management Board

Krzysztof Nowicki
Member
of the Management Board

Robert Perkowski
Member
of the Management Board

Michał Róg
Member
of the Management Board

Piotr Sabat
Member
of the Management Board

Jan Szewczak
Member
of the Management Board

Iwona Waksmundzka-Olejniczak
Member
of the Management Board

Józef Węgrecki
Member
of the Management Board