May 2021

SECOND PARTY OPINION

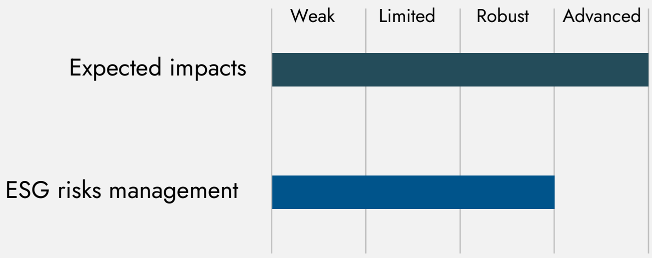
on the sustainability of Polski Koncern Naftowy (PKN) Orlen's Green Finance Framework

V.E is of the opinion that PKN Orlen's Framework is aligned with the four core components of the Green Bond Principles 2018 ("GBP") and Green Loan Principles 2021 ("GLP").
In addition, PKN Orlen's climate change strategy has adopted a majority of the four key elements of recommended disclosures of the Climate Transition Finance Handbook (December 2020).

Framework

Contribution to Sustainability:

Advanced Limited
Robust Weak



SDG Mapping

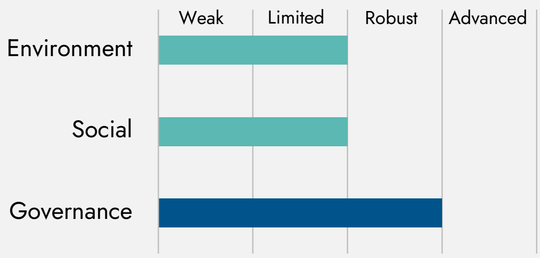
Characteristics of the Framework

Green Categories	⇒ Renewable Energy ⇒ Clean Transportation ⇒ Pollution Prevention and Control
Project locations	Poland and the Czech Republic
Existence of framework	Yes
Share of refinancing	To be disclosed before each Instrument issuance
Look back period	36 months from the year of issuance

Issuer

ESG Performance as of November 2020

Advanced Limited
Robust Weak



ESG Controversies

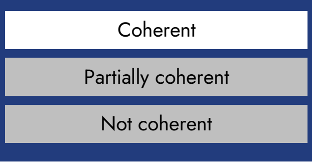
Number of controversies	One
Frequency	Isolated
Severity	Significant
Responsiveness	Non-communicative

Controversial Activities

The Issuer is involved 6 of the 17 controversial activities screened under our methodology:

☒ Alcohol
☐ Animal welfare
☐ Cannabis
☒ Chemicals of concern
☐ Civilian firearms
☒ Fossil fuels industry
☒ Coal
☐ Gambling
☐ Genetic engineering
☐ High interest rate lending
☐ Human embryonic stem cells
☒ Military
☐ Nuclear power
☐ Pornography
☐ Reproductive medicine
☐ Unconventional oil and gas
☒ Tobacco

Coherence



We are of the opinion that the Framework is coherent with PKN Orlen's strategic sustainability priorities and sector issues and that it contributes to achieving the Issuer's sustainability commitments.

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Keys findings

Alignment with the Green Bond Principles and Green Loan Principles

V.E is of the opinion that PKN Orlen's Framework is aligned with the four core components of the GBP and GLP.

Of note, PKN Orlen's first issuance has also obtained a CBI certification.

Use of Proceeds – aligned with the GBP and GLP

- Eligible Categories are clearly defined, the Issuer has communicated the nature of the expenditures and the location of Eligible Projects. The eligibility criteria of the three Eligible Categories is in line with CBI's screening indicators, and the Renewable Energy and Clean Transportation Categories follow the screening criteria of the EU Taxonomy[1].
- The Environmental Objectives are clearly defined, these are relevant for all the Eligible Categories and set in coherence with sustainability objectives defined in international standards.
- The Expected Environmental Benefits are clear, these are considered relevant, measurable, and will be quantified for all the eligible categories in the reporting.
- The Issuer has committed to transparently communicate on the share of refinancing before each issuance. The look-back period for Eligible Categories covering capital and/or operational expenditures will be 36 months from the year of issuance, while no look-back period is defined for assets which meet the Eligibility Criteria, in line with market practices.

Evaluation and Selection - aligned with the GBP and GLP, and with best practices identified by V.E

- The Process for Project Evaluation and Selection has been clearly defined and detailed by the Issuer. It is considered well-structured in all the evaluation and selection steps (including the proposal, selection, validation, and monitoring of the Eligible Projects). The roles and responsibilities are clear and include relevant expertise. The process is publicly available in the Framework and this SPO.
- Eligibility Criteria (selection) for project and asset selection have been clearly defined and detailed by the Issuer for all the Eligible Categories.
- The process applied to identify and manage potentially material E&S risks associated with the projects is publicly disclosed in this SPO. The process is considered robust: it combines monitoring, identification, and corrective measures for a majority of the Eligible Green Projects (see detailed analysis on pages 17-19).

Management of Proceeds - aligned with the GBP and GLP

- The Process for the Management of Proceeds is clearly defined and is publicly available in the Framework and this SPO.
- The allocation period will be at the end of 2023.
- Net proceeds of the Instrument will be placed in the general treasury and tracked by the Issuer in an appropriate manner and attested in a formal internal process.
- Information on the intended types of temporary placement for the balance of the unallocated net proceeds is publicly disclosed.
- The Issuer has committed that as long as the Instrument is outstanding, the balance of the tracked net proceeds will be periodically adjusted to match the allocation during that period.
- The Issuer has provided information on the procedure that will be applied in case of project/asset divestment or postponement and it has committed to reallocate divested proceeds to projects that are compliant with the framework.

[1] https://ec.europa.eu/info/publications/210421-sustainable-finance-communication_en#taxonomy

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Reporting - aligned with the GBP and GLP, , and with best practices identified by V.E

- The Issuer has committed to report on the Use of Proceeds annually, until maturity. The report and its external verification will be publicly available on the website of PKN Orlen.
- The reporting will cover relevant information related to the allocation of Instrument proceeds and to the expected sustainable benefits of the projects. The Issuer has also committed to report on material developments and controversies related to the projects and assets.
- The reporting methodology and assumptions used to report on environmental benefits of the Eligible Green Projects Categories will be publicly disclosed.
- An external auditor will verify the tracking and allocation of funds to Eligible Green Categories, as well as the indicators used to report on environmental benefits, until maturity.

Alignment with the Climate Transition Finance Handbook

V.E. is of the Opinion that PKN Orlen's climate transition strategy has adopted a majority of the recommended disclosures on the four key elements of the Climate Finance Transition Handbook. The Issuer's climate transition targets do not include Scope 3 emissions, hence V.E does not have sufficient information to confirm that the Issuer's strategy is aligned with the goals of the Paris Agreement. An area for improvement is for PKN Orlen to align its climate transition strategy with the goals of the Paris Agreement by setting science-based targets including Scope 1, 2 and 3 emission (both in intensity and absolute terms) that cover their entire operations.

V.E values the commitments and efforts made by the Issuer to set GHG emissions reduction targets for its Scope 1 and 2 emissions, as well as the formalised commitment of the Issuer in the Green Financing Framework to include Scope 3 in future accounting of its GHG emissions moving forward. The Green Financing Framework, the green bond issuance plans and the commitment to include Scope 3 emissions represent important transparency and accountability steps towards setting climate transition targets as recommended by international best practices and standards, and the disclosure recommendations of the Climate Transition Finance Handbook 2020 *(see page 20)*.

Contact

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SCOPE

V.E was commissioned to provide an independent opinion (thereafter "Second Party Opinion" or "SPO") on the sustainability credentials and management of the Green Finance Instruments[2] ("Instruments") to be issued by PKN Orlen (the "Issuer") in compliance with the Green Finance Framework (the "Framework") created to govern their issuance.

Our opinion is established according to V.E's Environmental, Social and Governance ("ESG") exclusive assessment methodology and to the latest version of the voluntary guidelines of ICMA's Green Bond Principles ("GBP") - edited in June 2018,and the LMA/APLMA/LSTA Green Loan Principles (GLP) - February 2021 and the Climate Transition Finance Handbook – December 2020.

Our opinion is built on the review of the following components:

- Framework: we assessed the Framework, including the coherence between the Framework and the Issuer's environmental commitments, the Instruments' potential contribution to sustainability, its alignment with the four core components of the GBP 2018 and GLP 2021, and the Issuer's adoption of the four key recommended disclosure elements of the Climate Transition Finance Handbook 2020.
- Issuer: we assessed the Issuer's ESG performance, its management of potential stakeholder related ESG controversies and its involvement in controversial activities[3].

Our sources of information are multichannel, combining data (i) gathered from public sources, press content providers and stakeholders, (ii) from V.E's exclusive ESG rating database, and (iii) information provided from the Issuer, through documents and interviews conducted with the Issuer's managers and stakeholders involved in the Financial Instruments issuance, held via a telecommunications system.

We carried out our due diligence assessment from February 23 to May 3, 2021. We consider that we were provided with access to all the appropriate documents and interviewees we solicited. Reasonable efforts have been made to verify data accuracy.

Type of External Reviews supporting this Framework

☒	Pre-issuance Second Party Opinion	☒	Independent verification of impact reporting
☒	Independent verification of funds allocation	☒	Climate Bond Initiative Certification

[2] The "Green Finance Instruments" is to be considered as instruments to be potentially issued, subject to the discretion of the Issuer. The name "Green Finance Instruments" has been decided by the Issuer: it does not imply any opinion from V.E. The Issuer has stated that Green Finance Instruments may include bonds (including private placements), commercial paper, loans, promissory notes (Schuldscheindarlehen) and any other Green Finance Instruments in various formats and currencies.

[3] The 17 controversial activities screened by V.E are: Alcohol, Animal welfare, Cannabis, Chemicals of concern, Civilian firearms, Coal, Fossil Fuels industry, Unconventional oil and gas, Gambling, Genetic engineering, Human embryonic stem cells, High interest rate lending, Military, Nuclear Power, Pornography, Reproductive Medicine and Tobacco.

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COHERENCE

Coherent
Partially coherent
Not coherent

We are of the opinion that the contemplated Framework is coherent with PKN Orlen's strategic sustainability priorities and sector issues and that it contributes to achieving the Issuer's sustainability commitments.

According to the International Energy Agency[4], the oil and gas utilities sector emits a highly significant share of the world's greenhouse gas (GHG) emissions, with around 5200 million tonnes (Mt) of carbon-dioxide equivalent (CO2-eq), which accounts for 15% of total energy sector greenhouse gases (GHG) emissions. Additionally, a report released by the UNEP[5] finds that fossil fuels account for over 75% of global GHG emissions, and according the Global Carbon Project [6], in 2019, 85.5% of global CO2 emissions came from the use of fossil fuels and industry. According to the Intergovernmental Panel on Climate Change (IPCC), CO2 emissions from fossil fuels will need to decline by approximately 6% per year to remain on a 1.5° pathway, and by roughly 2% per year to remain on a 2°C trajectory[7].

Setting GHG emissions reduction targets is one of the key actions to be adopted by oil and gas companies to help meet the climate goals. In particular, a material issue for the sector is to set GHG emissions reduction targets which go beyond their own operational emissions (Scope 1 and 2) and to include Scope 3 emissions, which represent emissions from the combustion of fossil fuels, accounting between 70% to 90% of lifecycle emissions from oil products and 60% to 85% of those from natural gas[8].

Furthermore, according to the Stockholm Environmental Institute (SEI)[9], gradually phasing down oil production is an essential approach to help meet the Paris Agreement's 1.5-2°C temperature limits reducing fossil fuel consumption. Consequently, the transition of the core activities and investments towards a business model which clearly supports the climate goals (e.g. a business model centred around renewable energy) is material for the sector.

Therefore, mitigating climate change is a key sector challenge that the oil and gas sector must address urgently by managing the transition away from fossil fuels in order to achieve climate goals, particularly through the reduction of Scope 1, 2 and 3 emissions across companies' value chain, and changing the core business activities of power generation to cleaner sources of energy.

PKN Orlen reportedly acknowledges its role regarding climate change mitigation and energy transition through formalised commitments and targets towards decarbonisation and environmental responsibility, namely to:

- Achieve net carbon neutrality by 2050, including interim goals: -20% CO2 by 2030 from current production assets, -33% kgCO2/MWh from power produced (2019 baseline).
- Expand its portfolio to include Renewable Energy Systems In order to have >2.5 GW of renewable capacity by 2030.
- Develop the distribution infrastructure for alternative fuels, including electricity, biofuels, and hydrogen.
- Increase its activity in the area of circular economy.

[4] https://www.iea.org/reports/methane-tracker-2020/methane-from-oil-gas
[5] http://productiongap.org/wp-content/uploads/2019/11/Production-Gap-Report-2019.pdf
[6] https://www.carbonbrief.org/analysis-global-fossil-fuel-emissions-up-zero-point-six-per-cent-in-2019-due-to china#:~:text=Emissions%20from%20fossil%20fuel%20and,Global%20Carbon%20Project%20(GCP).
[7] https://www.ipcc.ch/site/assets/uploads/sites/2/2019/05/SR15_Chapter2_Low_Res.pdf ; http://productiongap.org/wp-content/uploads/2019/11/Production-Gap-Report-2019.pdf
[8] https://www.lse.ac.uk/granthaminstitute/news/emissions-targets-in-the-oil-and-gas-sector-how-do-they-stack-up/#:~:text=But%20downstream%20emissions%20from%20burning,those%20from%20natural%20gas%EF%BB%BF%20. ; https://www.iea.org/reports/world-energy-outlook-2018
[9] https://www.sei.org/publications/limiting-fossil-fuel-production-as-the-next-big-step/

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- Engage in research and development activities, e.g. in the field of biofuels, Carbon Capture and Utilization (CCU), and pyrolysis technology.
- Operate in accordance with the Integrated Management System, which includes the Environmental Management System (ISO 14001).

By creating a Framework to issue Green Finance Instruments to finance or refinance, in full or in part, assets related to Renewable Energy and Clean Transportation, the Issuer coherently aligns with its sustainability strategy and commitments and addresses the main issues of the sector in terms of environmental responsibility and climate transition. Please see our detailed assessment on the adoption of the four key recommended disclosure elements of the Climate Transition Finance Handbook 2020 (*see page 20*).

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FRAMEWORK

The Issuer has described the main characteristics of the Green Finance Instruments within a formalised Green Finance Framework (the last updated version was provided to V.E on May 3, 2021) which covers the four core components of the GBP 2018 and GLP 2021. The Issuer has committed to make this document publicly accessible on PKN Orlen's website, in line with good market practices.

Alignment with the Green Bond Principles and the Green Loan Principles

Use of Proceeds

Not Aligned	Partially Aligned	**Aligned**	Best Practices

The net proceeds of the Green Finance Instruments will exclusively finance or refinance, in part or in full, projects falling under three Green Project Categories ("Eligible Categories"), as indicated in Table 1.

- Eligible Categories are clearly defined, the Issuer has communicated the nature of the expenditures and the location of Eligible Projects. The eligibility criteria of the three Eligible Categories is in line with the Climate Bond Initiative's (CBI) screening indicators, and the Renewable Energy and Clean Transportation Categories follow the screening criteria of the EU Taxonomy.
- The Environmental Objectives are clearly defined, these are relevant for all the Eligible Categories and set in coherence with sustainability objectives defined in international standards.
- The Expected Environmental Benefits are clear, these are considered relevant, measurable, and will be quantified for all the eligible categories in the reporting.
- The Issuer has committed to transparently communicate on the share of refinancing before each issuance. The look-back period for Eligible Green Projects Categories covering capital and/or operational expenditures will be 36 months from the year of issuance, while no look-back period is defined for assets which meet the Eligibility Criteria, in line with market practices.

BEST PRACTICES

⇒ Content and eligibility criteria are clear and in line with international standards for all categories.
⇒ Relevant environmental benefits are identified and measurable for all project categories.
⇒ The Issuer has committed to transparently communicate the estimated share of refinancing for each Instrument issuance.

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Table 1. V.E' analysis of Eligible Categories, Sustainability Objectives and Expected Benefits as presented in the Issuer's Framework

- Nature of expenditures: Physical assets as well as CAPEX, OPEX and R&D related to the Eligible Categories.
- Location of Eligible Projects/Assets: Poland and the Czech Republic

ELIGIBLE CATEGORIES	DESCRIPTON	SUSTAINABILITY OBJECTIVES AND BENEFITS	V.E'S ANALYSIS
Renewable Energy	Investments and expenditures for the acquisition, development, manufacturing, construction, operation, distribution, and maintenance of renewable energy generation sources from: - Solar Energy: Onshore and offshore photovoltaics (PV), concentrated solar power (CSP) and solar thermal facilities. - Wind Energy: Onshore and offshore wind energy generation facilities.	Climate Change Mitigation CO2 emissions avoidance Increase of renewable energy installed capacity and generation	The Eligible Category is clearly defined, the Issuer has communicated the nature and location of Eligible Green Projects. The eligibility criteria is in line with CBI's screening indicators and the technical screening criteria of the EU Taxonomy[10]. The Issuer has declared that wind and solar energy installations shall not have more than 15% of the electricity generated from non-renewable sources. The Environmental Objective is clearly defined, it is relevant and set in coherence with sustainability objectives defined in international standards. The expected Environmental Benefits are clear, it is considered relevant, measurable, and will be quantified in the reporting.
Clean Transportation	Investments and expenditures to advance the introduction of low carbon transportation infrastructure, such as (but not limited to): - Infrastructure related to electric transportation of passengers and freight such as electric vehicle (EV) charging stations and hydrogen fuelling stations.	Climate Change Mitigation CO2 emissions avoidance	The Eligible Category is clearly defined, the Issuer has communicated the nature and location of Eligible Green Projects. The eligibility criteria is in line with CBI's screening indicators and the technical screening criteria of the EU Taxonomy[10]. The Issuer has declared that the low-carbo transportation infrastructure will only be for electric or hydrogen vehicles. The Environmental Objective is clearly defined, it is relevant and set in coherence with sustainability objectives defined in international standards. The expected Environmental Benefit is clear, it is considered relevant, measurable, and will be quantified in the reporting.

[10] https://ec.europa.eu/info/publications/210421-sustainable-finance-communication_en#taxonomy

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ELIGIBLE CATEGORIES	DESCRIPTON	SUSTAINABILITY OBJECTIVES AND BENEFITS	V.E'S ANALYSIS
Pollution Prevention and Control	Investments and expenditures for the acquisition, development, construction, and operation of facilities for: - Sorting mixed recyclables - Processing recyclable waste fractions into secondary raw materials	Transition to a circular Economy Increase the use of secondary raw material and their quality, including by high-quality recycling of waste Pollution prevention and control Increase preparing for the re-use and recycling of waste	The Eligible Category is clearly defined, the Issuer has communicated the nature and location of Eligible Green Projects. The eligibility criteria is in line with CBI's screening indicators. The technical screening criteria for activities related to Pollution Prevention and Control are not yet available in the EU Taxonomy[10]. The Environmental Objectives are clearly defined, they are relevant and set in coherence with sustainability objectives defined in international standards. The expected Environmental Benefit is clear, it is considered relevant, measurable, and will be quantified in the reporting.

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SDG Contribution

The Eligible Categories are likely to contribute to four of the seventeen United Nations' Sustainable Development Goals ("SDGs"), namely:

ELIGIBLE CATEGORY	SDG	SDG TARGETS
Renewable Energy	7 AFFORDABLE AND CLEAN ENERGY	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix.
Clean Transportation	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.
Pollution Prevention and Control	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.
Renewable Energy Clean Transportation	13 CLIMATE ACTION	UN SDG 13 consists of taking urgent action to combat climate change and its impacts. Through renewable energy and clean transportation assets and projects, companies can contribute to integrate climate change into their strategy and planning.

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Evaluation and Selection of Eligible Categories

Not Aligned	Partially Aligned	Aligned	Best Practices

- The Process for Project Evaluation and Selection has been clearly defined and detailed by the Issuer. It is considered well-structured in all the evaluation and selection steps (including the proposal, selection, validation, and monitoring of the Eligible Projects). The roles and responsibilities are clear and include relevant expertise. The process is publicly available in the Framework and this SPO.
- Eligibility Criteria (selection) for project and asset selection have been clearly defined and detailed by the Issuer for all the Eligible Categories.
- The process applied to identify and manage potentially material E&S risks associated with the projects is publicly disclosed in this SPO. The process is considered robust: it combines monitoring, identification, and corrective measures for a majority of the Eligible Projects (see detailed analysis on pages 17-19).

Process for Project Evaluation and Selection

- The Issuer's Investment Committee, comprising Managing Directors responsible for Finance, Controlling, Strategy and Innovations, Development and Technology, IT, M&A, Property Investments, Procurement, Production, as well as the Strategy Committee, comprising the Strategy Director and all PKN Orlen Board Members excluding the CEO, will govern the decision-making process of the issuance of Green Finance Instruments.
- The Committees are responsible for:
  - Verifying the compliance of the selected Eligible Green Projects with the Eligibility Criteria during the lifetime of the Instruments.
  - Excluding projects that no longer comply with the Eligibility Criteria or have been disposed of and replacing them on a best-efforts basis during the portfolio review. Regarding the process of the proposal and selection of the Eligible Projects, the Strategy Division and the Finance Management Division submit materials and recommendations to the Investment Committee (comprised of Managing Directors responsible for Finance, Controlling, Strategy, M&A, CAPEX Investments and Production) to conduct an assessment on the compliance of investment projects with the taxonomy and criteria of external independent institutions responsible for certifying eligible investment projects portfolios. The Strategy Committee (comprised of the Strategy Director and all PKN ORLEN Board Members excluding CEO) is responsible for approving the eligible investment projects portfolios based on the recommendation of the Investment Committee.
- The Finance team and Strategy team is responsible for reviewing the content of the Framework and updating it to reflect changes in the corporate strategy, technology, and market developments. Updates to the Framework will be approved by PKN Orlen's management board.
- The traceability and verification of the selection and evaluation of the projects is ensured throughout the process:
  - The Committee will meet periodically, at least annually, monitor the compliance of selected projects/assets with the eligibility criteria throughout the lifetime of the Instrument. Projects that are no longer eligible will be replaced with other Eligible Projects.

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- The Issuer has committed to monitor ESG controversies associated with the Eligible Projects. In case of controversies concerning a project financed by green bonds, the Committees will assess the evidence for the controversy along with the underlying cause. The Committees will define, where appropriate, a response to the controversy as well as remedies to mitigate the occurrence of similar issues in the future. In the case of persistent and significant controversies the Committees will hold a dedicated session beyond the regular annual meeting to review the case. PKN Orlen will ensure transparency on persistent and significant controversies through its green bond reporting, including a description of the controversy and, where appropriate, remedial measures being implemented.
- The traceability of the decision-making process is ensured through meeting minutes.

Eligibility Criteria

The process relies on explicit eligibility criteria, relevant to the environmental objectives defined for the Eligible Categories.

- The selection criteria are based on definitions in Eligible Categories defined Table 1 in the Use of Proceeds section.
- The Issuer has explicitly excluded any projects that are dedicated to fossil fuels and/or locking in of fossil-fuel technology.

BEST PRACTICES

⇒ Eligibility (selection and exclusion) criteria for project selection are clearly defined and detailed for all the Eligible Categories.

⇒ The Issuer reports that it will monitor compliance of selected projects/assets with eligibility and exclusion criteria specified in the Framework throughout the life of the instrument and has provided details on content, frequency, duration and on procedure adopted in case of non-compliance.

⇒ The Issuer reports that it will monitor potential ESG controversies associated with the projects/assets throughout the life of the instrument and has provided details on frequency, content and procedures in case a controversy is found on a project.

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Management of Proceeds

Not Aligned	Partially Aligned	Aligned	Best Practices

- The Process for the Management of Proceeds is clearly defined and is publicly available in the Framework and this SPO.
- The allocation period will be until the end of 2023.
- Net proceeds of the Instruments will be placed in the General Treasury and tracked by the Issuer in an appropriate manner and attested in a formal internal process.
- Information on the intended types of temporary placement for the balance of the unallocated net proceeds is publicly disclosed.
- The Issuer has committed that as long as the Instrument is outstanding, the balance of the tracked net proceeds will be periodically adjusted to match the allocation during that period.
- The Issuer has provided information on the procedure that will be applied in case of project divestment or postponement and it has committed to reallocate divested proceeds to projects that are compliant with the framework.

Management Process

- The net proceeds of the Instruments will be credited to the Issuer's general treasury.
- The Finance department will monitor the allocation of the net proceeds to the Eligible Green Projects via the Issuers internal information system and database.
- The Issuer committed to maintain a portfolio of Eligible Green Projects larger than the amount issued in Instruments. In case the Eligible Projects portfolio is smaller than the Instruments' net proceeds outstanding, PKN Orlen has committed to fill the gap and load the Eligible Green Project Portfolio with new Eligible Projects to match or exceed the outstanding Green Finance Instrument.
- The unallocated funds will be invested in accordance to PKN Orlen's liquidity guidelines for the repayment of indebtedness, other capital management purposes.
- In case of projects postponement, cancelation, divestment, ineligibility, or in case an Eligible Project has matured, the Issuer has committed to replace the no longer Eligible Green Project by a new Eligible Green Project as soon as possible.

BEST PRACTICES
⇒ The Issuer has provided information on the procedure that will be applied in case of project divestment or postponement and it has committed to reallocate divested proceeds to projects that are compliant with the framework.

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Monitoring & Reporting

Not Aligned	Partially Aligned	Aligned	Best Practices

- The Issuer has committed to report on the Use of Proceeds annually, until maturity. The report and its external verification will be publicly available on the website of PKN Orlen.
- The reporting will cover relevant information related to the allocation of Instrument proceeds and to the expected sustainable benefits of the projects. The Issuer has also committed to report on material developments and controversies related to the projects and assets.
- The reporting methodology and assumptions used to report on environmental benefits of the Eligible Green Categories will be publicly disclosed.
- An external auditor will verify the tracking and allocation of funds to Eligible Green Categories, as well as the indicators used to report on environmental benefits, until maturity.

Indicators

The Issuer has committed to transparently communicate at Eligible Category level, on:

- Allocation of proceeds: The indicators selected by the Issuer to report on the allocation of proceeds are relevant and exhaustive.

REPORTING INDICATORS
⇒ The total amount of Green Finance Instruments outstanding ⇒ The amount of net proceeds allocated to Eligible Green Categories ⇒ The balance of unallocated proceeds ⇒ The amount or the percentage of new financing and refinancing ⇒ The proportion of co-financing attributable to PKN Orlen for Eligible Projects that are co-financed

- Environmental benefits: The indicators selected by the Issuer to report on the environmental benefits are clear, relevant, and exhaustive.

ELIGIBLE CATEGORIES	ENVIRONMENTAL BENEFITS INDICATORS	
	OUTPUTS AND OUTCOMES	IMPACT INDICATORS
Renewable Energy	Installed renewable energy capacity (in MW). Renewable energy produced per year (if applicable).	Estimated annual CO2 emissions avoided (in TCO2eq.)
Clean Transportation	Number of EV charging stations units installed. Amount of charged vehicles/charging hours.	Estimated annual CO2 emissions avoided (in TCO2eq.)

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ELIGIBLE CATEGORIES	ENVIRONMENTAL BENEFITS INDICATORS	
	OUTPUTS AND OUTCOMES	IMPACT INDICATORS
Pollution Prevention and Control	Waste that is prevented or recycled in absolute amounts (tonnes)	

BEST PRACTICES
⇒ The Issuer will report on the Use of Proceeds until bond maturity. ⇒ The Issuer's report will be publicly available. ⇒ The reporting will cover relevant information related to the allocation of Instrument proceeds and to the expected sustainable benefits of the categories. The Issuer has also committed to report on material development related to the projects, including ESG controversies. ⇒ The indicators selected by the Issuer are exhaustive with regards to allocation reporting. ⇒ The indicators selected by the Issuer are clear and relevant and cover all expected benefits associated with the Eligible Categories. ⇒ The reporting methodology and assumptions used to report on environmental benefits of the Eligible Categories will be disclosed publicly. ⇒ Environmental benefits and impacts will be externally verified, until full allocation and in case of material changes.

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Contribution to sustainability

Expected Impacts

The potential positive Impact of the Eligible Projects on environmental and social objectives is considered to be advanced.

ELIGIBLE CATEGORY	EXPECTED IMPACT	ANALYSIS
Renewable Energy	ADVANCED	Renewable energy represents a key element of decarbonisation strategies of oil and gas companies and is crucial to facilitate the transition toward a lower-carbon future. According the International Energy Agency[11], integrating renewables is one of the most cost-effective opportunities to reduce the emissions intensity of companies in the oil and gas sector. Additionally, Poland's electricity mix is dominated by coal and fossil fuels[12], therefore there is a particular need for PKN Orlen to support decarbonise the country's electricity production. Eligible Projects will be adopting the most stringent technical screening criteria available set forward by international standards.
Clean Transportation	ADVANCED	The oil and gas sector has a crucial role in promoting and supporting cleaner modes of transportation such as by implementing hydrogen fuelling stations and EV charging stations and supporting electric infrastructure for the electrification of transport. Additionally, adapting to changing customer demands on the generation of cleaner energy to supply environmentally friendly vehicles, will prove essential for the energy transition, with global environmental benefits. Furthermore, the category follows the best technology available in the sector to contribute to the claimed objective in the location and context of the category. Of note, the investments include the first hydrogen fuelling stations in Poland.
Pollution Prevention and Control	ROBUST	Investing in waste management such as recycling has positive impacts on the environment as it helps to prevent pollution from uncollected waste, reduces waste to landfill, and supports the transition to a circular economy. Nonetheless, initiatives on waste reduction and reuse have greater impact than recycling.

OVERALL ASSESSMENT	ADVANCED

[11] https://www.iea.org/reports/the-oil-and-gas-industry-in-energy-transitions
[12] https://www.iea.org/countries/poland

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ESG Risks Identification and Management systems in place at project level

The identification and management of the environmental and social risks associated with the Eligible Projects are considered robust[13].

PKN Orlen commits to ensure that all the Eligible Green Projects will comply with national and international environmental and social standards and local laws and regulations through its transaction approval process. In addition, PKN Orlen applies internationally recognized environmental requirements, "Do No Significant Harm", as well as minimum safeguards for many of its activities, including those financed with the proceeds of the Green Finance instruments.

	ELIGIBLE CATEGORIES	
	RENEWABLE ENERGY	CLEAN TRANSPORTATION
Environmental Strategy and EMS	X	X
Environmental Impact Assessment	X	N/A
Protection of Biodiversity	X	N/A
End-of-Life and Decommissioning	X	X
Human and Labour Rights	X	X
Health and Safety	X	X
Community Involvement	x	x
E&S Standards in the Supply Chain	x	x
Business ethics	x	x
OVERALL ASSESSMENT	Robust	Robust

Environmental Strategy and Environmental Management System (EMS)

PKN Orlen's EMS covers all the Eligible Green Projects and it is based on the PN-EN ISO 14001 certificate (compliant with ISO 14001:2015). Each of the Orlen Group companies has implemented procedures for internal audits of the EMS. In addition, the Issuer's EMS is part of the company's Integrated Management System which ensures, among others, that pro-environmental production methods and pro-environmental approaches are maintained and that environmental impacts are minimised. The Integrated Management System includes management reviews that include compliance assessments, among other factors, which are reported to the PKN Orlen Management Board.

Environmental Impact Assessment (EIA)

PKN Orlen reports to comply with environmental regulation and to conduct relevant Environmental Impact Assessments for the renewable energy Eligible Projects, including large infrastructures associated with the Eligible Projects. Based on environmental regulation, some clean transportation infrastructure projects such as EV charging points and hydrogen refuelling stations are not subject to EIA under either Annex I or Annex II of the EU EIA Directive. However, if applicable,

[13] The "X" indicates the E&S risks that have been activated for each Eligible Category.

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the building of green field parking locations where the hydrogen refuelling stations infrastructure is installed may be screened in under Annex II. An area for improvement is to commit to conduct an EIA on the green field parking locations where clean transportation infrastructure projects that store hydrogen, such as hydrogen re-fuelling stations, if any, in accordance with the EU Directives on Environmental Impact Assessment (2014/52/EU).

Protection of Biodiversity

The Issuer reports to follow the biodiversity protection requirements of the Polish environmental authority. In addition, the Issuer reports that all Eligible Projects have monitoring, protective, remediation, and compensation measures to protect biodiversity such as studies on the impact on local biodiversity and migratory birds, which can result in preventive measures such as turning off the wind parks at certain hours.

End-of-Life and Decommissioning

The Issuer reports that a part of the development of new RES projects, ORLEN Group performs an estimate of the value of expenses and revenues related to the decommissioning of installations. These expenses are taken into account as a reserved budget to be used after the 25-year lifetime of the investment. When it comes to machines, it is assumed that the devices have 100% amortization. After the period of operation, it is assumed that the devices will be sold or recycled. ORLEN Group is monitoring the market in terms of technological possibilities of recycling renewable energy installations. The Issuer states that they plan to develop reporting on this topic over the course of 2022. An area for improvement consists in formalizing a commitment/policy to responsibly extend the life of projects or dismantle and decommission the equipment and construction related to the Eligible Green projects and to formalize and implement a recycling or dismantling plan.

Human and Labour Rights

PKN Orlen has various policies and procedures in place to ensure the respect for human rights. The Issuer has a formalised commitment addressing human rights matters through its 'Core Values and Standards of Conduct PKN Orlen S.A.' and through its 'Workplace Bullying Policy' which sets out the rules, rights and obligations to be followed in cases where discrimination and harassment are reported. The company also declares having Anonymous Misconduct Reporting Systems to report a breach or suspected breach of the 'Core Values and Standards of Conduct of PKN Orlen S.A.' in connection with workplace incidents or employee behaviours, as well as having internal and external mechanisms to obtain advice on how to report a violation or suspected violation. Different measures are taken depending on the severity of the breaches.

Regarding Labour Rights, although no formalised commitment appears to be in place addressing the issue, PKN Orlen reports having Collective Bargaining Agreements[14] (in accordance with the provisions of Part XI of the Polish Labour Code and the Minister of Labour and Social Policy's Regulation) which sets out the conditions to be met in the employment relationship, the remuneration rules and the granting of other benefits to employees. At the end of 2019, the collective bargaining agreements covered 73% of employees in Poland and 92% in foreign companies.

Health and Safety

PKN Orlen has an Occupational Health and Safety Management System based on the PN-N-18001 standard which is part of its Integrated Management System and which also covers the activities of the Eligible Projects. PKN Orlen Group's also has an OHS Strategy until 2021 , which includes an External Contractor Safety Management process, and a Comprehensive Prevention System. The OHS strategy is to be updated in 2021 and will cover a period of five years. Some of the key projects around occupational health and safety of the company include further development of the work safety culture; mandatory safety training programmes for employees and contractors; control and audit system; and health and safety awareness raising activities in the workplace. Additionally, in 2019 PKN Orlen implemented a safety framework

[14] Please refer to the section "Respecting Human Rights" in PKN Orlen's 2019 Annual Integrated Report: https://raportzintegrowany2019.orlen.pl/en/nasza-odpowiedzialnosc/poszanowanie-praw-czlowieka/

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as part of the 'Safety Plus' project (to be completed in 2021), which comprises 15 standards representing the highest safety benchmarks in the fuel and energy industry.

Community Involvement

PKN's commitment towards local social and economic development is formalised in its 'Core Values and Standards of Conduct' and in its 'Charitable Giving Policy'. This commitment appears to be supported by different measures such as engaging in dialogue with the communities in which it operates and supporting them through social, educational, environmental, and other projects. For example, on the 'Baltic Power Offshore Windfarm' project which falls under the renewable energy category, the Issuer reports to have identified and cooperated with the relevant stakeholders on the design of the onshore cable route in a way that is least burdensome for the local community and for the landscape, and to have implemented activities for the benefit of the local communities including broader dialogue with local authorities, meeting with residents providing them information about the project, and a donation to a local school. The Issuer declared to V.E that dialogue and engagement measures with local stakeholders are implemented in all the Eligible Green Projects which are pursued according to investment, spatial planning and environmental permissions procedures in Poland. Additional dialogue measures are implemented as justified by project type and scale, for instance, in cases of projects related to offshore wind power or around EV infrastructure. The Issuer also participates in workshops which facilitate education and local dialogue around investment projects related to new technologies such as hydrogen. Moreover, the Integrated Management System considers the findings of audits and reviews as well as complaints and grievances.

Environmental and Social Standards in the Supply Chain

PKN Orlen has a Group Procurement Policy which includes standards to follow when selecting suppliers, such as considering whether a supplier ensures safety in the workplace, cares for the health of employees, offers fair and non-discriminatory working conditions, and respects human rights. Additionally, suppliers are required to accept specific criteria relating to ORLEN values and social responsibility. Furthermore, the Procurement area cooperates closely with the Stakeholders, analyses their needs, puts forward common priorities, plans, KPIs and improvements. As part of the Integrated Management System an internal audit system in place to verify the correctness of operation of the Group's organisational units, suppliers, contractors, among others.

Business Ethics

To prevent business ethics related risks, the Issuer has anti-corruption and anti-bribery policies and internal regulations which also cover the projects financed by the green finance instruments. In terms of relevant measures to prevent compliance issues, the Issuer reports to deliver trainings on an annual basis across business functions with the highest risk of misconduct, including the companies' management boards, in the form of classroom or e-learning training- The topics cover liability and disciplinary sanctions for corruption offences, identification of such offences, procedures to be followed in the case of suspected corruption by employees, whistleblowing options and channels, accepting and giving of gifts, and building safe relationships with business partners.

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Alignment with the Climate Transition Finance Handbook

V.E. is of the Opinion that PKN Orlen's climate transition strategy has adopted a majority of the recommended disclosures on the four key elements of the Climate Finance Transition Handbook. The Issuer's climate transition targets do not include Scope 3 emissions, hence V.E does not have sufficient information to confirm that the Issuer's strategy is aligned with the goals of the Paris Agreement. An area for improvement is for PKN Orlen to align its climate transition strategy with the goals of the Paris Agreement by setting science-based targets incorporating Scope 1, 2 and 3 emission (both in intensity and absolute terms) that cover their entire operations.

V.E values the commitments and efforts made by the Issuer to set GHG emissions reduction targets for its Scope 1 and 2 emissions, as well as the formalised commitment of the Issuer in the Green Financing Framework to include Scope 3 in future accounting of its GHG emissions moving forward. The Green Financing Framework, the green bond issuance plans and the commitment to include Scope 3 emissions represent important transparency and accountability step towards setting climate transition targets as recommended by international best practices and standards, and the disclosure recommendations of the Climate Transition Finance Handbook 2020.

CLIMATE TRANSITION FINANCE HANDBOOK – CORE ELEMENTS[15]	V.E'S ANALYSIS

1. Issuer's climate transition strategy and governance:
The financing purpose should be for enabling an issuer's climate change strategy.
A 'transition' label applied to a debt financing instrument should serve to communicate the implementation of an issuer's corporate strategy to transform the business model in a way which effectively addresses climate-related risks and contributes to alignment with the goals of the Paris Agreement.
	☑ A majority of the disclosure recommendations adopted.
	
	The Issuer's 2030 corporate strategy demonstrates a clear commitment towards climate change mitigation by communicating its transition to a new business model through:
	- *A long-term target to align with the goals of the Paris Agreement (e.g. objective of limiting global warming ideally to 1.5°C and, at the very least, to well below 2°C):* The Issuer has defined long-term targets, namely committing to net zero carbon by 2050. Although, these targets do not include Scope 3 emissions, hence V.E does not have sufficient information to confirm that this commitment will be aligned with the goals of the Paris Agreement as recommended by international best practices and standards[16] . Please see our detailed assessment in Element 3.
	- *Relevant interim targets on the trajectory towards the long-term goal:* The Issuer has set interim targets on Scope 1 and 2 aiming to reduce 20% of CO_2 emissions from its existing refining and petrochemical assets and 33% of its carbon intensity ($kgCO_2/MWh$) from its power generation business by 2030 (baseline 2020).
	- *Disclosure on the issuer's levers towards decarbonisation, and strategic planning towards a long-term target to align with the goals of the Paris Agreement:* The Issuer has disclosed the levers towards decarbonisation. The Issuer's has laid out different objectives and measures to achieve its climate transition strategy and addresses the most material environmental issues, including:
	    - Reducing GHG emissions Scope 1 and 2 through measures such as improvement of energy efficiency, renewable energy sources (RES), carbon capture storage (CCS), green H2, among others.
	    - Investing over PLN 30bn in sustainable capex between 2020 and 2030, including over PLN 25bn on projects to reduce CO_2 emissions.
	    - Expanding its portfolio to include RES power plants, and increasing its

[15] Climate Finance Transition Handbook, 2020: https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/Climate-Transition-Finance-Handbook-December-2020-091220.pdf

[16] https://ec.europa.eu/info/sites/info/files/business_economy_euro/events/documents/finance-events-190624-presentation-climate-benchmarks_en.pdf

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CLIMATE TRANSITION FINANCE HANDBOOK – CORE ELEMENTS[15]	V.E'S ANALYSIS
	- renewable energy generation asset base, aiming to achieve 2.5 GW of renewable energy by 2030. - Expanding its biofuel and biomaterial capacities by significantly increasing biofuel output, biofuels (HVO, co-HVO, UCOME, bioethanol from lignocellulose, biomethane), including second generation. PKN Orlen also intends to increase its efforts on the development of hydrogen production and sales capabilities. - Increasing its activity in the area of circular economy by building capacity in recycling and biomaterials. - *Clear oversight and governance of transition strategy:* The Issuer's climate transition strategy is supported by the Board of Directors and the Sustainable Development department. - *Evidence of a broader sustainability strategy to mitigate relevant environmental and social externalities and contribute to the UN Sustainable Development Goals:* The Issuer's new Sustainable Development Strategy and 2019-2022 CSR Strategy address ESG issues as well as different SDGs. The Issuer reports that the new strategy will be approved and disclosed at the end of April 2021. Additionally, the Issuer has relevant policies and measures to address ESG risks of the company, although, the ESG performance of the Issuer is considered overall limited (please refer to V. E's ESG performance assessment on page 20).
2. <u>Business model environmental materiality:</u> The planned climate transition trajectory should be relevant to the environmentally-material parts of the issuer's business model, taking into account potential future scenarios which may impact on current determinations concerning materiality.	☑ <u>All disclosure recommendations adopted</u> The Issuer's climate transition strategy addresses the most material environmental issues for the company, namely climate change risk and the impact on the environment. These issues have been identified through PKN Orlen's Materiality Matrix and the Issuer's climate transition strategy covers its entire business operations (refining and petrochemical assets, and power generation).
3. <u>Climate transition strategy to be science-based including targets and pathways:</u> Issuer's climate strategy should reference science-based targets and transition pathways. The planned transition trajectory should be quantitively measurable; be aligned with, benchmarked or otherwise referenced to recognised, science-based trajectories where such trajectories exist; be publicly disclosed; or be supported by independent assurance verification.	☑ <u>A majority of disclosure recommendations adopted</u> The Issuer's climate strategy and medium and long-term targets are quantitively measurable. Although, these targets do not include Scope 3 emissions. Hence, as of today the Issuer cannot demonstrate that is climate strategy will be in line with the goals of the Paris Agreement. - *Short, medium, and long-term greenhouse gas reduction targets aligned with Paris Agreement:* The Issuer has defined medium and long-term targets for Scope 1 and Scope 2 emissions. An external consultant has been engaged to calculate PKN Orlen's future Scope 1 and 2 emissions trajectories. Although, these targets do not include Scope 3 emissions, hence V.E does not have sufficient information to confirm that this commitment will be aligned with the goals of the Paris Agreement as recommended by international best practices and standards[17] In addition, a recent study published by the Transition Pathway Initiative[18] on the carbon performance of European Oil and Gas Companies concluded that the reductions targets set by the sector, even when claiming a "net zero" target are not in line with the 2D scenario.

[17] https://ec.europa.eu/info/sites/info/files/business_economy_euro/events/documents/finance-events-190624-presentation-climate-benchmarks_en.pdf
[18] https://www.transitionpathwayinitiative.org/publications/58.pdf?type=Publication

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CLIMATE TRANSITION FINANCE HANDBOOK – CORE ELEMENTS[15]	V.E'S ANALYSIS
	Of note, the Issuer reports to be transitioning to a multi-utility business model, which could create further opportunities for the company to align with the 2D scenario. - *Baseline:* 2019 - *Scenario utilised, and methodology applied (e.g. ACT, SBTi, etc.):* The Issuer has identified the EU climate agenda as its reference pathway to guide its climate transition strategy. V.E considers that this is not the most relevant standard to demonstrate the alignment with the Paris Agreement as more relevant benchmarks are available, namely the Transition Pathway Initiative. - *Greenhouse gas objectives covering all scopes (Scope 1, 2 and 3):* As of today, PKN Orlen climate transition strategy only covers Scope 1 and 2 emissions. Of note, the Issuer has formalized a commitment in the Green Financing Framework to develop and publish Scope 3 emissions indicators in 2022 and eventually define reduction targets. This positive development is recognized as an important step towards further alignment with international best practices and standards, as well as with the disclosure recommendations of the Climate Transition Finance Handbook. - *Targets formulated both in intensity and absolute terms:* The Issuer has clearly defined and disclosed the absolute CO_2 emissions reduction targets from its existing refining and petrochemical assets and the carbon intensity reduction targets from its power generation business. An area for improvement is to define absolute and carbon intensity targets for all its operations.
4. <u>Implementation transparency</u> Market communication in connection with the offer of a financing instrument which has the aim of funding the issuer's climate transition strategy should also provide transparency to the extent practicable, of the underlying investment programme including capital and operational expenditure.	☑ <u>All disclosure recommendations adopted.</u> - The Issuer has clearly disclosed the revenues aligned to the levers outlined in Element 1, as well as the capex roll-out to achieve their climate transition strategy. *Please see Element 1.*

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ISSUER

Polski Koncern Naftowy Orlen (PKN Orlen) is a leader player in the fuel and energy markets in the Central and Eastern Europe. The Company operates in six home markets: Poland, the Czech Republic, Germany, Lithuania, Slovakia, and Canada. It is involved in the manufacturing, distributing, wholesale and retail sale of petrochemical and refining products. The company also has a segment for generating energy.

Level of ESG performance

The Issuer's ESG performance was assessed through a complete process of rating and benchmark.

As of 2020, PKN Orlen displays an overall limited ESG performance, ranking 11th in our "Energy" sector which covers 29 companies. The company is limited in the Environmental and Social pillars and robust in the Governance pillar, in line with the sector average.

DOMAIN	COMMENTS	OPINION
Environment	<u>PKN Orlen's performance in the Environmental pillar is considered limited.</u> The Issuer has issued a formalised commitment to environmental protection in its Code of Ethics and its Integrated Report. In addition, the company has set a target of carbon neutrality by 2050 and has disclosed targets towards CO2 emissions in 2030 (baseline 2019). PKN Orlen appears to have comprehensive resources allocated to environmental management such as internal audits that assess the effectiveness of the Environmental Management System (EMS) and management review of the EMS. Indicators on waste production and non-GHG emissions decreased between 2017 and 2019. Meanwhile, indicators on GHG emissions in the downstream, water consumption and energy consumption increased during the same period. Regarding biodiversity, the company discloses some measures to limit the biodiversity impacts of its operations, but these do not seem to cover a majority of its sites. Lastly, the Issuer reports investing in renewable energy sources and alternative fuels but does not appear to disclose information on the company's total production coming from these energy sources.	Advanced Robust Limited Weak
Social	<u>PKN Orlen's performance in the Social pillar is considered limited.</u> In terms of Human Resources, the majority of employees received training in 2019 and training hours have increased between 2017 and 2019. Relevant measures are allocated to ensure health and safety KPIs decreased between 2017 and 2019, although it is unclear whether these cover contractors. The Issuer also discloses information on a signed framework agreement with employee representatives on reorganisations.	Advanced Robust

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DOMAIN	COMMENTS	OPINION
	Regarding Human Rights, information on measures implemented to ensure the respect of human rights and freedom of association within its operations is undisclosed. The Issuer's commitments in terms of non-discrimination are backed up by significant measures to promote diversity but it is unclear whether they cover the majority of the company's operations. Additionally, diversity related KPIs show mixed trends between 2017 and 2019.	Limited
	As to Community Involvement, the Issuer reports having a dedicated department involved in local social and economic development and measures to manage the impacts of its operations such as programmes to develop local employment and involvement in social development programmes. However, related quantitative outcomes are not disclosed. Furthermore, the Issuer reports transparently on its taxes.	Weak
Governance	<u>PKN Orlen's performance in the Governance pillar is considered robust.</u> In terms of Corporate Governance, PKN Orlen's Board of Directors is considered to be 60% independent. In addition, 33% of directors are women, and relevant CSR issues are discussed at Board level. The Audit Committee has a comprehensive role in overseeing internal and external controls, and the internal controls system seem to cover most CSR risks, such as climate change, health and safety and corruption prevention. Executive remuneration is disclosed on an individual basis, and health & safety objectives are linked to the variable remuneration of the company, although the targets are not disclosed. Regarding shareholder rights, major voting rights restrictions have been identified.	Advanced Robust
	Regarding Business Behaviour, the Issuer has formalised commitments on the prevention of corruption and anti-competitive practices, supported by a confidential reporting system. Additionally, no anti-trust incidents were internally reported during the period under review. Furthermore, the company does not disclose its lobbying budget. Regarding product safety, information is reported on systems to collect risk assessment studies on its products, and on the substances classified as very high concern for which substitutes are being developed. Concerning the integration of environmental factors in the supply chain, the Issuer's commitment is backed up by integrating environmental issues into contractual clauses.	Limited Weak

Management of ESG Controversies

As of February 2020, PKN Orlen faces one stakeholder related ESG controversy, linked to one of the six domains we analyse:

- Corporate Governance, in the criteria of "Audit and Internal Controls".

<u>Frequency</u>: The controversy faced is considered "isolated"[19].

<u>Severity</u>: The severity of the case, based on the analysis of the impact on both the Issuer and its stakeholders, is considered "significant"[20].

<u>Responsiveness</u>: PKN Orlen is considered overall "non-communicative"[21].

[19] VE scale of assessment: Isolated / Occasional / Frequent / Persistent.
[20] VE scale of assessment: Minor / Significant / High / Critical.
[21] VE scale of assessment: Non-communicative / Reactive / Remediative / Proactive.

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Involvement in Controversial Activities

PKN Orlen is involved in six of the 17 controversial activities screened under our methodology[22]:

- Major involvement in Fossil Fuel Industry: PKN Orlen has an estimated turnover from fossil fuels which is over 50% of total turnover. This turnover is derived from the ownership and operation of refineries and other midstream facilities, and from the exploration, appraisal and extraction of oil and gas, as well as from fossil fuel-powered electricity generation.
- Major[23] involvement in Coal PKN Orlen has an estimated turnover from coal which is less than 5%[24] of total turnover. This turnover is derived from coal-powered electricity and heat generation.
- Major involvement in Chemicals of concern: PKN Orlen produces and supplies restricted chemicals (OSPAR Priority List) and chemicals subject of controversy.
- Minor involvement in Alcohol: PKN Orlen has an estimated turnover from alcoholic beverages which is below 0.6% of total turnover. This turnover is derived from the sale of alcoholic beverages in the Company's owned and operated network of over 2,855 service stations, including Stop Cafe outlets. In addition, the Company owns a catering business through subsidiary, ORLEN Administracja, and under the Srebrna Catering brand. Srebrna Catering directly imports selected wines.
- Minor involvement in Military: PKN Orlen has an estimated turnover from military sales which is below 0.3% of total turnover. This turnover is derived from the supply of motor and aviation fuels to national armed forces, NATO, and the US Army.
- Minor involvement in Tobacco: PKN Orlen has an estimated turnover from tobacco which is below 2.8% of total turnover. This turnover is derived from the sale of tobacco products in the Company's owned and operated network of around 2,855 service stations, which include stores selling cigarettes among other products.

The Issuer appear to be not involved in any of the other 11 controversial activities screened under our methodology, namely: Animal welfare, Cannabis, Civilian firearms, Unconventional oil and gas, Gambling, Genetic engineering, Human embryonic stem cells, High interest rate lending, Nuclear Power, Pornography, and Reproductive Medicine.

The controversial activities research provides screening of companies to identify involvement in business activities that are subject to philosophical or moral beliefs. The information does not suggest any approval or disapproval on their content from V.E.

[22] Based on 2020 data

[23] V.E's methodology on the implication on controversial activities considers that all power generation from coal is considered a major involvement, regardless of the percentage that this represents from the company's total turnover.

[24] Please note that the Issuer reports a 1% of total turnover deriving from the generation of coal. However, V.E's scope of the methodology on the estimated percentage of turnover from coal, derive from both the generation of coal as well as from the sale of electricity generated burning coal (calculated comparing the annual generation as percentage of the fuel energy mix with the revenue derived from the sale of electricity). Therefore, although the Issuer reports a 1% of total turnover deriving only from coal generation, using V.E's methodology on Controversial Activities, coal power generation and sale are estimated to be below 5% of total turnover.

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METHODOLOGY

In V. E's view, Environmental, Social and Governance (ESG) factors are intertwined and complementary. As such they cannot be separated in the assessment of ESG management in any organisation, activity, or transaction. In this sense, V.E provides an opinion on the Issuer's ESG performance as an organisation, and on the processes and commitments applicable to the intended issuance.

Our Second Party Opinions (SPOs) are subject to internal quality control at three levels (Analyst, Project Manager and Quality Reviewer). If necessary, this process is complemented by a final review and validation by the Expertise Committee and Supervisor. A right of complaint and recourse is guaranteed to all companies under our review, following three levels: first, the team in contact with the company; then the Executive Director in charge of Methods, Innovation & Quality; and finally, V.E's Scientific Council. All employees are signatories of V. E's Code of Conduct, and all consultants have also signed its add-on covering financial rules of confidentiality.

COHERENCE

Scale of assessment: not coherent, partially coherent, coherent

This section analyses whether the activity to be financed through the selected instrument is coherent with the Issuer's sustainability priorities and strategy, and whether it responds to the main sustainability issues of the sector where the Issuer operates.

ISSUANCE

Alignment with the Green and/or Social Bond Principles

Scale of assessment: Not aligned, Partially aligned, Aligned, Best Practices

The Framework has been evaluated by V.E according to the International Capital Market Association's (ICMA) Green Bond Principles - June 2018 ("GBP"), the Loan Market Association, Asia Pacific Loan Market Association, Loan Syndications & Trading Association (LMA/APLMA/LSTA) Green Loan Principles - February 2021 ("GLP") the Climate Finance Transition Framework – December 2020, and on our methodology based on international standards and sector guidelines applicable in terms of ESG management and assessment.

Use of proceeds

The definition of the Eligible Projects and their sustainable objectives and benefits are a core element of Green Bonds and Loans standards. V.E evaluates the clarity of the definition of the Eligible Categories, as well as the definition and the relevance of the primary sustainability objectives. We evaluate the descriptions of the expected benefits in terms of relevance, measurability, and quantification. In addition, we map the potential contribution of Eligible Projects to the United Nations Sustainable Development Goals' targets.

Process for evaluation and selection

The evaluation and selection processes are assessed by V.E on its transparency, governance, and relevance. The eligibility criteria are assessed on their clarity, relevance, and coverage vs. the intended objectives of the Eligible Projects.

Management of proceeds

The process and rules for the management and the allocation of proceeds are assessed by V.E on their transparency, traceability, and verification.

Reporting

The monitoring and reporting process and commitments defined by the Issuer are assessed by V.E on their transparency, exhaustiveness and relevance, covering the reporting of both proceeds' allocation and sustainable benefits (output, impact indicators).

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Contribution to sustainability

Scale of assessment: Weak, Limited, Robust, Advanced

V.E's assessment of activities' contribution to sustainability encompasses both the evaluation of their expected positive impacts on environmental objectives, as well the management of the associated potential negative impacts and externalities.

Expected positive impact of the activities on environmental objectives

The expected positive impact of activities on environmental and/or social objectives to be financed by the Issuer or Borrower is assessed based on:

i) the relevance of the activity to respond to an important environmental objective for the sector of the activity;

ii) the scope of the impact: the extent to which the expected impacts are reaching relevant stakeholders (i.e. the issuer, its value chain, local and global stakeholders);

iii) the magnitude and durability of the potential impact of the proposed activity on the environmental (capacity to not just reduce, but to prevent/avoid negative impact; or to provide a structural/long-term improvement);

iv) the extent to which the activity is adopting the best available option.

Activities' ESG risk management

The identification and management of the potential ESG risks associated with the eligible projects/activities are analysed based on V. E's ESG assessment methodology, international standards and sector guidelines applicable in terms of ESG management and assessment.

ISSUER

Issuer's ESG performance

Scale of assessment of ESG performance: Weak, Limited, Robust, Advanced

NB: The Issuer's level of ESG performance (i.e. commitments, processes, results of the Issuer related to ESG issues), has been assessed through a complete process of rating and benchmarking developed by V.E.

The Issuers ESG performance has been assessed by V.E based on its:

- Leadership: relevance of the commitments (content, visibility and ownership).
- Implementation: coherence of the implementation (process, means, control/reporting).
- Results: indicators, stakeholders' feedbacks and controversies.

Management of stakeholder related ESG controversies

A controversy is an information, a flow of information, or a contradictory opinion that is public, documented and traceable, allegation against an Issuer on corporate responsibility issues. Such allegations can relate to tangible facts, be an interpretation of these facts, or constitute an allegation based on unproven facts.

V.E reviewed information provided by the Issuer, press content providers and stakeholders (partnership with Factiva Dow Jones: access to the content of 28,500 publications worldwide from reference financial newspapers to sector-focused magazines, local publications or Non-Government Organizations). Information gathered from these sources is considered as long as it is public, documented and traceable.

V.E provides an opinion on companies' controversies risks mitigation based on the analysis of 3 factors:

- Frequency: reflects for each ESG challenge the number of controversies that the Issuer has faced. At corporate level, this factor reflects on the overall number of controversies that the Issuer has faced and the scope of ESG issues impacted (scale: Isolated, Occasional, Frequent, Persistent).
- Severity: the more a controversy is related to stakeholders' fundamental interests, proves actual corporate responsibility in its occurrence, and have caused adverse impacts for stakeholders and the company, the higher its severity is. Severity assigned at the corporate level will reflect the highest severity of all cases faced by the company (scale: Minor, Significant, High, Critical).

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- Responsiveness: ability demonstrated by an Issuer to dialogue with its stakeholders in a risk management perspective and based on explanatory, preventative, remediating or corrective measures. At corporate level, this factor will reflect the overall responsiveness of the company for all cases faced (scale: Proactive, Remediate, Reactive, Non- Communicative).

The impact of a controversy on a company's reputation reduces with time, depending on the severity of the event and the company's responsiveness to this event. Conventionally, V. E's controversy database covers any controversy with Minor or Significant severity during 24 months after the last event registered and during 48 months for High and Critical controversies.

Involvement in controversial activities

17 controversial activities have been analysed following 30 parameters to screen the company's involvement in any of them. The company's level of involvement (Major, Minor, No) in a controversial activity is based on:

- An estimation of the revenues derived from controversial products or services.
- The specific nature of the controversial products or services provided by the company.

V.E'S ASSESSMENT SCALES

Scale of assessment of Issuer's ESG performance or strategy and financial instrument's Contribution to sustainability	
Advanced	Advanced commitment, strong evidence of command over the issues dedicated to achieving the sustainability objective. An advanced expected impact combined with an advanced to robust level of E&S risk management & using innovative methods to anticipate new risks.
Robust	Convincing commitment; significant and consistent evidence of command over the issues. A robust expected impact combined with an advance to robust level of assurance of E&S risk management or an advanced expected impact combined with a limited level of assurance of E&S risk management.
Limited	Commitment to the objective of sustainability has been initiated or partially achieved, fragmentary evidence of command over the issues. A limited expected impact combined with an advanced to limited level of assurance of E&S risk management; or a robust expected impact combined with a limited to weak level of assurance of E&S risk management; or an advanced expected impact combined with a weak level of assurance of E&S risk management.
Weak	Commitment to social/environmental responsibility is non-tangible, no evidence of command over the issues. A weak expected impact combined with an advanced to weak level of assurance of E&S risk management or a limited expected impact with a weak level of assurance of E&S risk management.

Scale of assessment of financial instrument's alignment with Green and/or Social Bond and Loan Principles	
Best Practices	The Instrument's practices go beyond the core practices of the ICMA's Green and/or of the Loan Market Association's Green Loan Principles by adopting recommended and best practices.
Aligned	The Instrument has adopted all the core practices of the ICMA's Green and/or of the Loan Market Association's Green Loan Principles.
Partially Aligned	The Instrument has adopted a majority of the core practices of the ICMA's Green and/or of the Loan Market Association's Green Loan Principles, but not all of them.
Not Aligned	The Instrument has adopted only a minority of the core practices of the ICMA's Green and/or of the Loan Market Association's Green Loan Principles.

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