Second-Party Opinion

Polenergia S.A.
Green Bond Framework

Second-Party Opinion
Reviewed by:
MORNINGSTAR | SUSTAINALYTICS

Evaluation Summary

Sustainalytics is of the opinion that the Polenergia S.A. Green Bond Framework is credible and impactful and aligns with the four core components of the Green Bond Principles 2021. This assessment is based on the following:

USE OF PROCEEDS The eligible categories for the use of proceeds – Renewable Energy and Energy Efficiency – are aligned with those recognized by the Green Bond Principles. Sustainalytics considers that investments in the eligible categories will lead to positive environmental impacts and advance the UN Sustainable Development Goals, specifically SDGs 7 and 9.

PROJECT EVALUATION AND SELECTION Polenergia has established an ESG Committee that will be responsible for evaluating and selecting eligible projects, together with the Sustainable Development Coordinator. Polenergia has internal processes to address environmental and social risks associated with the eligible assets. Sustainalytics considers the risk management process to be adequate and the project selection process to be in line with market practice.

MANAGEMENT OF PROCEEDS The ESG Committee will be responsible for the management and allocation of proceeds. Polenergia will track the proceeds using internal IT systems and manage them using a portfolio approach. Polenergia intends to fully allocate the net proceeds within 36 months of issuance. Pending full allocation, proceeds will be temporarily invested in short-term instruments with high liquidity, such as bank deposits with maturity shorter than 90 days. This is in line with market practice.

REPORTING Polenergia will report on allocation of proceeds on its website on an annual basis until full allocation. Allocation reporting will include: i) the amount of net proceeds allocated; ii) the amount of net proceeds allocated per use of proceeds category; iii) the share of financing and refinancing; iv) the balance of unallocated proceeds; v) a list of eligible projects financed; and vi) a list of eligible projects financed meeting the EU Taxonomy criteria. In addition, Polenergia intends to report on relevant impact metrics. Sustainalytics views Polenergia's allocation and impact reporting as aligned with market practice.

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Report Sections

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Introduction

Polenergia S.A. and its subsidiaries ("Polenergia" or the "Group") form a vertically integrated energy group, generating, distributing and transmitting electricity. The Group generates energy from renewables and conventional sources and had a total energy generation capacity of 691 MW in 2024. Polenergia is headquartered in Warsaw, Poland, and also operates in Czechia and Romania. As of December 2023, the Group had 478 full-time employees.

Polenergia has developed the Polenergia S.A. Green Bond Framework dated September 2024 (the "Framework") under which it intends to issue green bonds, including notes (such as structured and promissory notes), commercial paper and other financial instruments,[1] to finance or refinance, in whole or in part, projects intended to support the decarbonization of the Polish energy market. The Framework defines eligibility criteria in the following areas:

1. Renewable Energy
2. Energy Efficiency

Polenergia engaged Sustainalytics to review the Framework and provide a Second-Party Opinion on the Framework's environmental credentials and its alignment with the Green Bond Principles 2021 with June 2022 Appendix (GBP).[2] The Framework has been published in a separate document.[3]

Scope of work and limitations of Sustainalytics' Second-Party Opinion

Sustainalytics' Second-Party Opinion reflects Sustainalytics' independent[4] opinion on alignment of the Framework with current market standards and the extent to which the eligible project categories are credible and impactful.

As part of the Second-Party Opinion, Sustainalytics assessed the following:

- The Framework's alignment with the Green Bond Principles 2021 with June 2022 Appendix, as administered by ICMA;
- The credibility and anticipated positive impacts of the use of proceeds; and
- The alignment of the issuer's sustainability strategy and performance and sustainability risk management in relation to the use of proceeds.

For the use of proceeds assessment, Sustainalytics relied on its internal taxonomy, version 1.17, which is informed by market practice and Sustainalytics' expertise as an ESG research provider.

As part of this engagement, Sustainalytics held conversations with representatives of Polenergia to understand the sustainability impact of its business processes and planned use of proceeds, as well as the management of proceeds and reporting aspects of the Framework. Polenergia representatives have confirmed that: (1) they understand it is the sole responsibility of Polenergia to ensure that the information provided is complete, accurate and up to date; (2) they have provided Sustainalytics with all relevant information; and (3) that any provided material information has been duly disclosed in a timely manner. Sustainalytics also reviewed relevant public documents and non-public information.

This document contains Sustainalytics' opinion of the Framework and should be read in conjunction with it. Any update of the present Second-Party Opinion will be conducted according to the agreed engagement conditions between Sustainalytics and Polenergia.

Sustainalytics' Second-Party Opinion assesses alignment of the Framework with market standards but provides no guarantee of alignment nor warrants any alignment with future versions of relevant market standards. Furthermore, Sustainalytics' Second-Party Opinion addresses the anticipated impacts of eligible projects but does not measure the actual impact. The measurement and reporting of the impact achieved through projects financed under the Framework is the responsibility of the issuer.

In addition, the Second-Party Opinion opines on the potential allocation of proceeds but does not guarantee their realized allocation towards eligible activities.

No information provided by Sustainalytics under the present Second-Party Opinion shall be considered as being a statement, representation, warrant or argument in favour or against the truthfulness, reliability or completeness of any facts or statements and related surrounding circumstances that Polenergia has made available to Sustainalytics for the purpose of this Second-Party Opinion.

[1] Sustainalytics' assessment is limited to the financial instruments listed in the Framework.
[2] The Green Bond Principles are administered by the International Capital Market Association and are available at https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/.
[3] The Polenergia S.A. Green Bond Framework is available on Polenergia's website at: https://www.polenergia.pl/dla-inwestorow/zielone-obligacje/
[4] When operating multiple lines of business that serve a variety of client types, objective research is a cornerstone of Sustainalytics and ensuring analyst independence is paramount to producing objective, actionable research. Sustainalytics has therefore put in place a robust conflict management framework that specifically addresses the need for analyst independence, consistency of process, structural separation of commercial and research (and engagement) teams, data protection and systems separation. Last but not the least, analyst compensation is not directly tied to specific commercial outcomes. One of Sustainalytics' hallmarks is integrity, another is transparency.

Sustainalytics' Opinion

Section 1: Sustainalytics' Opinion on the Polenergia S.A. Green Bond Framework

Sustainalytics is of the opinion that the Polenergia S.A. Green Bond Framework is credible and impactful, and aligns with the four core components of the GBP. Sustainalytics highlights the following elements of the Framework:

- Use of Proceeds:
  - The eligible categories – Renewable Energy and Energy Efficiency – are aligned with those recognized by the GBP.
  - Polenergia has defined a look-back period of 24 months for refinancing operating expenditures, which Sustainalytics considers to be in line with market practice.
  - Under the Renewable Energy category, Polenergia may finance or refinance the purchase, development, construction, creation, installation and operation of renewable energy generation and related infrastructure in accordance with the following criteria:
    - Solar power from photovoltaics.
    - Onshore and offshore wind power generation. For offshore wind power, fossil fuel backup will be limited to power monitoring, operating and maintenance equipment, as well as resilience or protection measures and restart capabilities.
    - Hydrogen production, where the activity complies with the life cycle GHG emissions savings requirement of 73.4% for hydrogen (resulting in life cycle GHG emissions lower than 3 tCO_2e/tH_2) and 70% for hydrogen-based synthetic fuels relative to a fossil fuel comparator of 94 gCO_2e/MJ. Polenergia has confirmed to Sustainalytics that hydrogen production will be limited to hydrogen produced using renewable sources.
    - Sustainalytics considers the expenditures under this category to be aligned with market practice.
  - Under the Energy Efficiency category, Polenergia may finance or refinance the following:
    - Construction and operation of facilities for the storage of electricity, thermal energy and hydrogen.[5] Polenergia has confirmed to Sustainalytics that it will limit financing under the Framework to energy storage facilities that are connected to renewables, and that it will not finance pumped hydropower storage.
    - Installation and operation of electric heat pumps using refrigerants with a global warming potential (GWP) lower than 675. Polenergia has confirmed to Sustainalytics that projects will have a refrigerant management system in place to measure, monitor and minimize leakages, as well as regular leak detection inspections, maintenance and cleaning of the heat pumps.
    - Energy efficiency improvements and infrastructure, including LED lighting, thermal insulation of buildings, replacement of heating system components, and instruments for measuring and monitoring the energy performance of buildings. Polenergia has confirmed to Sustainalytics that the Framework excludes financing of energy-efficient technologies designed for processes that are carbon intensive or technologies that are primarily driven or powered by fossil fuels.
    - Sustainalytics considers the expenditures under this category to be aligned with market practice.
- Project Evaluation and Selection:
  - Polenergia has established an ESG Committee that will be responsible for evaluating and selecting eligible projects in line with the Framework's eligibility criteria, together with the Sustainable Development Coordinator. The committee is appointed by the Group's Management Board and consists of one member of the management board (presidents or vice-Presidents), the Director of the Environmental Protection and Sustainable Development Department, the Director of the Strategy and Development department, the advisor to the management board for business process optimization, the Director of Controlling and Investor Relations, the Director of the Human Resources department, the Director of the Administration and Organization department, and the Director of the Compliance department.

[5] The activity complies with the life cycle GHG emissions savings requirement of 73.4% for hydrogen (resulting in life cycle GHG emissions lower than 3 tCO_2e/tH_2) and 70% for hydrogen-based synthetic fuels relative to a fossil fuel comparator of 94 gCO_2e/MJ.

  - Polenergia has in place processes to identify and mitigate environmental and social risks potentially associated with the eligible projects. As part of these processes, the Group assesses compliance with its internal policies and guidelines on sustainable development, and local laws and regulations, including pertinent environmental and social requirements. These processes are applicable to all allocation decisions made under the Framework. Sustainalytics considers these environmental and social risk management systems to be adequate and aligned with the requirements of the GBP. For additional detail, see Section 2.
  - Based on the established process for project evaluation and selection and the presence of a risk management system, Sustainalytics considers this process to be in line with market practice.
- Management of Proceeds:
  - The ESG Committee will be responsible for the management and allocation of proceeds. Polenergia will track proceeds using internal IT systems and manage them using a portfolio approach.
  - Polenergia intends to fully allocate proceeds within 36 months of issuance. Pending full allocation, proceeds will be temporarily invested in short-term instruments with high liquidity. Polenergia has communicated to Sustainalytics that such short-term instruments will consist of bank deposits with maturity shorter than 90 days.
  - Based on the presence of a tracking system and the disclosure of the temporary unallocated proceeds, Sustainalytics considers this process to be in line with market practice.
- Reporting:
  - Polenergia will report annually on the allocation of proceeds and corresponding impact in reports that will be published on its website until full allocation.
  - Allocation reporting will include: i) the amount of net proceeds allocated; ii) the amount of net proceeds allocated per use of proceeds category of green projects; iii) the share of financing and refinancing; iv) the balance of unallocated proceeds; v) a list of eligible projects financed including the funds awarded and their main environmental impacts; and vi) a list of eligible projects financed meeting the EU Taxonomy criteria.
  - Impact reporting may include: i) annual GHG emissions avoided (in tCO_2e); ii) annual renewable energy generation (in MWh per year); iii) additional capacity of built or modernized installations using renewable energy sources (in MW); and iv) annual energy savings (in MWh per year).
  - The Group will obtain independent external verification for the allocation and impact reporting.
  - Based on the commitments to allocation and impact reporting, Sustainalytics considers this process to be in line with market practice.

Alignment with Green Bond Principles 2021 with June 2022 Appendix

Sustainalytics has determined that the Polenergia S.A. Green Bond Framework aligns with the four core components of the GBP.

Section 2: Sustainability Strategy of Polenergia

Contribution to Polenergia's sustainability strategy

Polenergia's sustainable development strategy focuses on the following key environmental areas: i) decarbonizing the Group's own operations; ii) supporting the green transformation of customers; iii) developing green hydrogen and energy storage innovation; iv) implementing circular economy principles across the Group's activities; v) developing a biodiversity due diligence system; and vi) studying the Group's spatial impacts.[6]

In 2023, Polenergia generated 85% of its energy from renewable sources, having more than 5000 MW of renewable energy sources (RES) capacity in operation, with the average annual capacity expected to grow in line with its Business Development Strategy.[7,8] The Group has set a target to reduce the emission intensity index[9] of its energy generation by 66% from its 2020-2022 average of 150 gCO_2e/kWh to

[6] Polenergia, "Polenergia Group's Sustainable Development Strategy 2023-2030", at: https://esg.polenergia.pl/2022/en/wp-content/uploads/sites/12/2023/03/PEPStrategiaESG223en.pdf
[7] Polenergia, "Sustainability Report for the Year Ended December 31, 2023", (2023), at: https://www.polenergia.pl/wp-content/uploads/2024/03/PolenergiaGroupConsolidatedSustainabilityReport2023.pdf
[8] Ibid.
[9] Measured by the sum of scope 1 and 2 market-based GHG emissions in kilograms, divided by the sum of energy produced in MWh. Polenergia, "Sustainability Report for the Year Ended December 31, 2023", (2023), at: https://www.polenergia.pl/wp-content/uploads/2024/03/PolenergiaGroupConsolidatedSustainabilityReport2023.pdf

50 gCO_2e/kWh by 2025, and by 93% to 10 gCO_2e/kWh by 2030.[10] These targets apply to the Group's operations both in Poland and abroad.[11] In 2023, the Group's emission intensity index stood at 58.3 gCO_2e/kWh, a reduction of 0.59% compared to 2022.[12] To achieve its emission reduction goals, Polenergia has implemented various initiatives, including the operation and development of wind and solar farms, the development of green hydrogen production facilities, and the provision of renewable energy services to prosumers[13] through PV micro-installations and other energy services.

The Group built its first wind farm in 2007,[14] with wind continuing to be the main source of green energy supplied to customers in 2024.[15] Polenergia is currently co-developing three wind farms in the Baltic Sea, with an expected combined capacity of 3000 MW, which are expected to be operational by 2027.[16] The Group currently has 575 MW of onshore wind and photovoltaic farm projects in operation, with 2100 MW of new onshore generation capacity in Poland under development.[17] In the prosumer category, the Group has set a target to increase the annual capacity of PV installations by 6% per year between 2023 and 2030.[18] Additionally, in 2022, the Group started developing hydrogen production facilities, with a planned capacity of approximately 110 MW, aiming to supply green fuel to the mobility sector and hard-to-decarbonize industries.[19,20]

Sustainalytics is of the opinion that the Polenergia S.A. Green Bond Framework is aligned with Polenergia's overall sustainability strategy and initiatives and will further the Group's actions on its key environmental priorities.

Approach to managing environmental and social risks associated with the projects

Sustainalytics recognizes that proceeds from the instruments issued under the Framework will be directed towards eligible projects expected to have positive environmental impacts. However, Sustainalytics is aware that such eligible projects could also lead to negative environmental and social outcomes. Some key environmental and social risks associated with the eligible projects may include issues involving: i) land use and biodiversity issues associated with large-scale infrastructure development; ii) emissions, effluents and waste generated in construction; iii) occupational health and safety (OHS); and iv) community relations and stakeholder participation.

Sustainalytics is of the opinion that Polenergia is able to manage or mitigate potential risks through implementation of the following:

- To manage or mitigate biodiversity and environmental risks, the Group has an Environmental and Social Policy, and a Biodiversity Strategy.[21,22] Under the policy, the Group commits to monitor, analyze and minimize environmental and biodiversity impacts during the construction and operational phases of projects.[23] The Biodiversity Strategy aims for a net zero impact on biodiversity by 2040.[24] In the first half of 2024, the Group implemented a framework to assess risks and opportunities related to biodiversity throughout its operations and tier one of the value chain, and aims to extend this to the wider value chain.[25] The Group aims to create a prioritized list of material nature-related risks and opportunities and prepare related management processes by the second half of 2025.[26] Furthermore, the Group is required to comply with relevant EU legislation, including the Environmental Impact Assessment Directive (2014/52/EU), which requires all projects with potentially significant environmental impacts to be properly assessed before approval.[27] The directive also requires

[10] Ibid.
[11] Ibid.
[12] Ibid.
[13] Individuals with capacity to consume and produce energy
[14] Polenergia, "Strategy of Polenergia Group 2020-2024", at: https://www.polenergia.pl/wp-content/uploads/2021/11/22518strategymarketpresentation.pdf
[15] Polenergia, "Sustainability Report for the Year Ended December 31, 2023", (2023), at: https://www.polenergia.pl/wp-content/uploads/2024/03/PolenergiaGroupConsolidatedSustainabilityReport2023.pdf
[16] Ibid.
[17] Polenergia, "Polenergia S.A. Green Bond Framework", (2024).
[18] Polenergia, "Polenergia Group's Sustainable Development Strategy 2023-2030", at: https://esg.polenergia.pl/2022/en/wp-content/uploads/sites/12/2023/03/PEPStrategiaESG223en.pdf
[19] Polenergia, "Polenergia Group's Sustainable Development Strategy 2023-2030", at: https://esg.polenergia.pl/2022/en/wp-content/uploads/sites/12/2023/03/PEPStrategiaESG223en.pdf
[20] Bulletin H2, "Polenergia launches hydrogen R&D project", (2022), at: https://h2bulletin.com/polenergia-launches-hydrogen-rd-project/
[21] Polenergia, "Polenergia Group Environmental and Social Policy", (2024), at: https://www.polenergia.pl/wp-content/uploads/2024/04/1.PolitykaSrodowiskowoSpolecznaFINeng.pdf
[22] Polenergia, "Biodiversity Strategy of Polenergia Group", (2024), at: https://www.polenergia.pl/wp-content/uploads/2024/04/2231212StrategiaBioroznorodnosciFINEN.pdf
[23] Polenergia, "Polenergia Group Environmental and Social Policy", (2024), at: https://www.polenergia.pl/wp-content/uploads/2024/04/1.PolitykaSrodowiskowoSpolecznaFINeng.pdf
[24] Polenergia, "Biodiversity Strategy of Polenergia Group", (2024), at: https://www.polenergia.pl/wp-content/uploads/2024/04/2231212StrategiaBioroznorodnosciFINEN.pdf
[25] Ibid.
[26] Ibid.
[27] European Parliament, "Directive 2014/52/EU on the assessment of the effects of certain public and private projects on the environment", (2014), at: https://eurlex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32014L0052

companies to take measures to avoid, prevent, reduce and, where possible, offset significant adverse effects on species and habitats, including in the marine environment.[28] The Group also has a whistleblowing procedure for employees and individuals cooperating with the Group to report breaches in appropriate conduct relating to the environment.[29]

- Concerning emissions, effluents and waste management, Polenergia designates responsibility for waste generated in the process of construction and renovation to the relevant subcontractor.[30] The Group's Code of Conduct for Business Partners outlines the expectation for partners, including subcontractors, to comply with applicable regulations, industry guidelines, and to minimize the negative environmental impact of their business.[31] They also have a waste procedure in place, which regulates how waste is handled and documented, with the site manager reporting waste management information to the environmental manager.[32,33] Furthermore, Polenergia confirmed that it complies with applicable law, such as the EU Construction and Demolition Waste Protocol[34] and the EU Waste Framework Directive.[35] The EU Waste Framework Directive requires waste management to be carried out without endangering human health or causing harm to the environment.[36] The Act on Waste transposes the directive into Polish law, which similarly requires waste treatment to be conducted in a manner that does not pose a threat to human life or health and to the environment.[37]
- The Group complies with local legislation relating to OHS, including: the Act of 26 June 1974 Labour Code;[38] the Ordinance of the Minister of Labour and Social Policy of 26 September 1997 on general health and safety regulations;[39] the Ordinance of the Minister of Energy of 28 August 2019 on health and safety at work with energy equipment;[40] and the Act of 7 July 1994 Construction Law.[41,42] The Group's operations are also covered by EU OHS regulations, including the European Council Directive on Safety and Health at Work.[43] The directive sets basic obligations that employers should implement in order to ensure the health and safety of workers, including the need to provide adequate training and instructions, and developing risk prevention.[44] Polenergia has an OHS management system based on ISO 14000[45] and OHSAS 18001[46] standards.[47] The Group has communicated to Sustainalytics that it is in the process of implementing this procedure across its operations. The Group's Whistleblowing Procedure provides a means for employees and individuals to report breaches in appropriate conduct relating to health and safety.[48]
- Polenergia addresses risks related to community relations though its Environmental and Social Policy, Social Engagement Policy, Grievance Mechanism Procedure, and Group Public Communication Plan. As part of the Group's Public Communication Plan the group commits to develop and publish detailed stakeholder relationship management plans for each project before starting construction.[49] Under the Environmental and Social Policy, the Group outlines its commitment to maintaining communication with local communities from the beginning of investment through the lifetime of the asset, as well as to consider the safety, welfare and

[28] Ibid.
[29] Polenergia, "Whistleblowing Procedure of Polenergia S.A.", (2023), at: https://www.polenergia.pl/wp-content/uploads/2023/04/Whistleblowingprocedurever.1.1.pdf
[30] Polenergia, "Sustainability Report for the Year Ended December 31, 2023", (2023), at: https://www.polenergia.pl/wp-content/uploads/2024/03/PolenergiaGroupConsolidatedSustainabilityReport2023.pdf
[31] Polenergia, "Sustainability Report for the Year Ended December 31, 2023", (2023), at: https://www.polenergia.pl/wp-content/uploads/2024/03/PolenergiaGroupConsolidatedSustainabilityReport2023.pdf
[32] Polenergia, "Sustainability Report for the Year Ended December 31, 2023", (2023), at: https://www.polenergia.pl/wp-content/uploads/2024/03/PolenergiaGroupConsolidatedSustainabilityReport2023.pdf
[33] Polenergia shared the Waste Management Procedure with Sustainalytics confidentially.
[34] European Commission, "EU Construction and Demolition Waste Protocol and Guidelines", (2018), at: https://single-market-economy.ec.europa.eu/news/eu-construction-and-demolition-waste-protocol-2018-09-18_en
[35] European Commission, "Directive 2008/98/EC on waste". (2008), at: https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32008L0098&from=EN
[36] Ibid.
[37] ISAP, "Dz.U. 2019 poz. 701", (2019) at: https://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU20190000701/T/D20190701L.pdf
[38] ISAP, "Dz.U. 1974 Nr 24 poz. 141", (1974), at: https://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU19740240141/U/D19740141Lj.pdf
[39] ISAP, "Dz.U. 1997 nr 129 poz. 844", (1997), at: https://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU19971290844/O/D19970844.pdf
[40] ISAP, "Dz. U. 2019 poz. 1830", (2019) at: https://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU20190001830/O/D20191830.pdf
[41] ISAP, "Dz. U. 1994 Nr 89 poz. 414". (1994), at: https://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU19940890414/U/D19940414Lj.pdf
[42] Ibid.
[43] Council of the European Communities, "Council Directive of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work", (1989), at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31989L0391
[44] European Commission, "Council Directive of 12 June 1989", (1989), at: eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31989L0391&from=FR
[45] ISO, "ISO 14000 family — Environmental management", at: https://www.iso.org/standards/popular/iso-14000-family
[46] SCCM, "Occupational Health OHSAS 18001", at: https://english.sccm.nl/content/occupational-health-ohsas-18001
[47] Polenergia, "Sustainability Report for the Year Ended December 31, 2023", (2023), at: https://www.polenergia.pl/wp-content/uploads/2024/03/PolenergiaGroupConsolidatedSustainabilityReport2023.pdf
[48] Polenergia, "Whistleblowing Procedure of Polenergia S.A.", (2023), at: https://www.polenergia.pl/wp-content/uploads/2023/04/Whistleblowingprocedurever.1.1.pdf
[49] Polenergia, "Polenergia Group Public Communication Plan", (2024), at: https://www.polenergia.pl/wp-content/uploads/2024/04/2.PlanKomunikacjiSpolecznejFINeng.pdf

environmental interests of communities in all business decisions.[50] Polenergia also commits to engage in dialogue with environmental defenders and consider their concerns.[51] Regarding onshore wind farms, which are a main concern for communities in Poland,[52] the Group's activities are regulated under the Act on Investments in Wind Farms, which requires wind turbines to be set at a minimum distance of 700 metres from residential buildings.[53] Furthermore, the Group's grievance mechanism sets a formal procedure for stakeholders' complaints to be raised, processed and managed.[54]

- Sustainalytics further notes that the eligible projects will be located in Poland, which is recognized as a Designated Country by the Equator Principles, indicating the presence of robust environmental and social governance systems, legislation and institutional capacity to mitigate common environmental and social risks associated with financed projects.[55]

Based on these policies, standards and assessments, Sustainalytics is of the opinion that Polenergia has implemented adequate measures and is well positioned to manage and mitigate environmental and social risks commonly associated with the eligible categories.

Section 3: Impact of Use of Proceeds

All use of proceeds categories are aligned with those recognized by the GBP. Sustainalytics has focused below on where the impact is specifically relevant in the local context.

Importance of renewable energy in Poland and the EU

In 2023, the energy sector accounted for more than 75% of the EU's GHG emissions.[56] The Renewable Energy Directive sets a revised binding target to reach 42.5% renewable energy supply in the EU's overall energy consumption by 2030 with a non-binding target to achieve 45%, an increase from the previous goal of 32%.[57] This supports the EU's aim to reduce GHG emissions by 55% by 2030 compared to 1990 levels. As of 2022, renewable energy accounted for 23% of the EU's energy consumption.[58]

In 2022, the energy sector was the largest contributor to Poland's GHG emissions, followed by the transport and industrial sectors.[59] In the same year, more than 80% of Poland's primary energy came from fossil fuel, of which 45% was derived from coal.[60] In 2024, as part of its updated National Plan in the field of Energy and Climate by 2030, Poland established a target to reach 29.8% renewable energy in final energy consumption by 2030 and has been advised to revise the target to 32% by the EU Commission.[61,62] As of 2022, approximately 17% of the total final energy consumed in Poland was generated from renewable energy, with biomass (primarily wood) accounting for approximately two-thirds of it, and solar, wind and ambient energy (such as heat pumps) accounting for less than 3%.[63]

Poland is focusing on developing PV and wind energy as part of its plans to increase the share of renewable energy in the total energy mix, in particular within electricity supply.[64,65] Furthermore, as at the end of 2022, Poland was one of the largest hydrogen producers in the EU, accounting for approximately

[50] Polenergia, "Polenergia Group Environmental and Social Policy", (2024), at: https://www.polenergia.pl/wp-content/uploads/2024/04/1.PolitykaSrodowiskowoSpolecznaFINeng.pdf
[51] Ibid.
[52] Polenergia, "Polenergia Group Public Communication Plan", (2024), at: https://www.polenergia.pl/wp-content/uploads/2024/04/2.PlanKomunikacjiSpolecznejFINeng.pdf
[53] ISAP, "Dz. U. 2024 poz. 317", (2024), at: https://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU20240000317/T/D20240317L.pdf
[54] Polenergia, "Grievance Mechanism", (2024), at: https://www.polenergia.pl/wp-content/uploads/2024/04/2.2.ProceduraSkladaniaSkargiWnioskowFINeng.pdf
[55] Equator Principles, "About the Equator Principles", at: https://equator-principles.com/about-the-equator-principles/
[56] European Parliament, "Directive 2023/2413 on the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652", (2023), at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202302413
[57] Ibid.
[58] Eurostat, "Shedding light on energy in Europe – 2024 edition", (2024), at: https://ec.europa.eu/eurostat/web/interactive-publications/energy-2024#:~:text=Renewable%20energies%20account%20for%20the,and%20crude%20oil%20(3%25).
[59] European Commission, "Climate Action Progress Report 2023, Country Profile, Poland", (2023), at: https://climate.ec.europa.eu/document/download/c87bf87e-3785-46df-b270-4461814adeaa_en?filename=pl_2023_factsheet_en.pdf
[60] Forum Energii, "Energy Transition in Poland. 2024 Edition", (2024), at: https://www.forum-energii.eu/en/transformacja-edycja-2024
[61] Poland Ministry of Climate and Environment, "National Plan in the field of Energy and Climate by 2030, (2019 update of NECPs)", (2024), at: https://commission.europa.eu/document/download/5118b15e-d380-49ae-b8bb-41cc81a28e15_en?filename=PL_NECPupdate_Projekt_EN.pdf
[62] European Commission, "Commission Recommendation on the draft updated integrated national energy and climate plan of Poland covering the period 2021-2030", (2024), at: https://commission.europa.eu/document/download/b40cb8bb-4eaf-434b-a298-6f282fb8ed4a_en?filename=Recommendation_draft_updated_NECP_Poland_2024.pdf.pdf
[63] Forum Energii, "Energy Transition in Poland. 2024 Edition.", (2024), at: https://www.forum-energii.eu/en/transformacja-edycja-2024
[64] Poland Ministry of Climate and Environment, "2030 Polish Hydrogen Strategy", (2021), at: https://energy.ec.europa.eu/document/download/e63cb8ff-2a56-4f0b-98f6-59b4e15cf3f7_en?filename=8_-%20_polish_hydrogen_strategy_draft_presentation.pdf&prefLang=lv#:~:text=Strategy%20sets%20the%20long%2Dterm,key%20for%20its%20successful%20implementation.&text=50%20MW%20and%202%20GW,by%202030%20and%202040%20accordingly
[65] Poland Ministry of Climate and Environment, "Energy Policy of Poland until 2040", (2021), at: https://www.gov.pl/attachment/b1febd0c-e544-412d-a0d7-f6bff01707c

13% of hydrogen production in the bloc, though most production came primarily from fossil fuels.[66,67] The country aims to increase the share of renewable hydrogen to 42% of the total use of hydrogen in industry.[68,69] The government aims to leverage low-emission hydrogen to help decarbonize building heating, transport and industrial sectors, which are among Poland's largest sources of GHG emissions.[70,71]

Based on the above context, Sustainalytics is of the opinion that Polenergia's investments in solar, wind and green hydrogen projects are expected to deliver a positive environmental impact by supporting the growth of the renewable energy sector and the transition towards a low-carbon economy in Poland and the EU.

Contribution to SDGs

The Sustainable Development Goals were adopted in September 2015 by the United Nations General Assembly and form part of an agenda for achieving sustainable development by 2030. The instruments issued under the Polenergia S.A. Green Bond Framework are expected to advance the following SDGs and targets:

Use of Proceeds Category	SDG	SDG target
Renewable Energy	7. Affordable and clean energy	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix
Energy Efficiency	7. Affordable and clean energy	7.3 By 2030, double the global rate of improvement in energy efficiency
	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

Conclusion

Polenergia has developed the Polenergia S.A. Green Bond Framework under which it may issue green bonds, including notes (such as structured and promissory notes), commercial paper and other financial instruments,[72] and use the proceeds to finance projects intended to support the decarbonization of the Polish energy market. Sustainalytics considers that the eligible projects are expected to provide positive environmental impacts.

The Framework outlines processes for tracking, allocation and management of proceeds, and makes commitments for reporting on allocation and impact. Sustainalytics considers that the Polenergia S.A. Green Bond Framework is aligned with Polenergia's sustainability strategy and that the use of proceeds will contribute to the advancement of UN Sustainable Development Goals 7 and 9. Additionally, Sustainalytics considers that Polenergia has adequate measures to identify, manage and mitigate environmental and social risks commonly associated with the eligible projects.

Based on the above, Sustainalytics is confident that Polenergia is well positioned to issue green bonds and that the Polenergia S.A. Green Bond Framework is robust, transparent and in alignment with the four core components of the Green Bond Principles 2021 with June 2022 Appendix.

[66] Poland Ministry of Climate and Environment, "National Plan in the field of Energy and Climate by 2030, (2019 update of NECPs)", (2024), at: https://commission.europa.eu/document/download/5118b15e-d380-49ae-b8bb-41cc81a28e15_en?filename=PL_NECPe_Projekt_EN.pdf
[67] European Hydrogen Observatory, "The European Hydrogen Market Landscape", (2023), at: https://observatory.clean-hydrogen.europa.eu/sites/default/files/2023-11/Report%2001%20-%20November%202023%20-%20The%20European%20hydrogen%20market%20landscape.pdf
[68] Poland Ministry of Climate and Environment, "National Plan in the field of Energy and Climate by 2030, (2019 update of NECPs)", (2024), at: https://commission.europa.eu/document/download/5118b15e-d380-49ae-b8bb-41cc81a28e15_en?filename=PL_NECPupdate_Projekt_EN.pdf
[69] Poland Ministry of Economic Development and Technology, "Poland's Hydrogen Strategy: A Green Future", (2024), at: https://www.trade.gov.pl/en/extended-topics/polands-hydrogen-strategy-a-green-future/
[70] Poland Ministry of Climate and Environment, "National Plan in the field of Energy and Climate by 2030, (2019 update of NECPs)", (2024), at: https://commission.europa.eu/document/download/5118b15e-d380-49ae-b8bb-41cc81a28e15_en?filename=PL_NECPupdate_Projekt_EN.pdf
[71] IEA, "Poland 2022, Energy Policy Review", (2022), at: https://iea.blob.core.windows.net/assets/b9ea5a7d-3e41-4318-a69e-f7d456ebb118/Poland2022.pdf
[72] Sustainalytics' assessment is limited to the financial instruments listed in the Framework.

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