

POST-ISSUANCE CLIMATE BOND CERTIFICATION

Verification Report for Post-Issuance Certification for the Green Bond Issued by ORLEN S.A.

SCOPE

ORLEN S.A. (ORLEN) commissioned ICS to compile a Verifier's Report for Post-Issuance Certification of its Green Bond by the Climate Bonds Initiative (CBI). The Climate Bonds Certification process includes verifying whether the provisions of the Climate Bonds Standards issued by the CBI are met and obtaining evidence to support the verification.

CRITERIA

Relevant CBI Standards for this Climate Bonds Certification:

- Climate Bonds Standard (Version 3.0)
- Wind Energy Sector Eligibility Criteria
- Solar Energy Sector Eligibility Criteria
- Marine Renewable Energy Sector Eligibility Criteria
- Low Carbon Transport Sector Eligibility Criteria

ISSUER'S RESPONSIBILITY

ORLEN's responsibility was to provide information and documentation on:

- Selection of nominated projects & assets
- Technical aspects of projects & assets
- Internal processes & controls
- Proposed reporting

ICS'S VERIFICATION PROCESS

Since 2014, ISS Group, of which ICS is part, has built up a reputation as a highly-reputed thought leader in the green and social bond market and has become one of the first CBI approved verifiers.

This independent Post-Issuance Verification of the green bond (XS2346125573) issued by ORLEN has been conducted based on the Climate Bond Standards Version 3.0, and limited assurance procedures based on common market practices and voluntary guidelines, such as the International Standard on Assurance Engagements other than Audits or Reviews of Historical Financial Information (ISAE 3000).

The approach to assess whether the Issuer's green bond meets the criteria of the Climate Bond Standards Version 3.0 is as follows:

- The Issuer provided an overview over the assets to be included in the green bond asset pool and the relevant processes and documentation regarding the proceeds (e.g., use of proceeds, management of proceeds).
- The Issuer filled in a questionnaire that covers all criteria of the Climate Bonds Standard Version 3.0.
- The Issuer provided background documents that elaborate further on the information mentioned in the questionnaire.
- An assessment of the CBI criteria has been carried out using the questionnaire and background documents. In case any answers were unclear, the Issuer has been contacted for more details and clarification.

The engagement with ORLEN took place from September to October 2023.

ICS BUSINESS PRACTICES

ICS has conducted this verification in strict compliance with the ISS Group Code of Ethics, which lays out detailed requirements in integrity, transparency, professional competence and due care, professional behavior and objectivity for the ISS business and team members. It is designed to ensure that the verification is conducted independently and without any conflicts of interest with other parts of the ISS Group.

RESTRICTION ON DISTRIBUTION AND USE OF REPORT

This Verification Report for Climate Bonds Certification including all documentation provided alongside is intended for the use of ORLEN and the Climate Bonds Standard Board. The present document may be published by ORLEN, CBI, and ICS. CBI and ICS agree to publish the report with the consent of ORLEN.



OPINION

Based on the limited assurance procedures conducted and evidence obtained, nothing has come to our attention that causes us to believe that, in all material respects the Issuer's 2021 Green Bond (XS2346125573) is not in conformance with the Climate Bonds Standard's Post-Issuance Requirements.

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MARIJA KRAMER ISS Corporate Solutions Business Rockville, MD, 16 October 2023

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ABOUT ICS

Companies turn to ISS Corporate Solutions (ICS) for expertise in designing and managing governance, compensation, sustainability and cyber risk programs that align with company goals, reduce risk, and manage the needs of a diverse shareholder base by delivering best-in-class data, tools, and advisory services.

We assess alignment with external principles (e.g. the ICMA Green / Social Bond Principles), analyse the sustainability quality of the assets and review the sustainability performance of the issuer themselves. Following these three steps, we draw up an independent SPO so that investors are as well informed as possible about the quality of the bond / loan from a sustainability perspective.

Learn more: https://www.isscorporatesolutions.com/solutions/esg-solutions/green-bond-services/

For more information on SPO services, please contact: <u>SPOsales@isscorporatesolutions.com</u>

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ANNEX

Annex 1: Detailed Findings

- Annex 2: Detailed Findings Solar Energy
- Annex 3: Detailed Findings Wind Energy
- Annex 4: Detailed Findings Marine Renewable Energy
- Annex 5: Detailed Findings Low Carbon Transport

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ANNEX 1: DETAILED FINDINGS

1. USE OF PROCEEDS

	REQUIREMENT	FACTUAL FINDINGS	ANALYSIS AGAINST REQUIREMENTS
5.1	Net proceeds allocation to Nominated projects	EUR 283,120,864.3 out of EUR 500,000,000 has been allocated to nominated Eligible Assets from 2018 till Jun 2023. ¹	~
5.2	Conformance with the Bond's documented objectives and requirements of Part B of the CBI Standard	 The allocated net proceeds have been used to refinance the following projects, which conform with the relevant eligibility requirements under part B of the Climate Bonds Standards: Low Carbon Transport Marine Renewable Energy Solar farms Wind farms 	~
5.3	Allocation of proceeds within 24 months of issuance of the bond	Since issuance of the Green Bond in May 2021, 57% of net proceeds have been allocated as of June 2023, the rest of the proceeds will be allocated by the end of 2023. It's worth noting that there is an extension of the allocation period until the end of 2023, as agreed upon with CBI, which means that the full allocation will not occur within the standard 24-month timeframe from issuance.	~
5.4	No double nomination of projects and assets	The Issuer confirms that the nominated assets have not been nominated to other CBI Certified Climate Bonds.	~
5.5	Share of financing vs refinancing	The Issuer confirms that approximate 11% of the net proceeds was used for refinancing with lookback period from 2018-2020.	~
5.6	Tracking of proceeds	The Issuer confirms that the net proceeds are tracked and managed in accordance to the process as stated in Chapter 5 of the Green Finance Framework ² .	~

¹ Three different exchange rates were used as follows: exchange rate EUR/PLN as of 31 December 2021 for expenses spent at 2018-2021 (4.5994), exchanged rate EUR/PLN as of 31 December 2022 for expenses spent at 2022 (4.6899), exchanged rate EUR/PLN as of 30 June 2023 for expenses spent till June 2023 (4.4503). Using these rates, funds allocated as on 31 December 2021 were EUR 218393460.8, funds allocated as on 31 December 2022 were EUR 32957029.61 and funds allocated as on 30 June 2023 were EUR 31770373.89. ² PKN ORLEN SA Green Finance Framework, May 2021 <u>https://www.orlen.pl/content/dam/internet/orlen/pl/en/sustainable-development/green-</u>

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Size of net proceeds
vs investment
exposure to
nominated projects
and assetsThe Issuer confirms that the value of the nominated
projects far exceeds the net proceeds of the
issuance.5.8Additional Projects
and assetsAll nominated projects fall within the same Sector
Criteria as in the pre-issuance certification.

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2. PROCESS FOR EVALUATION AND SELECTION OF PROJECTS & ASSETS

	REQUIREMENT	FACTUAL FINDINGS	ANALYSIS AGAINST REQUIREMENTS
6.1	Documented and maintained a decision-making process, including: A statement on the Climate-related objectives of the Bond Climate-related objectives of the bond in the context of the Issuer's strategy Issuer's rationale for issuance the bond Process determining that the projects/ assets meet the eligibility criteria	The Issuer confirms that the project selection and evaluation process are in accordance to the process as stated in Chapter 4 of the Green Finance Framework. ORLEN has an Investment Committee and a selection process to ensure only eligible and appropriate projects and assets are included for nomination and financing by the proceeds. An appropriate statement has been included in ORLEN's Green Finance Framework, which incorporates all the necessary elements. The objectives of the Green Finance Instrument is to channel investments to projects that have demonstrated environmental benefits. The Framework aims to support ORLEN's strategy and the transition to low carbon economy. By issuing the Green Finance Instruments, ORLEN intends to align its funding strategy with its mission, sustainability strategy and responsible investing objectives.	

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3. MANAGEMENT OF PROCEEDS

	REQUIREMENTS	FACTUAL FINDINGS	ANALYSIS AGAINST REQUIREMENTS
7.1	Net Proceeds are credited to a sub- account/portfolio or otherwise tracked and documented	ORLEN confirms that the proceeds are managed as described in the pre-issuance certification. The net proceeds of the bonds are managed by ORLEN's Finance Department, who verifies that the allocation of the bonds' net funds coincides nominally with the disbursements made to the Eligible Green Projects, until the full allocation of funds. The Finance Department in cooperation with Investment and Development Controlling Office monitored on a quarterly basis the implementation of CAPEX concerning green portfolio projects. For this purpose, there was an internal reporting system 'CRIP - Central Register of Initiatives and Projects' implemented.	~
7.2	Net proceeds are earmarked	 ORLEN maintains an internal project register, all investment projects (CAPEX and OPEX expenditures) including those related to the green bond portfolio are linked to an identifier/tracker that is matched with the company's accounting system SAP. ORLEN confirms that the earmarking process for the proceeds is the same as the one described in the pre-issuance certification. The Finance department monitors the allocation of the net proceeds to the portfolio of Eligible Green Projects through an asset register (CRIP) containing the Eligible Green Projects. Additional projects are be added to the portfolio of Eligible Green Projects to the extent required. Eligible Green Projects are selected by ORLEN'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 Strategy Committee, comprising the Strategy Director and all ORLEN Board Members excluding the CEO. These committees verify the compliance of the selected Eligible Green Projects with the Eligibility Criteria at least on an annual basis. The Committees are also responsible for excluding 	

7.3Unallocated
proceedsThe Issuer confirms that unallocated proceeds are
invested in bank deposits or are used to
temporarily reduce indebtedness of a revolving
nature. As of the reporting period, the Issuer
confirms that no proceeds have been used for
temporary investments.

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4. **REPORTING**

	REQUIREMENTS	FACTUAL FINDINGS	ANALYSIS AGAINST REQUIREMENTS
8.1	Timing and availability of Update Reports	ORLEN publishes the Allocation & Impact Report annually (2021 and 2022) on its website ³ and will report publicly until maturity.	~
8.2	Allocation report, Eligibility Report, Impact Report	ORLEN published details on the allocation, eligibility, and impact of the projects financed by this bond in its Allocation & Impact Reports available on its website.	~
8.3	Allocation Reporting	The allocation reporting details are available in the Allocation & Impact Report on ORLEN's website. ORLEN confirms that the bond issued under the Green Bond Framework are aligned with the Climate Bonds Standard. 11% of the whole amount of the bond proceeds have refinanced the historical CAPEX. The list of projects include: • Wind energy Baltic Power; • Wind energy Przykona; • Solar farm 'Mitra'; • Photovoltaics program; • EV charging stations. The objectives of the Green Bond issued is to support ORLEN's sustainable development in the area of renewable energy, clean transportation, and pollution prevention and control. The Issuer	~

³ Orlen's Green Finance Website. <u>https://www.orlen.pl/en/sustainability/green-finance</u>

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		includes in the report the amount of proceeds allocated in 2021 and 2022, and the breakdown per project category. Moreover, the Issuer has included project information such as project type and name, capacity, location and year of coming into service.	
8.4	Eligibility Reporting	 The eligibility reporting details are available in the Allocation & Impact Report on ORLEN's website. The Issuer confirms that the eligibility of nominated projects for financing are determined in accordance with the eligibility criteria referred in the Green Finance Framework. The project type is also included in the reporting. The Issuer also confirms that the Pollution Prevention project that has been included in the Allocation & Impact Report 2021 has been removed from the portfolio, namely Construction of mechanical recycling plants – "PIGOZ". Such information will be included in the Allocation & Impact Report 2023. 	~
8.5	Reasons for confidentiality	Public disclosure of the nominated projects and assets is available on the website.	\checkmark
8.6	Impact Reporting	 The impact reporting details are available in the Allocation & Impact Reports on ORLEN's website. The Issuer has reported on the following impacts and its relevant estimation assumptions: Installed renewable energy capacity built under each project (in MW) Renewable energy produced per year Number of EV charging station units installed Amount of charged vehicles/ charging hours The estimated CO₂ emissions avoided (Mg CO₂) Qualitative performance indicators have not been used in the reporting. 	~
8.7	Public Verifier Reports	The Issuer confirms that the CBI Pre-Issuance Verification Report is available on ORLEN's website. The CBI Post-Issuance Verification Report will be available on ORLEN's website after full allocation of proceeds by end of 2023.	~



8.8	Availability of information provided to Verifier	Relevant information has been provided to ICS.	~
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5. CLIMATE BOND TAXONOMY

		REQUIREMENTS	FACTUAL FINDINGS	ANALYSIS AGAINST REQUIREMENTS
l	9.1	Matching of Clim Bond category	57% of net proceeds have been allocated as of June 2023, which fall within the areas included in the Climate Bonds Taxonomy. The rest of the proceeds will be allocated by the end of 2023.	

6. TECHNICAL CRITERIA

	REQUIREMENTS	FACTUAL FINDINGS	ANALYSIS AGAINST REQUIREMENTS
10.1	Sector-specific eligibility criteria	57% of the net proceeds is allocated to Eligible Assets related to the aforementioned categories and the Issuer conforms with the relevant eligibility requirements under part B of the Climate Bonds Standards. The rest of the proceeds will be allocated by the end of 2023.	~

ANNEX 2: DETAILED FINDINGS SOLAR ENERGY (ONSHORE AND PHOTOVOLTAICS)

The Green Bond Asset Pool complies with the Solar Criteria of the Climate Bonds Initiative.

The Issuer confirms that photovoltaic generation facilities (onshore) and Solar farms do not have more than 15% of electricity generated from non-renewable sources.

The projects are all eligible for the Climate Bonds Certification.

ANNEX 3: DETAILED FINDINGS WIND ENERGY (ONSHORE)

The Green Bond Asset Pool complies with the Wind Criteria of the Climate Bonds Initiative.

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The Issuer confirms that onshore wind farms do not have more than 15% of electricity generated from non-renewable sources.

The projects are all eligible for the Climate Bonds Certification.

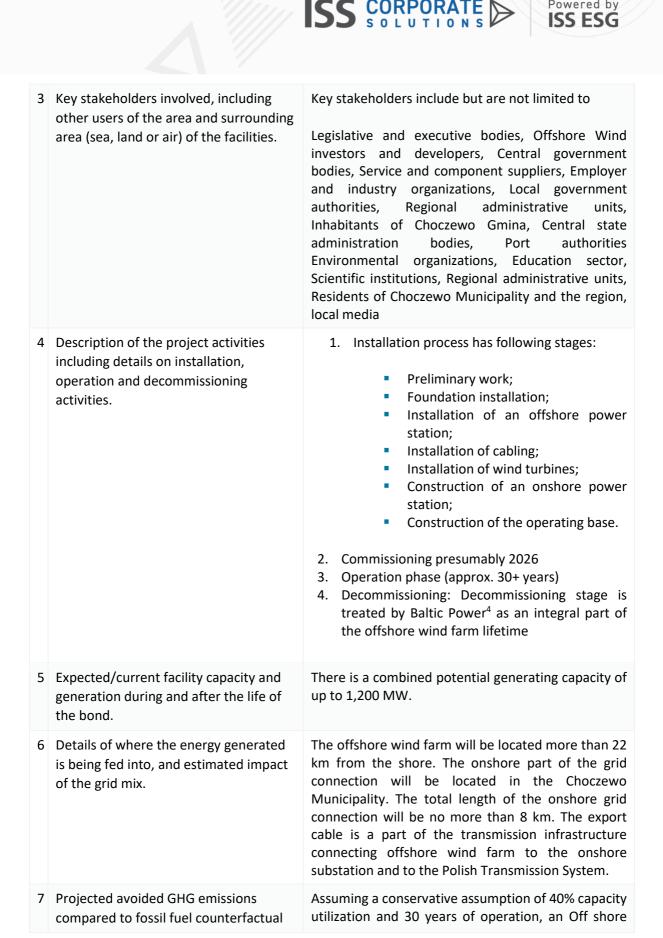
ANNEX 4: DETAILED FINDINGS MARINE RENEWABLE ENERGY (OFFSHORE WIND)

The Green Bond Asset Pool complies with the Marine Renewable Criteria of the Climate Bonds Initiative.

Offshore wind farms financed under the framework comply with the criteria and are eligible for the Climate Bonds Certification.

Disclosure Component (for disclosure only; assessment is not required)

	ITEM	FACTUAL FINDINGS
1	Project location and size, including description of marine coastal ecosystem in proximity to planned installations, noting for example whether located in marine protected areas or vulnerable marine ecosystems.	The project area is in the Baltic Sea, with a combined potential generating capacity of up to 1,200 MW. The project area is within any marine protected areas or vulnerable marine ecosystems. The export cable route crosses the N2000 site 'Przybrzeżne wody Bałtyku' (PLB990002) over a distance of 11.1 kms.
2	Projected lifespan of the asset/project.	Development phase approx. 6 years, Construction phase approx. 3 years, Operation phase approx. 30+ years, Decommissioning phase approx. 2-5 years



⁴ Development of the Baltic Power offshore wind farm is a joint venture project of two experienced companies: PKN ORLEN (Poland) and Northland Power (Canada). Under the partnership agreement signed in 2021, the companies will jointly carry out the construction of the 1.2 GW offshore wind farm at the Baltic Sea, https://balticpower.pl/en/. Baltic Power is the name of the off shore wind farm project and

the name of SPV (joint venture company).

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	(in kgCO₂e) using recognized conversion factors.	Wind Farm with a maximum capacity of 1,200 MW will generate 126.14 TWh (454.11 PJ) of electricity, which would allow to avoid emissions of over 45 million Mg CO ₂ , over 618 thousand Mg SO ₂ , over 83 thousand Mg of nitrogen oxides and nearly 1.5 million Mg of dust in lignite-fired power plants, assuming the emissions indicated by the European Environment Agency.
8	The planning standards, environmental regulations and other regulations that the project has been required to comply with.	In 2022, Republic of Poland has adopted Marine Spatial Plan (MSP) for the Polish part of the Baltic Sea including Polish Exclusive Economic Zone, territorial sea and the internal sea waters. This document regulates the relations between main marine users of the marine ecosystem. The draft of the Marine Spatial Plan was developed in accordance with the requirements of the Act on the maritime areas of the Republic of Poland and maritime administration. The Environmental Impact Assessment has been prepared meeting requirements of this Act.
		Offshore Location License is in place for allowing the construction of a wind farm in the given area of the Baltic Sea. Environmental Impact Decisions for the Offshore wind farm and grid connection and cable laying permits are issued based on the Environmental Impact Assessments provided by a developer. Being granted an Environmental Impact Decisions means in general that the Authorities responsible for Environmental protection do not consider that the renewable energy facility poses threat to the maritime environment and navigational safety.

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Adaptation and Resilience Component

	REQUIREMENT	FACTUAL FINDINGS	ASSESSMENT
1.1	Processes are in place to assess key risks to the assets from a changing climate and its impact on marine conditions	The possible effects of climate change on the assets are considered in the Environmental Impact Assessments (EIA) and environmental surveys. Met Ocean Studies, aiming at defining extremal weather conditions that may occur at the area of the wind farm were conducted. The studies were carried out during the Front-End Engineering Design Process. Met ocean criteria suitable to the characterization of conditions across the proposed Baltic Power	~

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		 Offshore Wind Farm (OWF) development in the Baltic Sea, offshore Poland overlap with the key risks which are the subject of assessment and are documented. The scope of the assessment was defined based on the European codes and standards including ISO and ICE, ICERE which are standards applicable offshore wind industry. Other standards include: DNVGL-RP-C205 (2019) Environmental Conditions and Environmental Loads, September 2019 IEC-61400-3 (2009) - Wind Energy Generation Systems - Part 3-1: Design Requirements for Fixed Offshore Wind Turbines ISO-19901-1 (2015) Petroleum and natural gas industries — Specific requirements for offshore structures — Part 2: Seismic design procedures and criteria ISO-19902 (2007) Petroleum and Natural Gas Industries Fixed Steel Structures ISO-19906 (2010) Petroleum and natural gas industries — Arctic offshore structures 	
2.1	Processes are in place to assess improvements and impacts the assets have on the resilience of other stakeholders	The Issuer confirms that an Environmental Impact Decisions for the offshore wind farm and grid connection, and cable laying permits have been obtained for the project before the construction works start, in accordance with Polish Law and regulation. The permit is issued based on the Environmental Impact Assessment and that the facility is not considered to poses threat to the maritime environment and navigational safety. Moreover, the Issuer has identified the other marine users and confirmed that the use of Baltic Sea by particular sectors is coordinated by the Authorities at the regional and national level, such that they do not interfere with each other.	~
3.1	An adaptation plan has been designed and is being	The EIA has provided an assessment of the potential environmental impacts associated with	~

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	implemented to address the risks identified in the assessments outlined above	 the construction, operation and maintenance, and decommissioning phases of the project. Met Ocean Studies, which were conducted in frame of the designer process, allowed to estimate the extreme meteorological conditions in which may happen in the operation phase of the Baltic Power Offshore Windfarm. The assessment of the impact of the Baltic Power offshore windfarms presents limited impact of the asset on other stakeholders in the system it operates. 	
		Baltic Power OWF project is in the development phase so the following plans, procedures, systems, processes have not been prepared and adopted yet:	
		1. The Issuer has designed or amended asset maintenance plans to ensure that scheduled maintenance is sufficient to cope with the ongoing impacts of climate change and a plan has been established to govern how they approach emergency maintenance needs arising from sudden climate change impacts (e.g. extreme storms)	
3.2	Inspections are carried out regularly and there is a maintenance regime for future inspections.	2. The Issuer has remotely controlled or automated shutdown procedures, training, capacity and governance arrangements in place to manage the impacts of exceptional events (such as extreme storms, winds etc.)	~
		3. The Issuer has monitoring and reporting systems and processes to identify high risk scenarios	
		4. The Issuer has contingency plans to address disruptions to operations or loss of the asset and any resulting environmental or social damage.	
		5. The Issuer has processes for feeding risk assessments back into decision making	
		6. The Issuer has a budget allocated to implementing the adaptation plan and has a	

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		named member of staff responsible for its implementation.7. The Issuer complies with any existing broader or higher-level adaption plans, such as NAPAs	
4.1	Issuer is involved in stakeholder engagement and collaboration	Baltic Power is involved in the stakeholder engagement and collaboration. Baltic Power has identified the key stakeholders for the projects and conducts continuous cooperation with them.	~
5.1	The assets or projects do not put at risk or endangered species or habitat or unduly impact ecosystem services. Where there are possible negative impacts to habitats, mitigation measures are implemented to offset the negative impacts	Baltic Power has conducted environmental surveys for the offshore wind farm and prepared Environmental Impact Assessment Report (EIA Report) for construction, operation and decommissioning phase which has been submitted to the Environmental Authority (Regional Director of Environmental Protection in Gdańsk). Pursuant to the law, Environmental Authority has issued the EIA Decision, which provisions have to be fulfilled by Baltic Power. The Baltic Power Offshore Wind Farm's impact on the environment has been described in the EIA Report. For the impacts that potentially could have a significant negative impact on the environment, mitigation measures have been proposed. This mitigation measures have been described in the EIA Report and is included in EIA decision.	~
5.2	Waste is responsibly dealt with, including appropriate disposal of construction waste and oil-based lubricants, including recycling options where possible	The EIA will be accompanied by an Oil Pollution Prevention Plan which has been approved by the Ministry of Maritime Economy and Inland Navigation and which will include a Waste Management Plan.	~
5.3	The Issuer has recognized and listed the potential risks for accidental site contamination either from leakage of hydraulic fluid or from wreckage/debris on the seabed.	Mitigation measurements will be taken into account in the waste management concept as well as in the EIA report. The potential risks for accidental site contamination either from leakage of hydraulic fluid (or any other potential pollutant) or from wreckage/debris on the seabed have been recognized and described in the EIA Report along with the steps leading to minimise these risks. In accordance with applicable law, in the event of a threat, Baltic Power will inform the competent	~

		public administration authorities and follow their guidelines. In addition, in accordance with the requirements of the OWF's Baltic Power location permit, Baltic Power submitted an Oil Pollution Prevention Plan, which has been approved by the Ministry of Maritime Economy and Inland Navigation.		
5.4	Decommissioning of the plant is planned in a way that considers environmental impacts	Decommissioning stage is treated by Baltic Power as an integral part of the Offshore Wind Farm lifetime. Decommissioning stage has been taken into account in EIA Report and will be included in EIA Decision.	~	
5.5	Issuer has plans and processes in place to effectively manage and minimize conflict with other users of marine and coastal place.	The analysis of potential conflicts with other users of the marine and coastal space has been described in the EIA Report. Moreover, all Baltic Power activities are carried out in accordance with the law, and Baltic Power is involved in the creation of the Polish offshore Sector Deal with the public administration and other stakeholders such as, for example fishermen.	~	

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ANNEX 5: DETAILED FINDINGS LOW CARBON TRANSPORT

The Green Bond Asset Pool complies with the Low Carbon Transport Criteria of the Climate Bonds Initiative.

Dedicated charging and alternative fuel infrastructure (separate from fossil fuel filling stations) and hydrogen fuel supplies and refueling infrastructure for hydrogen locomotives comply with the criteria and are eligible for the Climate Bonds Certification.

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