



ABEI Energy – Green Bond Framework

11.2024



TABLE OF CONTENTS

EthiFinance General Opinion	3
Alignment with the ICMA Principles	3
Global environmental impact	4
ESG assessment of ABEI Energy	5
Controversies	5
ESG Risk Management	5
Strategic Consistency	6
Alignment with the ICMA Principles	7
A. Use of Proceeds	7
B. Process for Project Evaluation & Selection	10
C. Management of proceeds	11
D. Reporting	12
Impacts of the projects	13
Green Impact – Renewable Energy - Solar projects plants	14
Green Impact – Renewable Energy - Wind projects plants	16
Green Impact – Renewable Energy - BESS Technology	18
Methodology	20

Introduction

EthiFinance has been commissioned to provide an independent Second Party Opinion on the Green Bond Framework of ABEI Energy (hereafter referred to as “ABEI”, “the Company” or “the Issuer”). The assessment of the Framework was conducted taking into consideration the International Capital Market Association’s Green Bond Principles (GBP) June 2021 (with June 2022 Appendix 1).

Headquartered in Madrid, ABEI Energy is a renewable energy company that manages every phase of a project’s lifecycle, from initial development and securing financing to asset management. With specialized teams in project development, EPC (Engineering, Procurement, and Construction), and Operations & Maintenance (O&M), the Company ensure quality, efficiency, and long-term performance for projects in solar, wind, storage systems, and emerging technologies like biogas and hydrogen.

ABEI Energy plans to issue green financing to finance eligible projects in three categories, all related to renewable energy, and energy efficiency. A Green Finance Framework has been developed, which is geared exclusively towards long-term financial instruments (bonds).

EthiFinance conducted the assessment in October and November 2024. ABEI Energy management provided all relevant documents, and EthiFinance was in direct contact with the relevant employees. The information we received has allowed us to provide a reasonable opinion on the Framework’s compliance with the above-mentioned guidelines.

EthiFinance General Opinion

EthiFinance considers ABEI’s Green Bond Framework (“the Framework”) to be aligned with ICMA 2021 Green Bond Principles. The eligible project categories are expected to have a high impact, contributing to Climate Change Mitigation and aligning with the UN Sustainable Development Goals 7, 12 and 13.

Alignment with the ICMA Principles

Not Aligned	Partially Aligned	ICMA Aligned	Best Practices
-------------	-------------------	---------------------	----------------

Use of Proceeds

☑ ICMA ALIGNED

ABEI Energy’s eligible projects are aligned with the ICMA’s Green Bond Principles 2021 (including the June 2022 Appendix 1) and demonstrate clear environmental benefits. The link to Green market standards is clearly demonstrated in the Framework and contributes to the associated SDGs. Most environmental benefits are measurable, even if the third category lacks detailed quantification. In addition, the Issuer has not formally disclosed any exclusion criteria to the projects to be financed.

Process for Evaluation & Selection

☑ ICMA ALIGNED

EthiFinance considers that the processes dedicated to project evaluation and selection are robust and aligned with the ICMA’s Green Bond Principles. This includes clear processes and responsibilities, with structured monitoring processes. Furthermore, the identification and mitigation of material ESG risks are assessed as good, with visibility into the processes undertaken to address these risks effectively.

Management of Proceeds

☑ ICMA ALIGNED

EthiFinance considers ABEI’s process for managing the proceeds to be transparent and robust, and aligned with ICMA’s Green Bond Principles. The Framework provides sufficient information on the tracking of funds by appropriate means, the process in place for a controlled use of proceeds or periodical adjustment of the balance of net proceeds. The Issuer also addresses the allocation timeframe.

Reporting

☑ ICMA ALIGNED

EthiFinance considers the reporting commitments detailed in the Framework to be aligned with the ICMA’s Green Bond Principles. The Issuer undertakes to report on both the allocation of funds and the benefits of the projects. The frequency and scope of reporting are also provided as well as examples of expected topics of performance indicators.

Global environmental impact

No Impact	Moderate impact	Substantial impact	High impact
-----------	-----------------	--------------------	--------------------

Environmental impact by project category

Renewable Energy – Solar projects plants

High

Solar photovoltaic projects deliver significant environmental benefits by generating clean energy without greenhouse gas emissions, reducing fossil fuel reliance and resource depletion. The advanced bifacial PV technology used by ABEI enhances efficiency and durability. However, potential drawbacks include habitat disruption and infrastructure lock-in, as well as future waste management challenges from decommissioned panels, particularly in countries like Spain, Mexico, and the U.S.

Renewable Energy – Wind projects plants

High

ABEI Energy's renewable energy projects, especially in onshore wind, have significant environmental and economic impacts, aligning with countries' energy transition goals, such as Spain's target for 74% renewable electricity by 2030 or the UK's goal of reducing emissions by 68%. In regions like Mexico and Poland, these projects address both climate change and energy dependency. In terms of magnitude, onshore wind power provides clean electricity with minimal land use, but potential issues like community displacement, labor rights and social resistance, but also ethical supply chain concerns and lifecycle impacts from production to disposal require enhanced management. While ABEI Energy includes compensation programs, improved transparency and mitigation could strengthen their sustainability efforts.

Renewable Energy / - Battery Energy Storage Systems

Substantial

ABEI's eligible project is deemed highly relevant, with EthiFinance recognizing that ABEI Energy's BESS initiative has a substantial environmental impact by enhancing grid stability and optimizing renewable energy use, thus lowering reliance on fossil fuels. Although there are some reservations concerning upstream production impacts, specific operational risks, and limited clarity on anticipated GHG savings, the project's ability to efficiently store and manage renewable energy underscores its positive role in advancing a sustainable energy transition.

ESG assessment of ABEI Energy

GENERAL OPINION

ABEI Energy's framework is highly consistent with its overall business strategy with no involvement in controversial activities or identified controversies. ESG risk management is considered good, given the existence of several important policies and evidence of comprehensive operational implementation across the business.

ESG Controversies

After examining ABEI Energy's activities, EthiFinance considers that the Company is not involved in any controversial business activities¹.

In addition, there is no information indicating that ABEI Energy's practices are the subject of recent and serious ESG controversies² as of 24 October 2024.

ESG Risk Management

EthiFinance considers ABEI Energy's ESG risk management system as good, with a solid foundation at corporate level, and valuable evidence of its implementation at the operational level.

Industry's ESG risks

The renewable energy industry, despite its role in combating climate change, faces several ESG impacts and vulnerabilities that must be carefully managed throughout the development, construction, and operation phases of projects. Poor management of these risks can lead to revenue variability, development and maintenance costs, regulatory risks, technological risk, access to financing and reputational risk for companies like ABEI Energy, potentially undermining business growth and long-term sustainability. Environmental risks include biodiversity loss and habitat disruption, particularly for wind and solar projects that can affect local ecosystems and wildlife. Land use conflicts, water consumption in solar panel manufacturing, and the end-of-life waste management of wind turbines, solar panels, and Battery Energy Storage Systems (BESS) also pose significant environmental challenges. Social risks include potential conflicts with local communities over land use, health and safety concerns for workers, and ensuring fair labor practices throughout the supply chain. Finally, governance risks arise from the need for regulatory compliance, supply chain transparency (especially in sourcing materials like lithium and cobalt for batteries), business ethics and financial accountability. Proper management of these risks is crucial to maintaining the industry's positive impact while addressing its inherent challenges.

ESG risk management at Corporate level

ABEI anchors its ESG management on UNEF's "Sello de Excelencia en Sostenibilidad" and ISO 14001 certifications, as well as ESG internal protocols (for health and safety, environment or procurement and supplier approval, etc.). While these standards offers a solid foundation for managing most of the environmental risks, additional measures may be needed to tackle industry-specific risks and ESG challenges within ABEI's broader renewable energy operations, including social impacts such as community displacement and labor rights issues, as well as supply chain risks related to the ethical sourcing of materials. Additionally, while EthiFinance considers positively that ABEI manages waste by outsourcing recycling to specialized companies, the whole lifecycle impacts of materials and equipment (including high-energy manufacturing, sourcing concerns, operational impact, recyclability) may not be fully addressed. Lastly, the resilience of projects to physical climate risks are critical factors that may require further evaluation.

¹ Controversial areas of business are specified in the Methodology section.

² Controversial business practices are specified in the Methodology section.

ESG risk management at operational level

All ABEI's projects are submitted to public administrations for construction permits. Within this framework, ABEI contracts specialized environmental consultancies to assess each project's environmental feasibility, producing reports on factors like energy, biodiversity, land impacts or water usage, based on country-specific requirements.

Beyond these mandatory regulatory studies, the Company has provided concrete details on the operational implementation of the ISO 14001 certification and evidence of a documented and actively monitored environmental management system.

By implementing impact studies, training and information, continuous EHS monitoring, KPI tracking for improvement, or regulatory compliance warning system, the Issuer demonstrates a satisfactory integration of its ESG risk management at operational level and into daily operations. With a rigorous suppliers approval process based on regulatory compliance, risk mitigation and supplier experience, the issue of sourcing quality also seems to be properly addressed.

In addition, ESG controversies, including those related to projects in the development phase, will be reviewed and reported on an annual basis.

Strategic Consistency

ABEI Energy's overall business strategy is highly coherent with the financing of solar photovoltaic power plants, onshore wind power plants, and Battery Energy Storage Systems (BESS). The Company's vertically integrated approach, allowing it to manage every stage of the renewable project lifecycle, from development to construction and operational management, ensures close alignment between its strategic objectives and the financing of specific renewable projects. By focusing on in-house expertise for project origination, engineering, procurement, construction (EPC), and operation & maintenance (O&M), ABEI Energy optimizes resource allocation and risk management, which supports the viability of solar and wind projects, as well as BESS initiatives, ensuring compliance with technical and financial benchmarks.

Additionally, the Company's strategic asset rotation - where it retains certain assets and sells others - provides a financing model that helps fund new renewable energy developments while maintaining operational efficiency in existing projects. ABEI Energy's focus on local teams and relationships with authorities in target countries ensures regulatory compliance, facilitating faster project approvals for solar and wind energy generation. However, the company could further enhance its strategy by expanding its integration of emerging technologies like green hydrogen and biogas, strengthening its market resilience and contributing to a more diversified and future-proof renewable portfolio.

Alignment with the ICMA Principles

A. Use of Proceeds

GENERAL OPINION	Best-practices
<p>ABEI Energy's eligible projects are <u>aligned</u> with the ICMA's Green Bond Principles 2021 (including the June 2022 Appendix 1) and demonstrate clear environmental benefits. The link to green market standards is clearly demonstrated in the Framework and contributes to the associated SDGs. Most environmental benefits are measurable, even if the third category lacks detailed quantification. Nevertheless, the Issuer has not formally disclosed any exclusion criteria to the projects to be financed.</p>	ICMA aligned
	Partially aligned
	Not aligned

Project Categories

Clarity of description The description of the projects is precise, with exhaustive description of projects that will be undertaken and financed. ABEI Energy develops all types of renewable energy projects (solar, wind, and storage systems) specialized in Engineering, Procurement, and Construction (EPC), overseeing the entire procurement and construction process for its projects as well as the Operations and Maintenance (O&M) throughout the lifespan of the projects. The Battery Energy Storage Systems (BESS) batteries will be used to store the energies produced by the solar and wind projects which are financed under the framework.

ABEI Energy has clearly defined three main eligible project categories in its Framework, aligning with those established by the ICMA:

1. **Renewable energy - solar power plants:** involving the construction of solar photovoltaic power plants, used for photovoltaic electricity generation, with none allocated to cogeneration
2. **Renewable energy – wind power plants:** involving the construction of onshore wind power plants
3. **Renewable Energy- BESS technology:** procurement of the BESS technology for the purpose of storing renewable energy mentioned above

The proceeds will be only used to finance CAPEX, OPEX and DEVEX for both standalone technology projects or hybridizations of existing ones, to be located in the following countries: Spain, Italy, France, UK, Poland, Germany, USA, and Mexico.

The proceeds from the Green Bond issuance will be allocated towards two main objectives: the refinancing of an existing facility with the Bank³ and the growth of ABEI Energy's development and operational pipeline. The refinancing will focus on advancing ABEI's renewable energy projects in Spain, specifically to the three projects included in this framework (solar, wind and BESS battery). Meanwhile, the remaining funds will support the same three projects.

Objectives ABEI Energy's main environmental objective in deploying these projects is to mitigate climate change, which is consistent with those defined by the ICMA.




³ The name of the bank is not disclosed for reasons of confidentiality

Benefits	<p>Projects' categories 1 & 2 being part of the renewable energy category (solar and wind) are expected to deliver substantial environmental benefits by <u>the reduction of GHG emissions</u>. The third project's category (BESS) is expected to deliver environmental benefits, both by:</p> <ul style="list-style-type: none"> • <u>the increase of energy efficiency</u>, by facilitating renewable energy integration, improving grid stability and efficiency, supporting decentralized energy systems and reducing curtailment of renewable energy • and <u>the reduction of GHG emissions</u>, by reducing the need for fossil fuel-based "peaking" power plants, which are typically used during periods of high demand.
Exclusion	<p>The Issuer has not formally disclosed any exclusion criteria for the projects to be financed. However, as ABEI Energy is widely regarded as a pure player in renewable energy, focusing primarily on solar photovoltaic (PV), wind energy, and BESS, EthiFinance considers the risk of proceeds being allocated to projects without environmental benefit to be low.</p>
Measurability	<p>Most benefits are measurable except for the third category (BESS) that lack detailed quantification. Projects 1 & 2's benefits will be measured by the quantification of energy produced, and then converted to CO₂ emissions reductions (per MWh of renewable energy generated) by using standard conversion factors. However, the methodology used to calculate both energy efficiency and reduction of GHG emissions is not disclosed.</p>
Refinancing	<p>The Issuer has committed to allocating 100% of the proceeds to finance eligible environmental projects. The allocation proportion of proceeds is divided as follows:</p> <ul style="list-style-type: none"> • 72% of them allocated to the development and operation of energy assets • and the remaining 28% allocated to refinancing a financing facility with the Bank⁴, dedicated to strategic growth and expansion initiatives. As the Issuer states the debt dates back to March 2024, the look-back period set for green bond allocation is compliant with the best practice of 36 months.

⁴ The name of the bank is not disclosed for reasons of confidentiality

Contribution to UN SDG's

The core activity of ABEI Energy – managing every phase of a renewable energy project's lifecycle, from development and engineering to operations and asset management – will primarily contribute to the achievement of the following Sustainable Development Goals:

 <p>7 AFFORDABLE AND CLEAN ENERGY</p>	<p>The UN SDG #7 aims to provide affordable and clean energy.</p> <p>Through its corporate purpose “<i>To be at the forefront of the energy transition, dedicated to building a sustainable future through zero-emissions power generation</i>”, its commitment to provide access to renewable energy solutions, ensuring they are affordable and widely available and its core activities in renewable energy development, ABEI Energy’s contributes significantly to SDG 7.</p> <p>Specifically, its work in project development for solar, wind, and energy storage systems helps expand the availability of clean energy sources. By providing EPC (Engineering, Procurement, and Construction) and O&M (Operations and Maintenance) services, the Company ensures the reliable and efficient operation of renewable energy plants, supporting long-term energy sustainability. Furthermore, its focus on asset management enhances the performance of renewable energy assets, ensuring ongoing contributions to a clean energy transition. This holistic approach helps increase the share of renewable energy in the global energy mix, a key target of SDG 7.</p>
 <p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p>	<p>The UN SDG #12 is about ensuring sustainable consumption and production patterns, which is key to sustain the livelihoods of current and future generations. ABEI Energy contributes to SDG 12 by integrating sustainable practices throughout its renewable energy projects. Its circular economy focus, promoting resource efficiency and waste reduction, directly aligns with SDG 12's goal of minimizing environmental impact. Additionally, the <i>Sello de Excelencia en Sostenibilidad</i> certification ensures that projects adhere to high standards of environmental integration and biodiversity protection, further enhancing responsible production processes. Through these efforts, the Company not only optimizes resource use but also contributes to local socio-economic benefits and environmental stewardship, ensuring long-term sustainability across its operations.</p>
 <p>13 CLIMATE ACTION</p>	<p>The UN SDG #13 aims to take urgent action to combat climate change and its impacts. The energy sector remaining by far the biggest contributor to greenhouse gas emissions in Spain (75%), particularly from transport (29%), industry (20.6%) and electricity generation (13.5%)⁵. Thus, ABEI Energy’s activities related to the generation of electricity from renewable sources and storage of renewable energy, could contribute under certain conditions to the decarbonisation of the economy.</p>

⁵ Ministerio para la Transición Ecológica y Reto Demográfico, 2020

B. Process for Project Evaluation & Selection

GENERAL OPINION EthiFinance considers that the processes dedicated to project evaluation and selection are robust and <u>aligned</u> with the ICMA’s Green Bond Principles. This includes clear processes and responsibilities, with structured monitoring processes. Furthermore, the identification and mitigation of material ESG risks are assessed as good, with visibility into the processes undertaken to address these risks effectively.	Best-practices
	ICMA aligned
	Partially aligned
	Not aligned

Processes and Governance

Committee’s composition and scope	The Issuer has established a comprehensive process for the evaluation and selection of projects, involving a multidisciplinary project team. This team is made up of members responsible for various aspects of the project, including legal requirements, environmental issues HSE, ESG, project development, and finance. This working group ensures that each project meets all necessary requirements. For higher-level decisions or critical issues, the team escalates matters to the appropriate committee, such as the Origination Committee, Development Committee, EPC Committee, or Asset Management Committee, depending on the project’s stage.
Selection process	The Issuer has established a clear process that begins with the proposal of an eligible project by the Sustainability Team. The final decision is taken by the multidisciplinary project team along with the board. The monitoring of the selected projects will be carried out the Sustainability team. This process will be documented and traceable through internal records.
ESG risks – identification & mitigation	ABEI’s projects undergo a thorough environmental feasibility assessment for construction permits, supported by ISO 14001 certification and a detailed ESG management system, including environmental impact studies, EHS monitoring, and supplier approval based on regulatory compliance and risk management, with annual reviews of ESG controversies.
External Verification	There is no indication that an external auditor will be mandated to review the process.

C. Management of proceeds

GENERAL OPINION EthiFinance considers ABEI’s process for managing the proceeds to be transparent and robust, and <u>aligned</u> with ICMA’s Green Bond Principles. The Framework provides sufficient information on the tracking of funds by appropriate means, the process in place for a controlled use of proceeds or periodical adjustment of the balance of net proceeds. The Issuer also addresses the allocation timeframe.	Best-practices
	ICMA aligned
	Partially aligned
	Not aligned

Process

Traceability of proceeds	ABEI Energy ensures robust financial oversight through a systematic process that includes weekly Financial Assessment Meetings. These meetings, involving the CFO and key stakeholders, review cash flow, operational expenses, legal considerations, and financial projections, ensuring a clear understanding of funding needs and the allocation of available resources. The Treasury Management team coordinates financial activities across departments, consolidating expenses into cash flow reports and assessing the alignment of proposed expenditures with the company’s strategic goals. Additionally, ABEI Energy emphasizes project-based cash flow management, linking payments to specific projects, which allows for precise tracking, accountability, and transparency, ensuring resources are allocated efficiently to support its green initiatives.
Periodic Adjustment	The Issuer conducts periodic adjustments of the proceeds by following a project-based cash flow management procedure, ensuring that all payments are directly linked to specific projects. This allows ABEI Energy to maintain precise tracking of expenses, ensuring accountability and transparency. Weekly Financial Assessment Meetings involving the CFO and key stakeholders review cash flow, operational expenses, and financial projections to assess funding needs and resource allocation. The Treasury Management team consolidates department expenses into cash flow reports, aligning proposed expenditures, ensuring transparent allocation to the projects under this framework.
External Verification	Although the Issuer states that its accounts are verified annually by an external auditor, there is no indication that an auditor will be appointed to carry out an annual audit specifically on the allocation of resources issued under the Framework, in accordance with the ICMA requirements.

Allocation of Proceeds

Allocation timeframe	According to the Framework, the allocation timeframe has been set to a maximum of 24 months, which is aligned with market best practices in the context of green bond proceeds. Moreover, the Issuer’s project-based cash flow management system is robust enough to ensure clear traceability of funds throughout the allocation period.
Unallocated proceeds	The unallocated funds will be held in cash and not invested in any financial assets.

D. Reporting

GENERAL OPINION EthiFinance considers the reporting commitments detailed in the Framework to be <u>aligned</u> with the ICMA's Green Bond Principles. The Issuer commits to reporting on both the allocation of funds and the benefits of the projects. The frequency and scope of reporting, as well as the processes for data collection and consolidation are also provided. The performance indicators selected by the Issuer are quantified, effectively demonstrating the projects' benefits in terms of climate change mitigation.	Best-practices
	ICMA aligned
	Partially aligned
	Not aligned

Report Details

Scope	Reporting will be conducted annually until the full allocation of proceeds to eligible projects and will be disclosed to both investors and internal stakeholders. The reporting will cover the allocation of proceeds along with the associated project benefits. Additionally, the share of refinancing and any material changes will be included in the reports. Lastly, ESG controversies, including those related to projects in the development phase, will be reviewed and reported on an annual basis.
Allocation	Allocation of proceeds, the amount allocated, unallocated, type of temporary allocation, share of financing vs refinancing will be reported.
Impact	The environmental reporting indicators selected by the Issuer are sufficiently relevant and meaningful for the renewable energy category.
Material changes	According to the Issuer, any material developments, such as the modification of the Framework or the allocation portfolio, will be reported in a timely manner.
ESG Risk & Controversies	There is a risk management system in place at corporate level and the Issuer indicate the impact reporting will include potential risk management measures taken at project level.
External Verification	An independent auditor will not be mandated to conduct an annual verification on the allocation of resources issued under the framework.

Indicators for the sustainable impact

Renewable Energy -solar	<ul style="list-style-type: none"> Annual GHG emissions reduced/avoided in tons of CO₂ equivalent Annual renewable energy generation in MWh/GWh (electricity) and GJ/TJ (other energy)
Renewable Energy -wind	
Renewable Energy - BESS	

Impacts of the projects

GENERAL OPINION The projects are expected to demonstrate a <u>High impact</u> by financing/ refinancing three project categories, namely solar renewable energy , wind renewable energy and Battery Energy Storage Systems . They contribute to climate change mitigation by demonstrating clear environmental benefits.	No Impact
	Moderate impact
	Substantial impact
	High impact

ICMA Category	Objective ⁶	Environmental benefit(s)
Renewable Energy Solar projects plants	Climate Change Mitigation	CO ₂ reduction
Renewable Energy Wind projects plants	Climate Change Mitigation	CO ₂ reduction
Renewable Energy / Battery Energy Storage Systems (BESS)	Climate Change Mitigation	CO ₂ reduction Energy efficiency

⁶ According to the *Mapping of the GBP-project categories to GBP-environmental objectives* – ICMA - June 2021

Green Impact – Renewable Energy - Solar power plants

NO IMPACT

MODERATE IMPACT

SUBSTANTIAL IMPACT

HIGH IMPACT

Relevance

Solar projects plants are considered highly relevant. Solar energy production is crucial for meeting renewable energy targets and addressing environmental challenges across several countries including in Spain, Italy, the United Kingdom, France, Germany, Poland, the U.S., and Mexico. Spain's ambitious goal of sourcing 74% of its electricity from renewables by 2030 underscores the role of solar PV in reducing emissions and combating climate change. France targets 32% renewable energy by 2030, using solar installations to improve air quality and reduce greenhouse gases. Italy, aiming for a 55% renewable energy share, addresses both fossil fuel dependence and urban pollution through extensive solar projects. The UK, despite its less favourable climate for solar, strives for 70% renewable energy by 2030, where solar contributes significantly to emissions reduction goals. In Poland, solar energy is essential for reducing coal reliance, although the climate is less suited to solar, and Germany, a renewable leader, aims for 80% by 2030, with solar projects supporting emissions reductions. In the U.S. and Mexico, expanding solar capacity is vital to reducing carbon emissions and enhancing energy security.

The relevance of solar energy projects in each of these countries is strongly supported by these ambitious national and regional targets, reflecting a unified commitment to renewable energy and climate objectives.⁷⁸⁹¹⁰¹¹¹²¹³

Magnitude

Solar photovoltaic (PV) plants play a crucial role in achieving renewable energy goals by generating electricity without greenhouse gas emissions, significantly reducing the reliance on fossil fuels. They contribute to long-term environmental durability by harnessing an abundant energy source, minimizing resource depletion. Additionally, PV systems have a relatively low environmental impact in terms of water use and pollution, compared to conventional power generation. The durability of PV technology is also enhanced by the long lifespan of panels, which can typically operate for over 25 years with minimal degradation in efficiency.

The construction of solar photovoltaic (PV) power plants is categorized under the EU Taxonomy as activity #4.1, *Electricity generation using solar photovoltaic technology*. Although this economic activity currently lacks specified Technical Screening Criteria (TSC) within the EU Taxonomy, the nature of solar PV projects is generally associated with relatively low environmental risks compared to other energy generation methods. Consequently, EthiFinance considers that the project inherently aligns with sustainability goals. Based on these characteristics, significant environmental benefits are expected from these projects, supporting their eligibility under the EU Taxonomy.

The Bifacial Mono PERC Half-cell Double Glass Module is widely regarded as a top-performing technology in the solar PV market due to its combined use of bifacial, PERC, and half-cell technologies, along with robust dual-glass construction. These features together provide higher efficiency, enhanced durability, and increased energy yield, particularly in large-scale installations. As such, these modules are positioned among the best available technologies, ideal for maximizing performance and longevity in solar PV projects

⁷ Ministerio para la Transición Ecológica y el Reto Demográfico, MITECO - <https://www.miteco.gob.es/>

⁸ RTE - Réseau de Transport d'Électricité - <https://www.rte-france.com/>

⁹ Ministero della Transizione Ecologica - <https://www.mitecogov.it/>

¹⁰ UK Department for Business, Energy & Industrial Strategy - <https://www.gov.uk/government/organisations/department-for-business-energy-and-industrial-strategy>

¹¹ German Federal Ministry for Economic Affairs and Climate Action - <https://www.bmwi.de/>

¹² U.S. Department of Energy - <https://www.energy.gov/>

¹³ [Mexico | Pan American Finance](#)

Although solar PV technology is modular and adaptable, thus avoiding a significant lock-in effect, concerns persist regarding the comprehensive management of ESG risks. ABEI's ESG strategy is grounded in UNEF's "Sello de Excelencia en Sostenibilidad" and ISO 14001 certifications; however, this combination may still fall short, as it does not fully address critical ESG risks specific to solar PV projects, including social impacts such as community displacement and labor rights issues, as well as supply chain risks related to the ethical sourcing of materials. Additionally, while Ethifinance considers positively that ABEI manages waste by outsourcing PV recycling to specialized companies, the whole lifecycle impacts of solar panels (including high-energy manufacturing, sourcing concerns, operational impact, recyclability) may not be fully addressed. Lastly, the resilience of projects to physical climate risks are critical factors that may require further evaluation.

EthiFinance considers the project to have substantial environmental benefits, given the use of solar PV technology, which lacks the typical lock-in effects and poses a low environmental risk overall. However, to strengthen its sustainability commitments, the Issuer would benefit from adopting a more comprehensive ESG risk management strategy.

Green Impact - Renewable Energy - Onshore wind power plants

NO IMPACT

MODERATE IMPACT

SUBSTANTIAL IMPACT

HIGH IMPACT

Relevance

Wind energy plays a pivotal role in meeting renewable energy targets and reducing emissions across several key countries including in Spain, Italy, the United Kingdom, France, Germany, Poland, the U.S., and Mexico. In Spain, wind supplied 23% of electricity in 2022 and is essential for achieving the country's target of 74% renewable electricity by 2030, supporting fossil fuel reduction under Spain's Integrated National Energy and Climate Plan. France, where wind provided 7% of electricity, aligns with a 2030 target of 40% renewables through its Multiannual Energy Program, aiming to improve urban air quality and reduce greenhouse gases. Similarly, Italy relies on wind to contribute to its 55% renewable target by 2030, as outlined in its National Integrated Energy and Climate Plan.

In the UK, wind generated 25% of electricity in 2022, with a goal of reaching 50 GW capacity by 2030, contributing significantly to the government's emissions reduction plan of 68% by 2030. Poland, heavily coal-dependent, sees wind energy as crucial for meeting EU climate goals, with over 9 GW of wind capacity in 2022. Germany, producing 25% of electricity from wind, targets 80% renewables by 2030 as part of its energy transition strategy. In the U.S., wind accounted for over 10% of electricity generation, aligned with the 100% clean energy goal by 2035 under the Inflation Reduction Act. Finally, Mexico's 7 GW wind capacity in 2022 supports its 35% renewable electricity target by 2024, addressing air pollution and energy access challenges. These ambitious targets underscore the essential role of wind energy in supporting sustainable energy transitions globally.

Magnitude

Onshore wind power plants are vital to renewable energy objectives by producing clean electricity with zero direct carbon emissions, helping to mitigate climate change. They are durable, with turbines typically lasting 20-25 years, and their energy output significantly reduces dependence on non-renewable sources. Onshore wind farms also have a relatively low environmental footprint in terms of land use and resource consumption, as the land beneath the turbines can often be used for agriculture or other purposes. Additionally, the modular nature of wind turbines allows for easy scalability and upgrades over time, enhancing long-term sustainability.

The construction of onshore wind power plants is classified under the EU Taxonomy as activity #4.3, *Electricity generation from wind power*. Although specific Technical Screening Criteria (TSC) are not quantified for this activity within the EU Taxonomy, given the inherently low-impact nature of onshore wind as a renewable energy source, these projects are expected to provide substantial environmental benefits by default, meeting the Taxonomy's objectives for sustainable investments.

In addition, the technology used by the Company for the onshore wind power plants to be financed (gearbox-driven) is generally more efficient in converting wind energy into electricity compared to direct drive systems, leading to potentially lower long-term environmental impacts. The gearbox technology allows for better performance in varying wind conditions, which can optimize energy production and reduce reliance on backup systems that might use fossil fuels, as noted in studies highlighting efficiency improvements and reduced emissions¹⁴. However, maintenance challenges and the potential for gearbox failures can lead to increased resource use over time, which is a consideration when assessing overall sustainability¹⁵.

¹⁴ Wind Europe, 2021

¹⁵ National Renewable Energy Laboratory, 2020

Onshore wind power plants, like solar projects, offer substantial renewable energy benefits but may also result in potential negative environmental impacts. These include habitat disruption and biodiversity loss, particularly in areas where land clearing and turbine installation may interfere with local ecosystems. For instance, in Spain and Poland, large-scale wind farms could disrupt migratory bird paths, posing risks to local wildlife. Social challenges such as visual and noise impacts from turbines may also lead to community resistance, which can impede further project development.

While ABEI Energy has indicated that all projects apply the UNEF's "Sello de Excelencia en Sostenibilidad," and ISO 14001 certified environmental management systems to manage the ESG risks arising from the projects, further information from the Issuer would help confirm a robust approach to identifying and mitigating these potential impacts as well as social issues like community displacement, labor rights and social resistance, but also ethical supply chain concerns and lifecycle impacts from production to disposal.

EthiFinance recognizes that the construction of onshore wind power plants provides substantial environmental benefits as a renewable energy source. However, there is room to strengthen the coverage of key ESG risks, as mentioned above. By enhancing its ESG risk management policies, ABEI Energy could more responsibly capture these environmental benefits, ensuring they are achieved in a sustainable and socially considerate way.

Green Impact - Renewable Energy - BESS technology

Battery Energy Storage Systems

NO IMPACT	MODERATE IMPACT	SUBSTANTIAL IMPACT	HIGH IMPACT
-----------	-----------------	---------------------------	-------------

Relevance

This category will finance and refinance the procurement of Battery Energy Storage Systems (BESS) to store renewable energy produced by wind and solar projects financed under this framework. BESS plays a crucial role in Spain's renewable energy strategy, enabling the storage of excess energy generated by solar and wind sources. This stored energy can be used during periods of high demand or low renewable output, helping balance the grid and ensure energy reliability.

Several countries in Europe and North America have set ambitious targets for energy storage capacity to support the transition to renewable energy sources, with Battery Energy Storage Systems playing a critical role. In Italy, the National Integrated Energy and Climate Plan (PNIEC) has outlined a goal of reaching 22.5 GW of installed storage capacity by 2030 to manage the growing share of renewable energy from solar and wind sources and alleviate grid congestion, particularly addressing the imbalance between production in the south and consumption in the north. Germany and the UK are similarly advancing BESS deployment as part of their renewable energy strategies, aiming for high integration with solar and wind projects. These countries are leveraging BESS to stabilize the grid and manage the intermittency of renewables, aligning with Germany's target for 80% renewable energy by 2030. In Poland, expanding BESS capacity is essential for reducing reliance on coal, with recent regulatory support promoting co-location of renewables and BESS to enhance grid reliability as renewables increase their share in the energy mix. These national targets emphasize the growing role of BESS in energy strategies, where BESS installations are crucial for meeting renewable energy goals and ensuring grid stability, underscoring their importance in the renewable energy landscape.

Ethifinance considers this project relevant, given its alignment with national climate targets and its role in supporting renewable energy integration and grid stability.

Magnitude

ABEI Energy's Battery Energy Storage System (BESS) project plays a key role in stabilizing the grid and enhancing renewable energy utilization. The project incorporates two types of batteries: stand-alone systems and colocated batteries hybridized with solar photovoltaic and onshore wind projects. This combination enables flexible energy storage to balance demand and supply fluctuations, especially with intermittent renewable sources.

Stand-alone batteries store excess energy from the grid and release it during periods of high demand, helping to maintain grid stability and reliability. Co-located batteries, installed alongside solar or wind farms, capture surplus energy generated during low demand and store it for use during peak demand or when renewable generation is low. This setup enhances the efficiency of renewable energy projects by ensuring a continuous supply and reducing reliance on fossil fuels during gaps in renewable production.

The Issuer does not necessarily comply with the EU Taxonomy under category 3.4, which requires that off-grid energy storage projects demonstrate a significant reduction in GHG emissions as a result of their installation. In ABEI's case, even if the Company specifies that it will calculate the CO₂ reduction with a calculator developed by the Spanish Ministry for Ecological Transition, there is currently no clear data on the level of GHG reduction expected from the BESS project, which poses challenges for assessing the project's environmental impact. However, these concerns are mitigated by the fact that the technology plays a key role in facilitating the efficient use of the renewable energy. By storing renewable energy from solar or wind during high production periods and releasing it when demand is high, BESS helps displace fossil fuel-generated electricity. This can indirectly

reduce GHG emissions by ensuring renewable energy is available when needed, reducing the need for backup from fossil fuels.

BESS technology offers significant environmental benefits by maximizing the use of renewable energy sources, enhancing grid stability, and reducing dependency on fossil fuels during periods when renewable sources are insufficient. This aligns well with ABEI's commitment to sustainable energy solutions. However, despite ABEI's role as a procurer rather than a producer of BESS technology, the environmental risks associated with upstream battery production should still be considered. Battery manufacturing poses notable challenges, including high energy demands and resource depletion from extracting materials like lithium and cobalt, which contribute substantially to carbon emissions, especially when production relies on non-renewable energy sources. Advances in recycling and green manufacturing practices are essential to mitigate these impacts, ensuring the sustainable expansion of battery technology in the renewable energy sector.¹⁶

The installation of Battery Energy Storage Systems (BESS) at project sites entails several environmental risks, such as minor land disruption, potential chemical leakage from batteries, and noise pollution from cooling systems. While ABEI Energy has indicated that all projects apply the UNEF's "Sello de Excelencia en Sostenibilidad," and ISO 14001 certified environmental management systems to manage the ESG risks arising from the projects, it does not fully address these specific risks associated with BESS installations. However, compared to large-scale solar and wind installations, BESS installations generally pose lower ESG risks due to their smaller physical footprint. Additionally, for end-of-life management, ABEI Energy outsources BESS recycling to specialized companies, ensuring compliance with environmental standards. While ABEI does not manage this recycling directly, collaborating with specialized firms ensures that battery disposal is conducted responsibly, addressing environmental concerns related to battery waste and thus contributing to sustainable project management practices.

EthiFinance considers that ABEI Energy's BESS project provides substantial environmental impact by stabilizing the grid and maximizing renewable energy use, thereby reducing reliance on fossil fuels. Despite some reservations regarding upstream production impacts, specific operational risks, and a lack of clarity on the GHG savings expected from the project, its role in efficiently storing and managing renewable energy reinforces its positive contribution to a sustainable energy transition.

¹⁶ [Energy Storage: 10 Things to Watch in 2024 | BloombergNEF \(bnef.com\)](https://www.bnef.com/articles/energy-storage-10-things-to-watch-in-2024/)

Methodology

The present Second Party Opinion (SPO) was prepared according to the recognised and methodically secured procedures developed by EthiFinance. We have defined strict quality standards for all research activities and customer processes. The SPO is an independent external analysis of debt instruments (e.g., Green Bond/Loan, Social Bond/Loan, Sustainability Bond/Loan or Sustainability-linked Bond/Loan) aimed at financing sustainable development projects.

In order to produce a Second Party Opinion, EthiFinance examines the following modules:

- The Issuer's ESG assessment
- ICMA alignment
- Impact of the projects

The Issuer's ESG assessment

The assessment of the "ESG maturity" consist of the following components:

- Assessment of the ESG risk management: a customised detailed assessment of ESG risk management in line with current sustainability requirements. In the SPO, the results of the assessment of the policies and processes (no, some or appropriate) as well as the quality of the risk management system (weak, moderate, good or very good) are presented.
- Review of the compliance of the planned issuance with the sustainability strategy of the issuer. The results of the review are presented qualitatively.
- Review of involvement in controversial business activities and practices: controversial business activities include alcohol, tobacco, cannabis, gambling, pornography, hazardous chemicals, fossil fuel industry, coal, unconventional oil and gas production, mining, nuclear energy, military/armament, civilian firearms, green genetic engineering, animal testing/animal welfare. The nuclear energy and gas sectors are not classified as controversial if they fully fulfil the criteria of the EU taxonomy. All controversial business activities are listed, regardless of a turnover threshold.

The controversial business practices include, for example, violations of internationally recognised sustainability standards, such as the UN Global Compact or the ILO core labour standards. The analysis covers the following areas: environmental damage, society and corporate governance. EthiFinance categorises controversial business practices according to their severity level: severity level 1, severity level 2, severity level 3, severity level 4 or severity level 5 and also takes into account the issuer's response. Only the controversial business practices with a severity level of 3, 4 or 5 are listed in the Second Party Opinion.

Alignment with the ICMA principles

Following a detailed examination of the framework of the issuer, EthiFinance confirms whether an issuance complies with the recent version of Green Bond Principles, Social Bond Principles, the Sustainability Bond Guidelines, as well as the Green Loan Principles or Social Loan Principles.

For a positive assessment, the issuer must transparently report on and comprehensibly implement the following components: (1) use of the proceeds, (2) process for project evaluation and selection, (3) management of the proceeds and (4) reporting.

An issuer can achieve the following outcomes for each core component and at the aggregate level for the whole framework:

- Not aligned
- Partially aligned
- Aligned
- Best practices

Impact of the projects

In order to evaluate the level of impact of each of the projects identified by the issuer, EthiFinance gives its opinion on different aspects:

- Relevance of the projects for the respective sector, country, and the sustainability strategy of the issuer
- Compliance with relevant sector standards or taxonomy criteria and the management of potential project specific ESG risks

Rating scale:

- No Impact
- Moderate impact
- Substantial impact
- High impact



Disclosure of the relation between EthiFinance and the Issuer:

EthiFinance Ratings SL, a Credit Rating Agency wholly owned by EthiFinance Group, is a provider of ABEI Energy, and has provided the company's credit rating. The credit rating is public.

This activity is not related to this Second Party Opinion. There is no other relationship, financial or otherwise, between EthiFinance and the Issuer.

Disclaimer © 2024 EthiFinance. All rights reserved.

This Second Party Opinion (hereinafter the "SPO") was produced and delivered by EthiFinance SAS. EthiFinance SAS' majority shareholder is Andromede SAS, which also holds Rémy Cointreau, Oeneo as a majority shareholder. EthiFinance SAS' CEO is a member of the Board of Directors of Crédit Agricole S.A.

EthiFinance provides an independent sustainability evaluation. EthiFinance has prepared this independent SPO in accordance with its methodology and in strict compliance with its Code of Ethics to avoid any conflicts of interest and to meet requirements of objectivity and transparency, independence, integrity and professional conduct.

In providing the external review, EthiFinance adheres to the ethical and professional principles as well as to transparency standards and independency in line with ICMA's Guidelines for Green, Social, Sustainability and Sustainability-Linked Bonds External Reviews.

EthiFinance is the sole holder of the intellectual property rights to the SPO and the information and methodologies contained therein, as well as of any other rights that may be derived therefrom. Only EthiFinance and its teams may reproduce, modify, distribute, or market this SPO in whole or in part.

Unless explicitly otherwise agreed between EthiFinance and the Issuer, this SPO is for the exclusive use of Issuer and its potential investors. The Issuer is not authorized to distribute it to third parties for any reason or to any recipient whatsoever. Any internal or external use shall only be in whole. Any partial use of the SPO, any modification, selection, alteration, withdrawal, or addition in any way to the SPO is prohibited.

This SPO contains analysis, information, scoring, evaluations, and research which relate exclusively to the ESG (Environmental Green and Governance) performance of the Issuer and the related bond framework under study.

This SPO does not in any way constitute an "investment advice", an "investment recommendation" within the meaning of article 3-1-35 of European Regulation No. 596/2014 of April 16, 2014 known as "Market Abuse Regulation", nor more generally a recommendation or offer to buy or subscribe to, sell or hold or retain a security. Under no circumstances the SPO shall be used to evaluate credit risk, liquidity risk or any other element which does not directly and exclusively belong to ESG performance.

The Issuer is fully responsible for attesting the compliance with its commitments defined in its policies, for their implementation and their monitoring. The opinion delivered by EthiFinance neither focuses on the financial performance of the Bond[s], nor on the effective allocation of its proceeds. EthiFinance is not responsible for the induced consequences when third parties use this opinion either to make investments decisions or to make any kind of business transaction.

The information contained in this SPO results from the analysis made by EthiFinance at the time the SPO has been issued. It might be subject to significant changes. It is a subjective analysis and it is not tailor-made to any recipient specific financial situation, experience or knowhow. It neither constitutes any assessment of the Issuer's economic performance or creditworthiness, any financial recommendation, or any evaluation of the suitability of an investment for any particular investors or any groups of investors, nor shall it replace the skills, the experience and the knowledge of decision makers taking investment or commercial decisions. EthiFinance shall not be held responsible for any damage or loss, direct or indirect, that may result from the use of the information contained in the SPO.

With due skill, diligence, and all reasonable effort to ensure the accuracy of the information provided, EthiFinance takes the greatest care possible in the selection, review and use of information and data in this SPO. This data and

information come from sources whose information can legitimately be considered as true and reliable and over which EthiFinance does not have direct control or cannot always conduct a verification. It comprises data provided by the Issuer and public information. It might be subject to modification. The information contained herein is provided "as is". EthiFinance declines all liability for any damages that may result from the use of this SPO or the information it contains whatsoever.

EthiFinance disclaims all warranties, express or implied, of any kind, including warranties of commerciality, comprehensiveness, trustworthiness, completeness, accuracy, timeliness, or suitability of the SPO for a particular purpose.

This Second Party Opinion is valid after completion of the dating of the document, unless and until changes are made to the framework. EthiFinance recommends updating the SPO after two years, as the timeliness and validity of the reviewed content can no longer be guaranteed.

In the event of material changes to the issuer's framework and the requirements for the analysis and assessment of sustainability factors relating to the SPO, as well as in the event of a change to the underlying standard, the SPO must also be updated.

CONTACT

Anne Chanon
ESG Rating Agency
Head of ESG Research & Operations
anne.chanon@ethifinance.com