Empresa de Transmisión Eléctrica S.A.– Second-Party Opinion

Sustainable Fitch Second-Party Opinion	Excellent
Framework Type	Green
Alignment	ICMA's Green Bond Principles (GBP)

See Appendix A for definitions of ICMA Principles. See Appendix B for details on Second-Party Opinion. Date assigned: 07 August 2023.
This document is a translation of the original Spanish version.

Framework Highlights

- Sustainable Fitch considers that the green framework of Empresa de Transmisión Eléctrica S.A. (ETESA), as of 31 July 2023, is aligned with ICMA's Green Bond Principles (GBP). Our second-party opinion (SPO) is that alignment is 'Excellent'.
- The framework is based on the four relevant pillars set out in the ICMA principles: the use of proceeds (UoP); project selection and evaluation process; management of proceeds; and reporting.
- Our opinion on the UoP is 'Excellent'. The UoP will be used to finance infrastructure projects and technologies dedicated to the transmission of renewable electricity or supporting infrastructure to improve the capacity, stability and flexibility of the electricity grid by allowing the transmission of greater amounts of renewable energy. The expansion of renewable electricity transmission contributes substantially to the mitigation of climate change and the UN Sustainable Development Goals (SDGs), highlighting SDG 7 (affordable and clean energy), by increasing the flow of renewable energy in Panama and contributing directly to the decarbonisation of the country's electricity sector. The technical environmental screening criteria detailed in the debt framework aligns with the thresholds of the EU taxonomy and the Climate Bond Initiative (CBI). Therefore, the UoP will clearly finance sustainable activities.
- We believe that the framework supports Panama's decarbonisation agenda, meeting the updated targets of the Nationally Determined Contributions (NDCs) through the Paris Agreement, as these include specific objectives for the energy sector. Panama's NDCs are supported by its Energy Transition Agenda 2020–2030 and the National Energy Plan 2015–2050, which aims to expand Panama's National Interconnected System (NIS) to meet future energy demands and increase electricity generation from renewable sources.
- As part of the documentation received to provide this SPO, ETESA made a portfolio of eligible projects available to us. This portfolio was built under the green bond framework that is developed in collaboration with the Inter-American Development Bank, with the support of the State Secretariat for Economic Affairs, the German Government and the NDC Accelerator Fund, through the technical assistance of the consulting firm, Carbon Trust. This document provided transparency and traceability of the characteristics of the debt issuances that will be carried out under the framework.
- We assess ETESA's project selection and evaluation processes as 'Excellent', as it has transparent processes to carry out the selection and monitoring activities of eligible projects. However, ETESA defines that up to 50% of the funds raised can be allocated to the refinancing of existing projects, which reduces the positive environmental impact additionality, in absolute terms. The lookback period considers eligible projects initiated five years ago. Although it does not reflect best practices, it is understandable, as the timeframe for construction projects under ETESA's responsibility is extensive. The management of the UoP will be carried out in an automated manner with electronic records, and the unallocated resources will be invested to guarantee high liquidity and low risk, without considering the green criteria of the investments. The alignment of this with best practices is 'Good'. The reporting and verification commitment to funding allocation and impact is considered robust and assessed as 'Good'.

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Source: Sustainable Fitch, ETESA's green bond framework

Information on the Issuer and the Electricity Sector of Panama

- ETESA is a 100% state capital company, with the monopoly of the electricity transmission services in Panama. According to its latest annual report for 2022, ETESA has more than 3,000km of lines and 4,500 high voltage towers, with the operation of 18 substations and 22 communication sites.
- According to Panama's 2010 census, about 90% of the country's population has access to electricity. However, the coverage rate in some provinces is 61%. Indigenous communities are the most affected by the lack of electricity. About 30,000 residents of this population, representing almost the entire Indigenous population of Panama, do not have access to these services.
- ETESA is responsible for transmitting all the energy of the country's NIS. In 2022, electricity generation in Panama was 11,846GWh; 79% is from renewable sources as follows: 87% dominated by hydroelectric generation, 7% by solar generation and 6% by wind. Electricity generation by thermoelectric plants based on non-renewable fuels, such as coal and natural gas, accounted for 21% of the total electricity generated. The participation of renewable sources in Panama's electricity matrix is positive and exceeds the average of Latin American and Caribbean countries, which is 58%.
- There are tax incentives for the construction, operation and maintenance of clean energy projects in Panama and, according to several international trade groups and companies, Panama's business environment is generally positive, with few barriers to the development of the renewable energy sector. This should support the growth perspective for the country's clean energy generators.
- Panama's contribution to global GHG emissions is less than 0.1%. However, the country set the goal to achieve carbon neutrality by 2050 and committed, through its NDCs, to reduce total emissions from the energy sector by 11.5% by 2025 and by 24% by 2050.
- Our view is that Panama's electric decarbonisation trajectory demonstrates steady progress. This trend should continue, supported by continued government approvals for new renewable energy generation plants. According to the 2021 National Energy Balance and the 2022 Annual Statistics of the National Authority of Public Services of Panama, the installed capacity of wind and solar energy in Panama has increased by 25% in the last five years (from 2018–2022), and in 2022, represented 20%, or 798MW, of the country's total installed capacity. It has a development potential of more than 1,600MW. In contrast, the fossil fuels' installed generation capacity has reduced by 30% from 2018 to 2022. In addition, Panama's NIS emission factor, published by the National Secretariat of Energy, was reduced by 65% in the last three years, from 291gCO_2e/kWh in 2019 to 103gCO_2e/kWh in 2021.
- ETESA and its transmission line expansion projects will play an important role in integrating renewable energy generation into the grid and enabling more efficient and reliable system operation.

Source: Sustainable Fitch, ETESA's green bond framework, National Interconnected System Expansion Plan (PESIN) 2020–2034, ETESA 's annual report 2022, National Energy Balance 2021, Annual Statistics 2022 of the National Authority of Asep

Use of Proceeds – Eligible Projects

Opinion: Excellent

Company Material	Sustainable Fitch's View
Renewable Energy	
• The framework UoP focuses on investments in electricity transmission infrastructure and equipment projects dedicated to the use and connection of low-carbon and renewable energy generation sources. It also includes investments in supporting infrastructure to improve the capacity, stability and flexibility of the electricity grid, enabling the transmission of greater amounts of renewable energy. • Examples of projects to be carried out are transmission lines; substations; transformers; and equipment that helps control the flow of energy and increase transmission limits. This allows the transmissions lines to achieve the requirements of voltage control and solve the problems of compensation of reactive power. Examples include static synchronous compensator and capacitor banks.	• This category is aligned with ICMA's GBP list of eligible projects. The UoP in this category is 'Excellent', as it supports an increase in the transmission capacity of electricity from renewable sources in Panama and contributes to climate change mitigation. • The electric power transmission sector plays a fundamental role in the decarbonisation of the electricity system by connecting new renewable energy sources to the grid. • This UoP aligns with the criteria of the EU and CBI taxonomies, as the financed electricity transmission infrastructure projects and equipment will be dedicated to electricity generated by low-carbon renewable sources. Renewable electricity in Panama is below 100gCO2/kWh, achieving the technical threshold established by the EU and CBI taxonomies to be considered sustainable. Renewable energy in Panama consists mainly of wind, solar and runoff hydroelectric power. The emission factor of Panama's NIS in 2021 reached 103gCO2/kWh, and it has been decreasing in the last three years. This indicates that Panama's entire electricity matrix is in a low-carbon transition, in accordance to the aforementioned international standards. • In addition, according to information from the National Secretariat of Energy of Panama, we can assume that 100% of all new electricity generation capacity installed in the country, between 2018 and 2022, was renewable, as there was a decrease in the installed capacity of fossil thermal plants and an increase in renewable energy. We identified that more than 67% of the generation capacity added in the system in the last five years is below the generation limit value of 100gCO2e/kWh; this meets another technical criterion of the EU and CBI taxonomies. • We believe that this UoP generates relevant environmental benefits for the country and is aligned with national strategies for climate transition and emission reduction.
Source: ETESA's green bond framework	Source: Sustainable Fitch, PESIN 2020–2034

Use of Proceeds – Other Information

Opinion: Good

Company Material	Sustainable Fitch's View
• The UoP will be allocated to new and existing projects, considering a retrospective period of up to five years. Refinanced projects can represent up to 50% of the total funds that a green bond can obtain. • ETESA excludes infrastructure projects from the UoP that are dedicated exclusively to directly connecting and/or extending the existing direct connection to fossil fuel-based production plants.	• ETESA defines that at least 50% of the total funds raised will be used to finance new projects. In case of refinancing, the lookback period considers eligible projects with an initial date prior to five years. We recognise the long-term nature of ETESA's funding requirements and its projects. However, this does not align with best practices. Financing new projects is considered preferable, as it promotes an additional positive impact of the use of funds towards environmental objectives. • ETESA will allocate funds raised through bonds issued under the framework to projects that meet the eligibility criteria within a period of 24 months after issuance. • It is considered best practice for the framework to define penalty criteria in the case of non-compliance with the UoP. The framework does not include such reference, but ETESA confirms that the documentation regarding its green bond issuances will include adequate language to ensure that the UoP is strictly correlated with the eligibility criteria defined in the same framework.

Use of Proceeds – Other Information

Opinion: Good

Company Material	Sustainable Fitch's View
	• The exclusion of projects dedicated to supporting fossil fuel-based production plants ensures that funds will not be allocated to projects with a potentially harmful ESG impact. • Projects eligible under the framework are aligned with the objectives of PESIN 2020–2034. This plan supports Panama's NDCs due the increase of renewable energy transmission.
Source: ETESA's green bond framework	Source: Sustainable Fitch

Project Evaluation and Selection

Opinion: Excellent

Company Material	Sustainable Fitch's View
• The project evaluation and selection process will be carried out by an internal committee that will evaluate all projects based on the eligibility criteria, including the expected positive environmental impact of each project. The committee will be composed of members who are an essential part of ETESA's corporate governance, including the following areas: one member from the finance department; two members from the environmental and social department; and two members from the planning department. • From a list of projects provided by the committee, the budget management will allocate the green issuance funds. • All selected projects that will be financed or refinanced with green bond proceeds must comply with ETESA's ISO 9001:2015 quality system. • The environmental and social management department will ensure that each project will have an environmental and social management plan and that it will implement the environmental mitigation actions described in those plans. This department will issue the necessary reports required by the committee. • All selected projects will be approved by the National Authority of Public Services (Asep) of the Government of Panama.	• The project selection and evaluation process align with ICMA's GBP. • This process is clearly described in the framework. ETESA designated a multi-disciplinary internal committee as responsible for this process. Positively, 40% of the committee, or two members, are from the environmental and social management department. • We believe that decisions made by committees made up of representatives from a variety of business units, including a dedicated sustainability (or similar) team, can help avoid the risk of greenwashing and encourage greater transparency. • The participation of the Asep in the final approval of the projects is positive. This provides an additional level of approval that increases the robustness of defined internal controls. • It is positive that the environmental and social risks of the selected projects will be evaluated by ETESA's environmental and social management department. This will ensure compliance with environmental protection standards and the implementation of an environmental and social management plan, as well as the necessary mitigation actions.
Source: ETESA's green bond framework	Source: Sustainable Fitch

Management of Proceeds

Opinion: Good

Company Material	Sustainable Fitch's View
• ETESA's finance department will manage the net proceeds of the green bond in an automated manner with electronic records. It will also monitor their use and allocation, by identifying the amount assigned to eligible projects and unallocated proceeds, during the life of the green bond. • The allocation period defined by ETESA is 24 months from the issuance of the bond. In case of non-compliance, ETESA will present a schedule to fully allocate the proceeds. • Unallocated proceeds may be invested in cash, cash equivalents or short-term liquid assets. • ETESA has committed to monitor the projects throughout the life of the bond to ensure that funded projects align to established eligibility criteria. • The allocated funds will be verified by an independent auditor, who will prepare an annual verification report until all green bond funds are allocated. This report will confirm the	• The fund management process aligns with ICMA's GBP. • The funds raised by the green bonds will be managed in ETESA's treasury bank account. Detailed funding will be tracked in an automated manner, with electronic records to ensure their unique allocation to eligible projects. However, depositing funds in a fully segregated bank account would provide greater transparency to investors. • It is positive that ETESA will hire external auditors to review the allocation of the UoP, which offers greater transparency and aligns with best practices. • The unallocated fund shall be held in cash or invested in other short-term liquidity instruments. The UoP's investment in assets that support projects related to the framework or other projects with environmental benefits would ensure a greater positive impact. ETESA has mentioned that as a state company there are limitations at the country and even regional level in the selection of its

Management of Proceeds

Opinion: Good

Company Material	Sustainable Fitch's View
net amount of resources allocated aligned with the criteria established in the framework.	investments and the use of unallocated funds, since in the first instance, it must comply with regulatory guidelines. • It is positive that ETESA will continuously monitor the eligibility of projects. In addition, ETESA's environmental and social management department will carry out environmental monitoring inspections of projects during the construction and operation phase. ETESA is committed to implementing mitigation measures to ensure the project aligns with the framework requirements. • According to ETESA, all selected projects are defined in the company's budget planning and are not expected to cease to be eligible, given the strict compliance it has with legislation and regulations at the institutional level and at the country level. However, if environmental or social controversies are identified during the execution of a project, or if for any reason the project is no longer eligible, it will be replaced or excluded. This is a positive practice and provides reliability to investors.
Source: ETESA's green bond framework	Source: Sustainable Fitch

Reporting

Opinion: Good

Company Material	Sustainable Fitch's View
• The issuer will prepare an annual green bond report until the full allocation of proceeds of the bond are issued. • The report shall include information on allocation of proceeds and the impact of selected projects per bond, including the following information: – the percentage of financing and refinancing; – the amount disbursed to finance or refinance eligible projects by category, including a general description of the projects or types of projects that have received proceeds; – detailed information on the most relevant projects; – the percentage financed or refinanced, in relation to the total investment of these projects; – the amount of unallocated proceeds at the time of reporting; – the positive environmental impact of financed or refinanced projects by eligibility category; – the methodology and assumptions used to estimate impact indicators; – information related to social co-benefits derived from the implementation of financed or refinanced projects; – potential impact indicators; and – information on ESG management of eligible green projects and potential controversies about representative projects of the funded portfolio. • The potential impact indicators defined by ETESA are: – additional capacity of renewable energy plants connected and distributed by the transmission grid, in MW; and – reduced/avoided annual emissions, in tCO_2e. • The annual report of the green bond will be validated annually by an external reviewer, not yet defined, and the review report will be published on the ETESA website and in	• The reporting and verification process aligns with ICMA's GBP, and we view these commitments to be strong. • Combined allocation and impact reports will be published in a single report, on an annual basis, until the total disbursement of funds. The best practice would be reporting until bond maturity. • The reports will be published on the ETESA website. This aligns with best practices. • The information to be included in the allocation reports provides a good level of transparency. Reporting by project, and not just by category and bond, would align with best practices. • The impact metrics selected in the framework are measurable and relevant. The defined indicators are in line with ICMA's suggested impact reporting metrics for energy efficiency and renewable energy projects and are considered adequate to measure the benefit obtained from the projects. • The combined allocation and impact report will be verified by a technical external reviewer, providing transparency and aligning with good practices.

Reporting

Opinion: Good

Company Material	Sustainable Fitch's View
other communication channels of the Panama Stock Exchange.	
Source: ETESA's green bond framework	Source: Sustainable Fitch

Relevant UN Sustainable Development Goals

- **7.1:** By 2030, ensure universal access to affordable, reliable and modern energy services.
- **7.2:** By 2030, increase substantially the share of renewable energy in the global energy mix.
- **7.b:** By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programmes of support.

- **9.1:** Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.

- **13.1:** Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.
- **13.2:** Integrate climate change measures into national policies, strategies and planning.

Source: Sustainable Fitch, UN

Appendix A: Definitions

Term	Definition
Debt types	
Green	Proceeds will be used for green projects and/or environmental-related activities as identified in the instrument documents. The instrument may be aligned with ICMA Green Bond Principles or other principles, guidelines or taxonomies.
Social	Proceeds will be used for social projects and/or social-related activities as identified in the instrument documents. The instrument may be aligned with ICMA Social Bond Principles or other principles, guidelines or taxonomies.
Sustainability	Proceeds will be used for a mix of green and social projects and/or environmental and social-related activities as identified in the instrument documents. The instrument may be aligned with ICMA Sustainability Bond Guidelines or other principles, guidelines, taxonomies.
Sustainability-linked	Financial and/or structural features are linked to the achievement of pre-defined sustainability objectives. Such features may be aligned with ICMA Sustainability-linked Bond Principles or other principles, guidelines or taxonomies. The instrument is often referred to as an SLB (sustainability-linked bond) or SLL (sustainability-linked loan).
Conventional	Proceeds are not destined for any green, social or sustainability project or activity, and the financial or structural features are not linked to any sustainability objective.
Other	Any other type of financing instrument or a combination of the above instruments.
Standards	
ICMA	International Capital Market Association. In the Second-Party Opinion we refer to alignment with ICMA's Bond Principles: a series of principles and guidelines for green, social, sustainability and sustainability-linked (or KPI-linked) instruments.
EU Green Bond Standard	A set of voluntary standards created by the EU to "enhance the effectiveness, transparency, accountability, comparability and credibility of the green bond market".

Source: Sustainable Fitch, ICMA, UN, EU Technical Expert Group

Appendix B: Second-Party Opinion Methodology

Second-Party Opinion

Second-Party Opinions (SPO) are a way for issuers to obtain an independent external review on their green, social, sustainability and sustainability-linked instruments.

As per the ICMA Guidelines for External Reviewers, an SPO entails an assessment of the alignment of the issuer's green, social, sustainability or sustainability-linked bond or loan issuance/framework/programme with the relevant principles. For these purposes, "alignment" should refer to all core components of the relevant principles.

Sustainable Fitch analysts vary analysis based on the type of instruments, to consider whether there are defined use of proceeds or KPI and Sustainability Performance Targets. The analysis is done on a standalone basis, separate to the entity.

Analytical Process

Analysis considers all available relevant information (ESG and financial). The reports transparently display the sources of information analysed for each section and provide a line-by-line commentary on the sub-factors analysed. The ESG analysts working on an SPO will also engage directly with the issuer to acquire any additional relevant information not already in the public domain or in instrument-related documentation.

An important part of the analysis is the assessment of the E and S aspects of the use of proceeds. In addition to the alignment with ICMA Principle and Guidelines, the analysis may also refer to major taxonomies (e.g. the EU taxonomy for E aspects, and the UN Sustainable Development Goals for S aspects).

Once the analyst has completed the analysis, with commentary for the related ESG Ratings, it is submitted to the approval committee, which reviews it for accuracy and consistency. Based on issuer preference and mandate, an SPO can be monitored (annually or more frequently, if new information becomes available) or on a point-in-time basis.

Scale and Definitions

	ESG Framework
Excellent	Framework structure is excellent in terms of alignment with ambitious best practises and proceeds are dedicated to excellent environmental and/or social activities/projects.
Good	Framework structure is good in terms of alignment with ambitious best practises and proceeds are dedicated to good environmental and/or social activities/projects.
Average	Framework structure is average in terms of alignment with ambitious best practises and proceeds are dedicated to average environmental and/or social activities/projects.
Sub-average	Framework structure is sub-average in terms of alignment with ambitious best practises and proceeds are dedicated to sub-average environmental and/or social activities/projects.
Poor	Framework structure is poor in terms of alignment with ambitious best practises and proceeds are dedicated to poor environmental and/or social activities/projects.

Source: Sustainable Fitch

Appendix C: Principles and Guidelines

ICMA Labelled: Green Bond

Four Pillars	
1) Use of Proceeds (UoP)	Yes
2) Project Evaluation & Selection	Yes
3) Management of Proceeds	Yes
4) Reporting	Yes
Independent External Review Provider	
Second-party opinion	Yes
Verification	Yes
Certification	No
Scoring/Rating	No
Other	n.a.
1) Use of Proceeds (UoP)	
UoP as per Green Bond Principles (GBP)	
Renewable energy	Yes
Energy efficiency	No
Pollution prevention and control	No
Environmentally sustainable management of living natural resources and land use	No
Terrestrial and aquatic biodiversity conservation	No
Clean transportation	No
Sustainable water and wastewater management	No
Climate change adaptation	No
Eco-efficient and/or circular economy adapted products, production technologies and processes	No
Green buildings	No
Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBP	No
Other	n.a.
2) Project Evaluation & Selection	
Evaluation & Selection	
Credentials on the issuer's social and green objectives	Yes
Documented process to determine that projects fit within defined categories	Yes
Defined and transparent criteria for projects eligible for sustainability bond proceeds	Yes
Documented process to identify and manage potential ESG risks associated with the project	Yes
Summary criteria for project evaluation and selection publicly available	Yes
Other	n.a.
Evaluation & Selection/Responsibility & Accountability	
Evaluation/selection criteria subject to external advice or verification	No
In-house assessment	Yes
Other	n.a.
3) Management of Proceeds	
Tracking of Proceeds	
Sustainability bond proceeds segregated or tracked by the issuer in an appropriate manner	Yes
Disclosure of intended types of temporary investment instruments for unallocated proceeds	Yes
Other	n.a.
Additional Disclosure	

Appendix C: Principles and Guidelines

ICMA Labelled: Green Bond

Allocations to future investments only	No
Allocations to both existing and future investments	Yes
Allocation to individual disbursements	Yes
Allocation to a portfolio of disbursements	Yes
Disclosure of portfolio balance of unallocated proceeds	Yes
Other	n.a.
4) Reporting	
UoP Reporting	
Project-by-project	No
On a project portfolio basis	Yes
Linkage to individual bond(s)	Yes
Other	n.a.
UoP Reporting/Information Reported	
Allocated amounts	Yes
Sustainability bond-financed share of total investment	Yes
Other	n.a.
UoP Reporting/Frequency	
Annual	Yes
Semi-annual	No
Other	n.a.
Impact Reporting	
Project-by-project	No
On a project portfolio basis	Yes
Linkage to individual bond(s)	Yes
Other	n.a.
Impact Reporting/Information Reported (exp. ex-post)	
GHG emissions/savings	Yes
Energy savings	No
Decrease in water use	No
Other ESG indicators	Capacidad adicional de plantas de energía renovable conectada y distribuida por la red de transmisión, en MW
Impact Reporting/Frequency	
Annual	Yes
Semi-annual	No
Other	n.a.
Means of Disclosure	
Information published in financial report	No
Information published in ad hoc documents	Yes
Information published in sustainability report	No
Reporting reviewed	Yes
Other	n.a.

Note: n.a. – not applicable.
Source: Sustainable Fitch, ICMA