



Green Bond Report
2024

redeia
Valuing the essentials

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Introduction

After releasing its Green Finance Framework in September 2019, Redeia updated its framework in 2021 in order to be aligned as much as possible with the current version of the proposed EU Green Bond Standard and to be fully aligned with the EU Taxonomy Delegated Act for sustainable economic activities.

Regarding Redeia’s Green Bond issuances, the Company has four outstanding issues for a total amount of EUR 2.3 billion under its Euro Medium-Term Notes Programme plus a new Green Hybrid Bond for a total amount of 500 million EUR issued in January 2023. In addition, several loans granted by the European Investment Bank have been incorporated into Redeia’s green framework, recognizing the contribution of these funds to the development of Red Eléctrica’s transmission grid with the aim of maximizing the integration of renewable energies into the electricity system.

As set out in the Redeia Green Finance Framework, the net proceeds of Green Finance Instruments will be exclusively used to finance and/or refinance in whole or in part eligible

assets (“Eligible Green Assets”) including related partnerships and joint ventures in the use of proceeds category, together forming the “Eligible Green Asset Portfolio”:

Use of proceeds category	EU Economic Activity	Detail asset description	ICMA GBP/ LMA GLP
Electricity network	Transmission and Distribution of Electricity	• Transmission assets, including projects directly aimed at increasing the production of renewables such as international interconnections, converters and connections, among islands and with mainland.	• Renewable Energy
		• Assets, part of the transmission network, aimed at improving the efficiency of the rail system (high speed rail lines and electrical connections).	• Clean Transportation

The Green Finance Framework sets the basis for the identification, selection, verification and reporting of the Eligible Green Assets as well as the management of the proceeds from Green Finance Instruments.

Within the Framework, the categories relating to Eligible Green Assets are aligned with the Sustainable Development Goals of the United Nations (UN SDGs), in particular Goals 7 on affordable and clean energy and 13 on climate action. Redeia's Green Finance Framework has been verified with the International Capital Market Association's (ICMA) Green Bond Principles (GBPs) and the Green Loan Principles (GLPs).

This information can be found in the corresponding Second Party Opinion (SPO) prepared by Sustainalytics which is available on the [corporate website](#)

The Eligible Green Asset Portfolio includes mainly tangible green assets and a small amount of intangible green assets). Assets are included in the portfolio at their current IFRS net balance sheet value, which will be updated annually to reflect investment and depreciation under IFRS.

Ernst and Young has provided limited assurance on specific elements related to the use of funds raised by the Green Bonds issuances. See page 11 for the assurance report.

With this report, Redeia complies with its commitment assumed in its Green Finance Framework to report on the allocation of net proceeds and the associated environmental impacts annually until the proceeds of each Green Finance Instrument have been fully allocated.

This report contains information on the use of proceeds, allocation and impact reporting of the green finance instruments issued to date.

Also included are case studies on two projects aimed at directly increasing the production of renewable energies. They provide background information on the assets that can be financed by the green finance instruments issued.



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Allocation report

USE OF PROCEEDS ALLOCATION TABLE / Portfolio date: 31 December 2024

Eligible Green Assets Portfolio per 31 December 2024						Green Funding																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
ICMA GBP Category	Eligible Green Assets (mEUR)	Instrument (ISIN)	Issuance Date	Maturity Date	Amount (mEUR)	Funds allocated (mEUR)	Funds held by the issuer (mEUR)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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Notes to the allocation report
All proceeds from the green instruments issued have been fully allocated to the Eligible Green Assets categories and have been fully used for refinancing purposes except for EUR 41 million coming from the green hybrid bond that have been issued to finance a new project, Tenerife – La Gomera interconnection, described later in the case studies and EUR 157 million coming from the two bonds issued in 2024 that have been assigned to a new project, Península-Ceuta, described in the case studies too.

The Electricity Network Assets (transmission infrastructure or equipment) complies with the following criterion:

- More than 67% of newly enabled generation capacity in the system is below the generation threshold value of 100 g CO₂e/kWh measured on a life cycle basis in accordance with electricity generation criteria, over a rolling five-year period; but excluding any infrastructure dedicated to creating a direct connection or expanding an existing direct connection between a substation or network and a power production plant that is more greenhouse gas intensive than g CO₂e/kWh.
- All the investments included in the portfolio have been carried out in Spain.

Impact report

Impact of this projects is calculated considering the increase in the installed capacity for the rail system over the past years. This is 4,267 MVA for the current size of the green asset portfolio.

◀ 4 ▶ Case study

Interconnection Península-Ceuta

The proposed investment consists of a submarine link between the mainland electricity system and the electricity system of Ceuta. The following developments are required for this purpose:

- New Virgen de África 132 kV substation in Ceuta.
- New submarine link with two circuits Algeciras – Virgen de África 132 kV in alternative current.
- Extension of the Algeciras substation 220 kV.
- New Algeciras 132 kV substation with two 220/132 kV transformers.
- Reactances of 20 MVar each: 7 in Algeciras 132 kV and 2 in Virgen de África 132 kV.

The main drivers of the Project are:

- To integrate Ceuta's electricity system into the peninsular system in order to substantially increase the security and quality of the electricity supply in Ceuta.
- To reduce installed generation needs in Ceuta.
- To reduce overall generation costs and increase the renewable energy sources integration.



2021-2026 PLAN			Investments in substations:	
Substations	Lines	Links	Flow control elements:	New reactances:
Existing network: ● Name	400 kV 220 kV	400 kV C.C.	Dynamic stability elements: ●	New transformers: ■
Planned network: ● Name	400 kV 220 kV Decommissioning	400 kV 132 kV C.C.	Substation extensions:	
Investments in lines:			For distribution network support:	
Updatings, changes of conductor, refurbishings and Dynamic Line Rating (DLR):	400 kV 220 kV		For consumer connection to the Transmission Network:	
			For railway lines power supply:	
			For connection between generation and storage:	

Cost-Benefit Multi-Criteria Analysis

Benefits

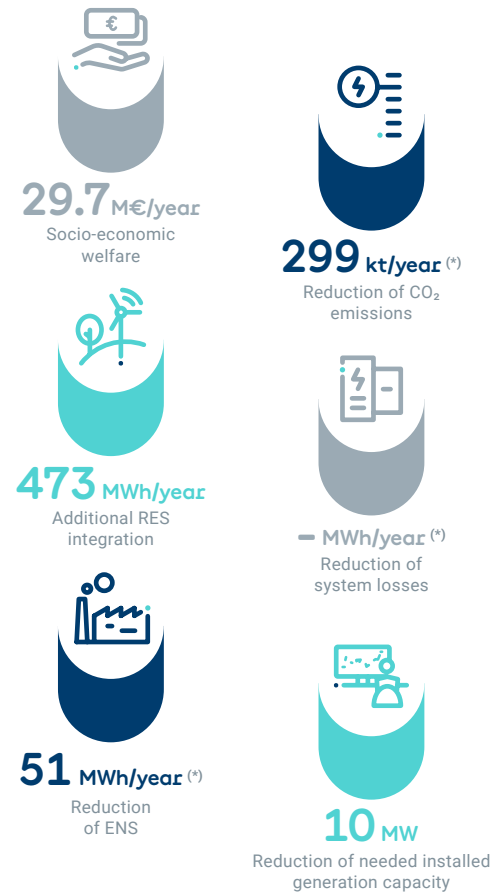


TABLE OF PHYSICAL UNITS

	132 kV	220 kV
Bays (units)	21	2
Total renewal of bays (units)		1
Cables (km)	3	1
Transformed to 132 kV (MVA)		250
Reactance (Mvar)	180	
Submarine Link (km)	138	

Note: The table covers all assets included in the investment under study, regardless of the Year of commissioning (detailed below) and whether costs for the system or third parties are involved. This table shows circuit kilometres, whereas the detailed table shows right of way kilometres.

DETAILED LIST OF INVESTMENTS

New substations	Type	Year
Algeciras 132 kV ⁽¹⁾	Building	2025
Virgen de África 132 kV ⁽¹⁾	Building	2025

(1) Non-standard cost included in total cost of project.

Substation extension	unids	Type	Driv.	Year
Algeciras 132 kV ⁽¹⁾	6	GIS	Link	2025
Algeciras 132 kV ⁽¹⁾	7	Conv.	Link	2025
Algeciras 220 kV	2	GIS	Link	2025
Virgen de África 132 kV ⁽¹⁾	2	GIS	SuD	2025
Virgen de África 132 kV ⁽¹⁾	4	GIS	Link	2025
Virgen de África 132 kV ⁽¹⁾	2	Conv.	Link	2025

(1) Coste sin estándar incluido en el coste del enlace.

Total renewal of bays	unids	Type	Driv.	Year
Algeciras 220 kV	1	GIS	Link	2025

(*) A negative value means existing increased emissions, losses or ENS.

Cost-Benefit Multi-Criteria Analysis / continued

DETAILED LIST OF INVESTMENTS / continued

Nuevas líneas/cables	MVA (win.)	MVA (sum.)	km (±10%)	Type	Driv.	Year
Algeciras - Algeciras 132 kV, circuit ⁽¹⁾			0.2	Cable	Link	2025
Algeciras - Virgen de África 132 kV, circuit 1 ⁽²⁾	80	80	69	Subm.	Link	2025
Algeciras - Virgen de África 132 kV, circuit 2	80	80	69	Subm.	Link	2025
DC Algeciras - Algeciras 132 kV			0.3	Cable	Link	2025
DC Algeciras - Algeciras 220 kV			0.3	Cable	Link	2025
Virgen de África - Virgen de África 132 kV, circuit ⁽³⁾			2	Cable	Link	2025

(1) Cost of connection of non-standard transformers and reactances included in the cost of the link.
(2) Submarine - underground link. The cost includes all non-standard installations associated with the link.
(3) Transformer connection cables to distribution and non-standard reactances included in the cost of the link.

New transformers	MVA	Type	Driv.	Year
Algeciras 220/132 kV, TF1 ⁽¹⁾	125	Triph. B.	Link	2025
Algeciras 220/132 kV, TF2 ⁽¹⁾	125	Triph. B.	Link	2025

(1) Non-standard cost included in total cost of project.

New reactances	MVAr	Type	Driv.	Year.
Algeciras 132 kV, REA1 ⁽¹⁾	20	-	Link	2025
Algeciras 132 kV, REA2 ⁽¹⁾	20	-	Link	2025
Algeciras 132 kV, REA3 ⁽¹⁾	20	-	Link	2025
Algeciras 132 kV, REA4 ⁽¹⁾	20	-	Link	2025
Algeciras 132 kV, REA5 ⁽¹⁾	20	-	Link	2025
Algeciras 132 kV, REA6 ⁽¹⁾	20	-	Link	2025
Algeciras 132 kV, REA7 ⁽¹⁾	20	-	Link	2025
Virgen de África 132 kV, REA1 ⁽¹⁾	20	-	Link	2025
Virgen de África 132 kV, REA2 ⁽¹⁾	20	-	Link	2025

(1) Fixed reactance in stages. Non-standard cost included in the project cost.

The total investment amount of this project is currently estimated around 300 million EUR, and it is expected to be finished in 2025.

You can find more information about the project in the following link: 

◀ 5 ▶ Case Study

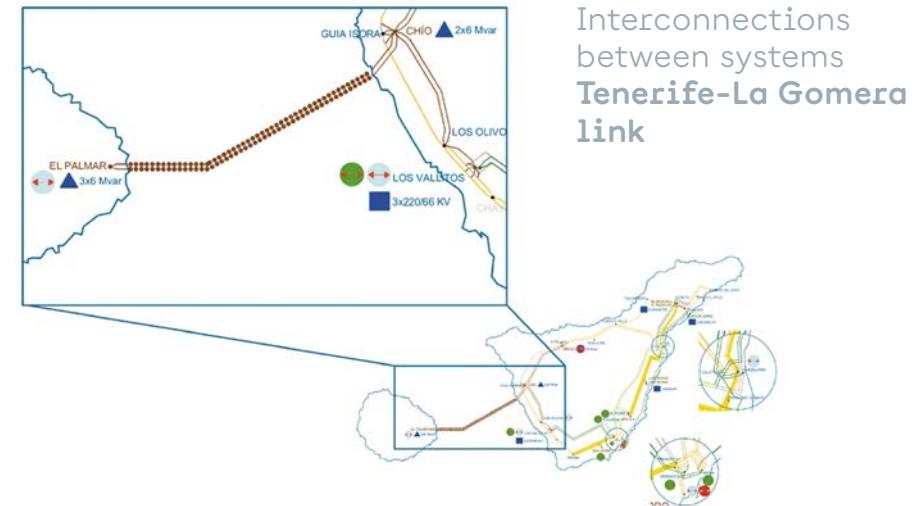
Interconnection between Tenerife and La Gomera

The proposed investment consists of a submarine link between the electricity systems of Tenerife and La Gomera. This requires the following developments:

- New El Palmar 66 kV substation in La Gomera.
- New El Palmar-Chío 66 kV alternating current double-circuit submarine-cable link, with 50 MVA capacity per circuit.
- Extension of the Chío 66 kV substation on Tenerife.
- 5 reactances at 66 kV of 6 MVar.

The main goals of this project are:

- Integrate the currently independent electricity systems of La Gomera and Tenerife, increasing the quality and security of supply.
- Reduce the overall production costs of the new joint system by improving generation efficiency.
- Enable greater RES integration, especially in La Gomera, and to reduce CO₂ emissions.
- Reduce installed generation power requirements in the joint system.



2021-2026 PLAN			Investments in substations:	
Substations	Lines	Links	Synchronous condenser:	New reactances:
Existing network: Name	220 kV 132 kV 66 kV	C.C. 132 kV 66 kV 30 kV	Batteries:	New transformers:
Planned network: 220 kV Name 132 kV Name 66 kV Name	220 kV 132 kV 66 kV Decommissioning	C.C. 132 kV 66 kV	Substation extensions:	
Investments in lines: Updatings, changes of conductor, refurbishings and Dynamic Line Rating (DLR):			For distribution network support:	
			For consumer connection to the Transmission Network:	
			For railway lines power supply:	
			For connection between generation and storage:	

Cost-Benefit Multi-Criteria Analysis

Benefits

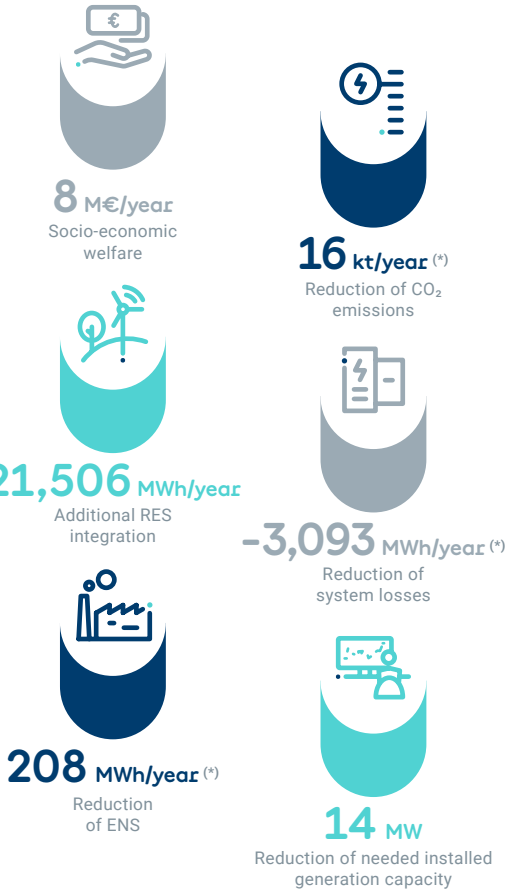


TABLE OF PHYSICAL UNITS

	66 kV
Bays (units)	14
Reactance (Mvar)	30
Submarine Link (km)	84

Note: The table covers all assets included in the investment under study, regardless of the Year of commissioning (detailed below) and whether costs for the system or third parties are involved. This table shows circuit kilometres, whereas the detailed table shows right of way kilometres.

DETAILED LIST OF INVESTMENTS

New substations	Type		Year	
El Palmar de La Gomera 66 kV	Building			2025
Substation extension	units	Type	Driv.	Year
Chío 66 kV	4	GIS	TN	2025
Chío 66 kV	2	Conv.	TN	2025
El Palmar de La Gomera 66 kV	5	GIS	TN	2025
El Palmar de La Gomera 66 kV	5	Conv.	TN	2025



(*) A negative value means existing increased emissions, losses or ENS.

Cost-Benefit Multi-Criteria Analysis / continued

DETAILED LIST OF INVESTMENTS / continued

New lines/cables	MVA (win.)	MVA (sum.)	km (±10%)	Type	Driv.	Year
Chío - El Palmar de La Gomera 66 kV, circuit 1	50	50	42	Subm.	Link	2025
Chío - El Palmar de La Gomera 66 kV, circuit 2	50	50	42	Subm.	Link	2025

Nuevas reactancias	MVAr	Tipo	Motiv.	Prev.
Chío 66 kV, REA1 ⁽¹⁾	6	-	Link	2025
Chío 66 kV, REA2 ⁽¹⁾	6	-	Link	2025
El Palmar de La Gomera 66 kV, REA1 ⁽¹⁾	6	-	Link	2025
El Palmar de La Gomera 66 kV, REA2 ⁽¹⁾	6	-	Link	2025
El Palmar de La Gomera 66 kV, REA3 ⁽²⁾	6	-	Link	2025

(1) Reactance associated with the link.
(2) Busbar reactance.

The total investment amount of this project is currently estimated in almost 175 million EUR, and it is expected to be finished in 2025.

You can find more information about the project in the following link: [↗](#)



Limited Assurance Report Independent of the Green Bonds Report



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INDEPENDENT PRACTITIONER'S ASSURANCE REPORT

To the Management of Redeia Corporación, S.A.:

Scope

In accordance with your request, we have performed a limited assurance engagement on the information contained in sections 2 "Allocation Report" and 3 "Impact Report" (hereinafter, the "Subject Matter") contained in the accompanying Redeia Corporación, S.A. and subsidiaries' (hereinafter "Redeia" or "the Group") "Green Bond Report 2024" from the period from January 1st, 2024, to December 31st, 2024.

Other than as described in the preceding paragraph, which sets out the scope of our engagement, we did not perform assurance procedures on the remaining information included in the Report, and accordingly, we do not express a conclusion on this information.

Criteria applied by Redeia

In preparing the Subject Matter, Redeia applied the "Green Finance Framework of Red Eléctrica España" published by the company and available on its website: [Green Finance Framework](#) (hereinafter, the 'Criteria'), as detailed in section 1 "Introduction" of the Report. Such Criteria were specifically designed to create a proprietary green financing framework through which to issue "green" financial instruments to finance and/or refinance projects that promote environmental progress. As a result, the Subject Matter information may not be suitable for another purpose

Redeia's responsibilities

Redeia Management is responsible for selecting the Criteria, and for presenting the Subject Matter in accordance with that Criteria, in all material respects. This responsibility includes establishing and maintaining internal controls, maintaining adequate records and making estimates that are relevant to the preparation of the Subject Matter, such that it is free from material misstatement, whether due to fraud or error.

EY's responsibilities

Our responsibility is to express a conclusion on the presentation of the Subject Matter based on the evidence we have obtained.

We conducted our engagement in accordance with the International Standard for Assurance Engagements Other Than Audits or Reviews of Historical Financial Information (ISAE 3000 (Revised)), issued by the International Auditing and Assurance Standards Board (IAASB) of the International Federation of Accountants (IFAC), and the terms of reference for this engagement as agreed on February 11th, 2025. Those standards require that we plan and perform our engagement to express a conclusion on whether we are aware of any material modifications that need to be made to the Subject Matter for it to be in accordance with the Criteria, and to issue a report. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risk of material misstatement, whether due to fraud or error.

We believe that the evidence obtained is sufficient and appropriate to provide a basis for our limited assurance conclusion.

Domicilio Social: Calle de Raimundo Fernández Villaverde, 65, 28003 Madrid - inscrita en el Registro Mercantil de Madrid, tomo 9, 364 general, B, 130 de la sección 3ª del Libro de Sociedades, folio 68, hoja nº 87.690-1, inscripción 1ª, C.I.F. B-789797056.
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Our Independence and quality management

We have maintained our independence and confirm that we have met the requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants and have the required competencies and experience to conduct this assurance engagement.

Our firm applies International Standard on Quality Management 1, which requires us to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Description of procedures performed

Procedures performed in a limited assurance engagement vary in nature and timing from and are less in extent than for a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. Our procedures were designed to obtain a limited level of assurance on which to base our conclusion and do not provide all the evidence that would be required to provide a reasonable level of assurance.

Although we considered the effectiveness of Management's internal controls when determining the nature and extent of our procedures, our assurance engagement was not designed to provide assurance on internal controls. Our procedures did not include testing controls or performing procedures relating to checking aggregation or calculation of data within IT systems.

A limited assurance engagement consists of making enquiries, primarily of persons responsible for preparing the Subject Matter and related information and applying analytical and other appropriate procedures.

Our procedures included:

- ▶ The analysis of the processes for collecting and internal control of quantitative data related to environmental impact indicators reflected in the Report regarding the reliability of the information, using analytical procedures and review tests based on sampling.
- ▶ The review of the key environmental performance indicators included in the section "Environmental Impact Report" of the Report.
- ▶ Verification that the investments made by Redeia included in the project portfolio have been carried out in accordance with the criteria of the "Green Finance Framework of Red Eléctrica de España."
- ▶ The traceability of the funds allocated for the refinancing of the projects included in the section "Fund Allocation Report" of the Report.
- ▶ The reading of the information included in the Report to determine if it aligns with our general knowledge and experience concerning Redeia's sustainability strategy and objectives.
- ▶ The contrast of the remaining non-financial information reflected in the Report with that included in Redeia's 2024 Sustainability Report.
- ▶ Obtaining a letter of representations from the Administrators and Management.

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Limited Assurance Report Independent of the Green Bonds Report

/ continued



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Other matters⁽¹⁾

This report can under no circumstances be considered an audit report in accordance with prevailing audit regulations in Spain. Our conclusion is not modified in respect of this matter.

Conclusion

Based on our procedures and the evidence obtained, we are not aware of any material modifications that need to be made to information contained in sections 2 “Allocation Report” and 3 “Impact Report” as of December 31st, 2024, for it to be presented in accordance with what is stated in the “Green Finance Framework of Red Eléctrica España”.

Restriction on distribution and use⁽²⁾

This report is intended solely for the information and use of Redeia Corporación, S.A. and to the other parties who will access the report, solely to verify whether the Subject Matter has been prepared, in all its significant aspects, in accordance with the Criteria and, consequently, and is not intended to be and should not be used by anyone other than those specified parties without our prior written consent. We will not accept any responsibility from any third parties different to the addressees of this report.

This report corresponds to the distinctive seal nº 01/25/08283 issued by the Institute of Chartered Accountants of Spain

ERNST & YOUNG, S.L.



Elena Fernández García

March 28, 2025

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