



GREEN BOND REPORT 2023





Green Bond Report 2023

Since 2018, Terna has issued **six green bonds** as part of its Euro Medium Term Notes (EMTN) programme. In addition, in February 2022, the Company issued, on a standalone basis, the first subordinated hybrid green bond to be issued by an Italian corporate. Details of the individual issues are provided below:

- on 16 July 2018, Terna launched its first green bond issue, worth €750 million and having a 5-year term;
- on 10 January 2019, the Company launched a fixed-rate green bond issue in the form of a private placement, amounting to €250 million, having reopened the bond issue announced to the market on 16 July 2018;
- on 3 April 2019, the Company launched an issue of euro-denominated green bonds with a total nominal value of €500 million and a 7-year term;
- on 17 July 2020, the Company placed a green bond amounting to €500 million and having a 12-year term;
- on 16 June 2021, the Company launched a green bond issue amounting to €600 million and having an 8-year term.
- on 2 February 2022, Terna launched its first non-convertible, perpetual subordinated hybrid green bond amounting to €1 billion;
- on 17 July 2023, the Company issued a new green bond amounting to €650 million and having a 10-year term.

The net proceeds from the issues are being used to fund the Company's **Eligible Green Projects**, selected on the basis of the **Green Bond Principles** issued in 2018 and subsequent amendments published by the International Capital Market Association ("ICMA").

At 31 December 2023, Terna had drawn up and published five **Green Bond Frameworks** to enhance the transparency and the quality of the green bonds issued.

The first was adopted on 16 July 2018, the second on 15 July 2020, the third on 15 June 2021 and the fourth on 12 January 2022, with the fifth published on 20 October 2023. These Frameworks and the second party opinions provided by the independent advisor, Vigeo Eiris (subsequently taken over by Moody's ESG), are available to the public on the Company's website (www.terna.it).

In this regard, it should be noted that the first three bond issues are covered by the Green Bond Framework drawn up in 2018, the fourth bond issue is covered by the Green Bond Framework of July 2020, the fifth bond issue by the Green Bond Framework of June 2021, whilst the hybrid issue dated 2 February 2022 and the bond issued on 17 July 2023 were issued in compliance with the updated Green Bond Framework of January 2022.

Vigeo Eiris (subsequently taken over by Moody's ESG) has provided Second Party Opinions¹ for all the issues, having assessed the contribution of all Terna's bond issues to sustainability and assigned them the best possible rating. Similarly, the assessments of the green bond frameworks show that they are fully aligned with the requirements in ICMA's Green Bond Principles and – as regards the latest versions of the framework – the recommendations in the EU Taxonomy.

¹ All the Second Party Opinions issued to Terna are available at the following link: <https://www.terna.it/en/investors/debt-rating/sustainable-finance/green-bonds>



This alignment was confirmed, with regard to 2023, via the mapping of the activities carried out by the Group to identify those that are eligible and in alignment with the Taxonomy. The analysis revealed that all the investment carried out to deliver the Eligible Green Projects, described in this report, are aligned with the object of mitigating climate change. Finally, Vigeo Eiris considered the Eligible Green Projects to be in line with the following UN SDGs:

UN SDGs

			
Ensure universal access to affordable, reliable, sustainable and modern energy services.	Build resilient infrastructure, promote fair, inclusive and sustainable industrialization and foster innovation.	Take urgent action to combat climate change and its impacts.	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

With this report, Terna is delivering on its commitment, made at the time of the bond issues, to report annually on its use of the proceeds and the environmental benefits resulting from the projects financed with those proceeds.

In addition to updating the report on the issues of April 2019, July 2020, June 2021 and February 2022, this edition of the Green Bond Report provides information for the first time on the issue carried out in July 2023.

As noted in the previous reports (see page 5 of the Green Bond Report 2020 and the Green Bond Report 2019 from page 251 of the Sustainability Report for 2019), the proceeds from the bond issues of 16 July 2018 and 10 January 2019 have been fully allocated and accounted for.

The indicators shown in the presented tables have been determined in accordance with the “Green Bond Framework”, showing the relevant amounts, how the proceeds have been allocated and the main environmental benefits for each environmental category within which the projects must fall in order to qualify as “eligible”.

The various categories of environmental benefit indicated in the five Green Bond Frameworks published as of 31 December 2023 are shown below:

CATEGORY OF ENVIRONMENTAL BENEFIT	DESCRIPTION
Renewable energy	Projects designed to boost renewable energy production (primarily wind and photovoltaic): • Connecting renewable energy plants (grid infrastructure designed to directly connect renewable energy plants to the transmission grid); • Integrating renewable energy production, improving the stability of the grid (grid infrastructure that enables a greater volume of renewable energy to be injected into the transmission grid, by, for example, relieving congestion in a certain part of the grid).
Energy efficiency	Projects designed to reduce the CO₂ emissions produced by the electricity system by reducing grid losses: • Grid infrastructure that enhances transmission efficiency (reducing the difference between power produced and energy consumed, all other conditions being equal).
Soil use & Biodiversity	Projects that aim to reduce soil use and the impact on terrestrial biodiversity: • Optimisation of the grid, involving the demolition of kilometres of existing overhead line. Demolition of the lines reduces the permanent occupation of land by overhead lines and the need to cut back the surrounding vegetation. The greatest impact occurs when overhead lines cross areas of environmental interest, such as nature reserves, wetlands and other protected areas. In addition, the demolitions also eliminate the albeit low risk of birds colliding with power lines. Finally, it should be noted that the projects in this category – such as putting cables underground – also reduce the visual impact of electricity infrastructure, an aspect considered one of the most significant impacts by local stakeholders.
Quality, security and resilience of electricity transmission Infrastructure	Projects that aim to ensure the quality, security and resilience of electricity transmission infrastructure: • Projects included in the Development Plan for the national Transmission Grid, focusing on the quality and security of the service by resolving operational issues that are in part linked with the energy transition, involving the decommissioning of thermoelectric plants and the integration of renewable sources. • Investment in the construction of new power lines and/or substations with the aim of boosting the resilience of the national transmission grid ("NTG") in the areas of Italy most exposed to extreme climate events (e.g., high winds, snow and ice).

FOCUS

How we manage our eligible green projects

In planning and delivering investment, Terna adopts a wide range of mitigation controls and measures designed to limit any negative impacts on stakeholders and the environment, guaranteeing:

- **the protection of nature and biodiversity:** Terna's approach is based on the mitigation hierarchy with the aim, from the planning phase – applying the ERPA Strategic Environmental Assessment (SEA) criteria in the Development Plan – through to the habitat restoration phase, of reducing any negative impact to a minimum. This involves taking voluntary initiatives designed to enhance interactions between our assets and nature to obtain net positive impacts, developing our own measurement tools, methodologies and techniques (e.g., the Incremental Ecological Index)²;
- **efforts to tackle climate change:** in devising its development strategy and planning its investment, which includes the eligible green projects, Terna focuses on achieving the decarbonisation targets set at Italian and EU level (the development scenarios developed in this regard are based on the trajectories provided for in the EU's Fit For 55 package)³. At the same time, climate change and rising temperatures may impact grid infrastructure, giving rise to the need to ensure the Italian electricity system's ability to withstand increasingly frequent extreme weather events. In this regard, each year Terna prepares a Resilience Plan setting out all the initiatives designed to prevent and/or reduce damage to the power grid caused by weather events⁴;
- **respect for social requirements and the needs of local communities:** Terna takes care to respect workers' rights and the needs of the communities affected by its business, and has adopted a series of prescriptive operational measures, such as policies and guidelines, procedures and management and control systems to ensure respect throughout the supply chain. Stakeholder engagement is a key element; Terna, is continuously committed to devising and implementing the most suitable forms of engagement and participatory design, with particular attention to the needs of the local communities affected by grid development⁵.

Allocation reporting

Information on how the proceeds from the bond issues of April 2019, July 2020, June 2021, February 2022 and July 2023 have been used is provided below, showing aggregate amounts and data for each Eligible Green Project at 31 December 2022.

The following tables also show, for the four bonds, the percentage of the proceeds allocated to refinance parts of projects yet to be completed and to refinance projects already completed at the date of the bond issue (% refinanced out of the total) and the balance of unallocated funds and/or funds still held by the issuer at 31 December 2023.

In accordance with Terna's green bond framework, the report for 2023 takes into account certain changes with respect to the reports for previous years. These are primarily due to the reshaping of a number of projects included in the original baskets due to updated completion times. To meet the requirements of the green bond framework, the following tables thus show the effects of this change and summarise the amounts allocated so far to the various projects.

Finally, with regard to the issues of July 2018 and January 2019, the related proceeds had been fully allocated by the time of the previous reports. As a result, the issues are not covered in this report. Further details are provided on page 5 of the Green Bond Report 2020 and on page 251 of the Green Bond Report 2019.

² Further information is available in the 2023 Integrated Report, in the section, "The landscape and biodiversity".

³ Further information is available in the 2023 Integrated Report, in the sections, "Terna's scenarios" and the "2023 Development Plan".

⁴ Further information is available in the 2023 Integrated Report, in the section, "Security and Resilience Plan".

⁵ Further information is available in the 2023 Integrated Report, in the sections, "Relations with local communities", "Workplace health and safety", "Respect for human rights", "Supply chain sustainability".

Issue of 3 April 2019

DESCRIPTION OF INDICATOR		AMOUNT (€000)
Total amount of the basket at the time of the Green Bond's issuance		528,177
- % of basket refinanced		44
Net Green Bond proceeds		498,430
Green Bond proceeds allocated at 31 December 2023		At 31 December 2023, the bond has been fully allocated
Funds/equivalent funds held by the issuer at 31 December 2023		
CATEGORY OF ELIGIBLE GREEN PROJECT	ELIGIBLE GREEN PROJECT	PROCEEDS ALLOCATED AT 31 DECEMBER 2023 (€000)
Renewable energy	CAPRI-MAINLAND AND SORRENTO INTERCONNECTION	76,806
	150kV OPPIDO SUBSTATION	5,561
	150kV FOGGIA SUBSTATION/ CONNECTION OF RENEWABLES	3,970
	UPGRADE 150kV PUGLIA WIND FARM COLLECTOR	18,833
	380kV FOGGIA - BENEVENTO II POWER LINE	75,117
	REORGANISATION NORTH CALABRIA GRID	4,874
	380kV SORGENTE – RIZZICONI POWER LINE	4,046
	CARDANO-NEW ARMoured CABLE	9,886
	380kV SUBSTATION FOR FOGGIA-BENEVENTO AREA WIND FARMS	61,677
	RATIONALISATION 220/132kV IN VALLE SABBIA	6,655
	WIND ENERGY S.R.L. BONORVA PLANT	4,589
	RENEWABLE ENERGY COLLECTOR IN SICILY	10,732
	150kV FIUME SANTO-PORTO TORRES LINE	8,295
	PHOENIX RENEWABLES CANINO PHOTOVOLTAIC PLANT	260
	132kV PIETRAMALA (FI) – ALL. PARCO E SUBSTATION	6,690
	380kV BRINDISI SOUTH SUBSTATION	2,228
	380kV GARAGUSO SUBSTATION AND CONNECTIONS	7,586
	WORK ON GRID IN NAPLES-CASERTA AREA	4,881
	150kV PICERNO SUBSTATION FOR CONNECTIONS	133
	GRID TO COLLECT RENWABLE ENERGY IN FOGGIA-BARLETTA AREA	6,369
	150kV SAN SEVERO SUBSTATION FOR CONNECTIONS	12,563
TOTAL Renewable energy		331,754
Energy efficiency	UPGRADE OF THE GRID IN UMBRIA	4,962
	ITALY-AUSTRIA INTERCONNECTION	3,932
	RATIONALISATION 132kV PIOMBINO AREA	5,834
	UPGRADE OF MONTECORVINO SUBSTATION	5,944
	PATERNÒ - PANTANO - PRIOLO	59,529
	NEW CONNECTION IN PROVINCE OF TREVISO	9,787
	RATIONALISATION 220kV CITY OF TURIN	43,376
	220kV SCHIO SUBSTATION	347
	REORGANISATION OF HV TERAMO VILLANOVA GRID	4,796
	220kV GLORENZA-TIRANO-PREMADIO LINE	9,761
TOTAL Energy efficiency		148,267
Soil use & Biodiversity	REORGANISATION 220kV GRID CITY OF NAPLES	34,357
TOTAL Soil use & Biodiversity		34,357
GRAND TOTAL		514,378

The sums of the individual items and the sub-totals shown in the table may differ due to the process of rounding the data presented.

Issue of 17 July 2020

DESCRIPTION OF INDICATOR	AMOUNT (€000)
Total amount of the basket at the time of the Green Bond's issuance	505,609
- % of basket refinanced	43
Net Green Bond proceeds	496,865
Green Bond proceeds allocated at 31 December 2023	482,739
Funds/equivalent funds held by the issuer at 31 December 2023	14,126

CATEGORY OF ELIGIBLE GREEN PROJECT	ELIGIBLE GREEN PROJECT	PROCEEDS ALLOCATED AT 31 DECEMBER 2023 (€000)
Renewable Energy	380KV VOLPAGO SUBSTATION	3,281
	WORK ON THE HV GRID FOR RENEWABLE ENERGY COLLECTION IN BASILICATA	4,304
	WORK ON THE HV GRID FOR RENEWABLE ENERGY COLLECTION IN PUGLIA	1,122
	OPPIMITTI CONNECTION	8,921
	ROTELLO SUBSTATION	24,183
	ASCOLI SATRIANO SUBSTATION	4,152
	WORK ON THE HV GRID FOR RENEWABLE ENERGY COLLECTION IN BETWEEN CAMPANIA AND MOLISE	893
	220KV GLORENZA SUBSTATION	14,040
	ARVIER HYDROELECTRIC CONNECTION	612
	AW2 WIND FARM CONNECTION	308
	150KV CASTELNUOVO DI CONZA INTERCONNECTOR SUBSTATION	261
	INERGIA STORNARELLA CONNECTION	-
	BELEOLICO TORRE TRIOLO CONNECTION	6,407
	LIGURIA-TUSCANY WIND FARM CONNECTION	2,108
	SYNCHRONOUS COMPENSATORS FOR MAIDA SUBSTATION	32,190
	SYNCHRONOUS COMPENSATORS FOR MATERA SUBSTATION	29,326
	SYNCHRONOUS COMPENSATORS FOR FOGGIA SUBSTATION	20,313
	SYNCHRONOUS COMPENSATORS FOR CANDIA SUBSTATION	17,024
	SYNCHRONOUS COMPENSATORS FOR FANO SUBSTATION	16,178
	SYNCHRONOUS COMPENSATORS FOR GARIGLIANO SUBSTATION	18,748
	380KV FOGGIA – VILLANOVA POWER LINE	103,406
	RATIONALISATION 220/132kV IN VALLE SABBIA	624
	SYNCHRONOUS COMPENSATORS FOR BRINDISI PIGNICELLE SUBSTATION	26,700
TOTAL Renewable energy		335,103
Energy efficiency	RATIONALISATION IN CITY OF MILAN	5,818
	RATIONALISATION OF NORTH-WEST TURIN AREA	2,226
	REORGANISATION OF ROME METROPOLITAN AREA	2,150
	REORGANISATION OF PALERMO METROPOLITAN AREA	38,850
	380KV MAGENTA SUBSTATION	31,296
TOTAL Energy efficiency		80,340
Soil use & Biodiversity	RATIONALISATION IN CITY OF TURIN	6,671
	380KV SORGENTE – RIZZICONI POWER LINE	5,973
	REORGANISATION OF 220KV GRID IN CITY OF NAPLES	38,291
	REORGANISATION OF FLORENCE METROPOLITAN AREA	14,407
	150KV CASTROCUCCO – MARATEA POWER LINE	1,954
TOTAL Soil use & Biodiversity		67,296
GRAND TOTAL		482,739

The sums of the individual items and the sub-totals shown in the table may differ due to the process of rounding the data presented.

Issue of 16 June 2021

DESCRIPTION OF INDICATOR	AMOUNT (€000)
Total amount of the basket at the time of the Green Bond's issuance	615,050
- % of basket refinanced ⁶	11
Net Green Bond proceeds	597,594
Green Bond proceeds allocated at 31 December 2023	546,754
Funds/equivalent funds held by the issuer at 31 December 2023	50,840

CATEGORY OF ELIGIBLE GREEN PROJECT	ELIGIBLE GREEN PROJECT	PROCEEDS ALLOCATED AT 31 DECEMBER 2023 (€000)
Renewable energy	SYNCHRONOUS COMPENSATOR VILLANOVA	31,308
	SYNCHRONOUS COMPENSATOR CODRONGIANOS	35,138
	SYNCHRONOUS COMPENSATOR SUVERETO	35,287
	SYNCHRONOUS COMPENSATOR ROSARA	38,858
	132KV PRATI DI VIZZE-STEINACH POWER LINE	14,471
	132KV APECCHIO SUBSTATION	2,511
	ENERMAC CONNECTION ⁷	16,591
TOTAL Renewable energy		174,163
Energy efficiency	REORGANISATION TERAMO VILLANOVA GRID ⁷	-
TOTAL Energy efficiency		-
Quality, security and resiliency of electricity transportation Infrastructure	UPGRADE 132KV GENOA METROPOLITAN AREA	26,411
	380-150KV PALO DEL COLLE SUBSTATION	9,262
	UPGRADE OF NORD SCHIO GRID	7,608
	REORGANISATION UPPER BELLUNESE AREA	40,115
	380KV UDINE WEST-REDIPUGLIA POWER LINE	16,304
	ITALY-FRANCE INTERCONNECTOR	165,822
	132KV ELBA-MAINLAND POWER LINE	98,214
TOTAL Quality, security and resiliency of electricity transportation Infrastructure		372,591
GRAND TOTAL		546,754

The sums of the individual items and the sub-totals shown in the table may differ due to the process of rounding the data presented.

⁶ In accordance with the commitment given in the Green Bond Framework of June 2021, the refinanced projects were completed within 36 months of the latest annual financial statements prior to the date of issue of the relevant Green Bond (16 June 2021).

⁷ In line with the requirements of Terna's green bond framework, activity included in the basket in place of projects whose timing is no longer consistent with the basket following their replanning.

Issue of 2 February 2022

DESCRIPTION OF INDICATOR	AMOUNT (€000)
Total amount of the basket at the time of the Green Bond's issuance	1,033,817
- % of basket refinanced ⁸	75
Net Green Bond proceeds	991,360
Green Bond proceeds allocated at 31 December 2023	852,318
Funds/equivalent funds held by the issuer at 31 December 2023	139,042

CATEGORY OF ELIGIBLE GREEN PROJECT	ELIGIBLE GREEN PROJECT	PROCEEDS ALLOCATED AT 31 DECEMBER 2023 (€000)
Renewable Energy	BELCASTRO SUBSTATION	34,063
	SCANDALE-MAGISANO CONNECTIONS	4,071
	ITALY-MONTENEGRO INTERCONNECTOR	605,472
	MORCONE SUBSTATION	10,044
	PONTELANDOLFO SUBSTATION	13,840
	PONTELANDOLFO-CASTELPAGANO POWER LINE	9,677
	RUMIANCA SUBSTATION	1,141
	ENLARGEMENT MATERA SUBSTATION	7,813
	ENLARGEMENT CATANZARO SUBSTATION	455
	AERO TANNA CONNECTION – PARTANNA SUBSTATION	614
	AM CONNECTION FOR RENEWABLE ENERGY	10,150
	METORA CONNECTION	9,379
	PRATI DI VIZZE-STEINACH POWER LINE	2,004
	RATIONALISATION IN CITY OF AREZZO	13,287
	REMOVAL OF CONSTRAINTS SOUTH-CENTRAL – NORTH CENTRAL	20,268
TOTAL Renewable energy		742,278
Energy efficiency	PATERNÒ - PANTANO – PRIOLO POWER LINE	23,883
TOTAL Energy efficiency		23,883
Quality, security and resiliency of electricity transportation Infrastructure	CELANO SUBSTATION	20,793
	RATIONALISATION IN CITY OF MILAN	5,236
	CAMIN-DOLO LINE	7,170
	BARI NORTH SUBSTATION	1,106
	RATIONALISATION IN CITY OF NAPLES	17,301
	SCHIO SUBSTATION	-
	RATIONALISATION OF ROME WEST-ROME SOUTH-WEST GRID	-
	COSTALUNGA PRIMARY SUBSTATION	956
	BORGONOVO - BARDI – BORGOTARO POWER LINE	4,115
	UPGRADE OF GRID BETWEEN NOVARA AND BIELLA	2,116
	S. TERESA-BUDDUSÒ SUBSTATION	7,922
	UPGRADE OF TERNI ROME HV GRID	11,274
	WORK ON RAGUSA GRID	3,717
	COLLECTION OF RENEWABLES ABRUZZO/LAZIO	1,892
	ROMA SOUTH-CIAMPINO	2,558
TOTAL Quality, security and resiliency of electricity transportation Infrastructure		86,157
GRAND TOTAL		852,318

The sums of the individual items and the sub-totals shown in the table may differ due to the process of rounding the data presented.

⁸ In accordance with the commitment given in the Green Bond Framework of January 2022, the refinanced projects were completed within 36 months of the latest annual financial statements prior to the date of issue of the relevant Green Bond (2 February 2022).



Issue of 17 July 2023

DESCRIPTION OF INDICATOR	AMOUNT (€000)
Total amount of the basket at the time of the Green Bond's issuance	657,599
- % of basket refinanced ⁹	47
Net Green Bond proceeds	642,571
Green Bond proceeds allocated at 31 December 2023	430,264
Funds/equivalent funds held by the issuer at 31 December 2023	212,307

CATEGORY OF ELIGIBLE GREEN PROJECT	ELIGIBLE GREEN PROJECT	PROCEEDS ALLOCATED AT 31 DECEMBER 2023 (€000)
Renewable Energy	NEW 380/150KV VIZZINI SUBSTATION	6,383
	MICROPOWER S.R.L. CONNECTION	7,766
	ASJA AMBIENTE ITALIA S.P.A. CONNECTION	396
	SARVE S.R.L. CONNECTION	8,305
	SYNCHRONOUS COMPENSATORS SOUTH SARDINIA	32,344
	380KV BRINDISI-BRINDISI ENI POWER LINE	36,639
	STATCOM DEVICES	89,461
	REORGANISATION NORTH CALABRIA GRID	10,261
	UPGRADE OF 150KV FOR BASILICATA WIND ENERGY COLLECTION	6,192
	REORGANISATION FLORENCE METROPOLITAN AREA GRID	4,036
	REORGANISATION TRENTO GRID	12,751
	INERGIA SPA WIND FARM (STORNARA SUBSTATION)	3,177
	220KV GLORENZA SUBSTATION	10,157
	FOSTER WHEELER SUBSTATION – RES CONNECTION	4,913
	380/150KV SUBSTATION MELFI CONNECTIONS	9,236
	FOIANO-GINESTRA-ARIANO 150KV POWER LINE	839
	SOLARWIND 2 CONNECTION	5,246
	NEW MONTEMATTINA SUBSTATION FOR CONNECTIONS	576
	VGE 01 CONNECTION	7,308
	SANDALIA SOLAR FARM S.R.L CONNECTION	537
	E-SOLAR 2 SRL CONNECTION	1,842
	DAUNIA WORK1 CONNECTION	355
	SYNCHRONOUS COMPENSATORS LAZIO NORTH	17,474
	REACTORS	45,806
	UPGRADE OF 150KV FORCALABRIA WIND ENERGY COLLECTION	5,956
	REMOVAL OF CONSTRAINTS SOUTH-CENTRAL – NORTH CENTRAL	13,907
	FOIANO 150KV SUBSTATION FOR CONNECTIONS	7,951
	ECOENERGIA FRANZESE CONNECTION	-
	TRINO BESS 2 CONNECTION	-
TOTAL Renewable energy		349,816
Energy efficiency	220KV GLORENZA-TIRANO-PREMADIO LINE	13,707
TOTAL Energy efficiency		13,707
Quality, security and resiliency of electricity transportation Infrastructure	220KV LIVORNO M. SUBSTATION	17,993
	UPGRADE MODENA AREA GRID	4,017
	REORGANISATION OF SORRENTINE PENINSULA GRID	4,328
	REORGANISATION ROME SOUTH-LATINA GRID	5,422
	CUNEO/SAVONA GRID	6,253
	RATIONALISATION TRENTO SOUTH	7,403
	REORGANISATION ROME METROPOLITAN AREA	2,831
	WORK ON HV GRID IN CATANIA	7,573
	WORK ON HV GRID FOR ABRUZZO/LAZIO RENEWABLE ENERGY COLLECTION	9,035
	220/150KV CATANIA NORTH SUBSTATION	1,885
TOTAL Quality, security and resiliency of electricity transportation Infrastructure		66,741
GRAND TOTAL		430,264

The sums of the individual items and the sub-totals shown in the table may differ due to the process of rounding the data presented.

⁹ In accordance with the commitment given in the Green Bond Framework of January 2022, the refinanced projects were completed within 36 months of the latest annual financial statements prior to the date of issue of the relevant Green Bond (17 July 2023).

The above tables show the names of eligible projects, coinciding with wide-ranging, complex interventions made up of numerous individual projects and minor works. Each bond (April 2019, July 2020, June 2021, February 2022 and July 2023) may have financed different parts of the same intervention. For this reason, a number of eligible projects, represented by different amounts, have been financed by more than one bond.

Given the nature of the projects financed, each intervention may contribute to achieving a number of environmental benefits. In the above table, the inclusion of an individual project in a category of benefit was based on economic criteria.

Impact reporting

This section details the impact and the benefits associated with the four categories of Eligible Green Project – described at the beginning of the document - financed by each of the five Green Bonds issued by Terna and accounted for in this Report. The percentages indicate the proportion of the benefits that can be associated with the stage of completion of the projects (works that have entered service) at 31 December 2023.

For a better understanding of the data relating environmental impacts, the following should be taken into account:

- the impact of the projects in columns A, B, C and F in the following tables that involve “Connections to renewable energy plants”, “Increased production from renewable sources”, “Reduction in grid losses” and “Reduction in energy not supplied” are measured in MW and MWh. The benefit resulting from completion of these projects may also be measured in terms of greenhouse gas emission savings, amounting to approximately 15.4 million tonnes of CO₂e a year¹⁰. The above data does not derive from ex-post measurement of the impact of the projects carried out, but are the result of grid simulations, conducted using models that permit a comparison of the ex-ante operation of the electricity system and the related environmental impacts with and without the individual projects. The results of the grid simulations are then used in the cost-benefit analysis applied to the main projects included in the Grid Development Plan. Given that there may be several years between the planning of a project and the start-up of work, the cost-benefit analysis for a project may be repeated to take into account new scenarios and the environmental impacts may change over time. Where projects are not subject to cost-benefit analysis, the value of the related benefits is measured using an approach in line with this method. If there are significant changes to the environmental benefits connected with the projects financed by the Green Bonds, these will be noted in future Green Bond Reports;
- the environmental benefits underpinning the selection of eligible projects – estimated using the methodological approach described above - are calculated, based on the most conservative scenario, at the level of each project, which, however, generally consists of a series of works that may require many years to complete. The proceeds from the Green Bonds may be used to finance or refinance a part of the previously planned works that have a part to play in completion of the selected projects in the baskets and, in this sense, in obtaining the environmental benefits associated with the projects.

None of the selected projects is the subject of significant proceedings (administrative or final court judgements) resulting in Terna being ordered to pay fines or to act or not act (e.g., prohibitions), or in its employees being found guilty of a criminal offence (full compliance in environmental and socio-economic matters).

¹⁰ The overall amount is the sum of the contributions of each bond, broken down as follows: approximately 4.2 million tonnes of CO₂ for the issue of 3 April 2019, approximately 2.3 million tonnes of CO₂ for the issue of 17 July 2020, approximately 1.5 million tonnes di CO₂ for the issue of 16 June 2021, approximately 1.9 million tonnes di CO₂ for the issue of 2 February 2022 and approximately 5.5 million tonnes di CO₂ for the issue of 17 July 2023. The calculation took into account the share of total Italian electricity production represented by thermoelectric production in 2023. Allocation for the purposes of the production mix was based on the December 2023 issue of the “Monthly Report on the Electricity System” available on the website at www.terna.it.



Issue of 3 April 2019

CATEGORY OF ELIGIBLE GREEN PROJECT	OUTPUT & IMPACT INDICATORS									
	A		B		C		D		E	
	CONNECTIONS TO RENEWABLE ENERGY PLANTS (MW)	% AT 31/12	INCREASED PRODUCTION FROM RENEWABLE SOURCES (MWH)	% AT 31/12	REDUCTION IN GRID LOSSES (MWH)	% AT 31/12	LAYING OF UNDERGROUND CABLES (KM)	% AT 31/12	DEMOLITION OF LINES (KM)	% AT 31/12
Renewable energy	1,938	100	8,800,493	96						
Energy efficiency					231,486	59				
Soil use & biodiversity							11	-	30	-

Issue of 17 July 2020

CATEGORY OF ELIGIBLE GREEN PROJECT	OUTPUT & IMPACT INDICATORS									
	A		B		C		D		E	
	CONNECTIONS TO RENEWABLE ENERGY PLANTS (MW)	% AT 31/12	INCREASED PRODUCTION FROM RENEWABLE SOURCES (MWH)	% AT 31/12	REDUCTION IN GRID LOSSES (MWH)	% AT 31/12	LAYING OF UNDERGROUND CABLES (KM)	% AT 31/12	DEMOLITION OF LINES (KM)	% AT 31/12
Renewable energy	1,897	99	4,826,985	88						
Energy efficiency					265,094	91				
Soil use & biodiversity							42	67	275	86

Issue of 16 June 2021

CATEGORY OF ELIGIBLE GREEN PROJECT	OUTPUT & IMPACT INDICATORS									
	A		B		C		F			
	CONNECTIONS TO RENEWABLE ENERGY PLANTS (MW)	% AT 31/12	INCREASED PRODUCTION FROM RENEWABLE SOURCES (MWH)	% AT 31/12	REDUCTION IN GRID LOSSES (MWH)	% AT 31/12	REDUCTION IN ENERGY NOT SUPPLIED (MWH PER YEAR)			% AT 31/12
Renewable energy	1,330	1	3,135,602	1						
Energy efficiency					12,028	-				
Quality, security and resiliency of electricity transportation Infrastructure							12,699			0.2

Issue of 2 February 2022

CATEGORY OF ELIGIBLE GREEN PROJECT	OUTPUT & IMPACT INDICATORS									
	A		B		C		F			
	CONNECTIONS TO RENEWABLE ENERGY PLANTS (MW)	% AT 31/12	INCREASED PRODUCTION FROM RENEWABLE SOURCES (MWH)	% AT 31/12	REDUCTION IN GRID LOSSES (MWH)	% AT 31/12	REDUCTION IN ENERGY NOT SUPPLIED (MWH PER YEAR)			% AT 31/12
Renewable energy	1,766	100	4,062,013	100						
Energy efficiency					13,200	-				
Quality, security and resiliency of electricity transportation Infrastructure							2,918			2

Issue of 17 July 2023

CATEGORY OF ELIGIBLE GREEN PROJECT	OUTPUT & IMPACT INDICATORS									
	A		B		C		F			
	CONNECTIONS TO RENEWABLE ENERGY PLANTS (MW)	% AT 31/12	INCREASED PRODUCTION FROM RENEWABLE SOURCES (MWH)	% AT 31/12	REDUCTION IN GRID LOSSES (MWH)	% AT 31/12	REDUCTION IN ENERGY NOT SUPPLIED (MWH PER YEAR)			% AT 31/12
Renewable energy	4,835	5	11,839,182	8						
Energy efficiency					3,364	-				
Quality, security and resiliency of electricity transportation Infrastructure							11,940			1

In addition to the benefits achievable through each category provided for in the Green Bond Framework, the above tables also show percentages indicating the share of the benefits linked to the stage of progress on projects at 31 December.

It should be noted that, in line with Terna's green bond framework and the information provided in the allocation reporting section, the figures for the impacts presented may differ from those reported in previous years. This primarily reflects the reshaping of certain projects due to changes in the project timings and related cost-benefit analyses.

Examples of Eligible Green Projects

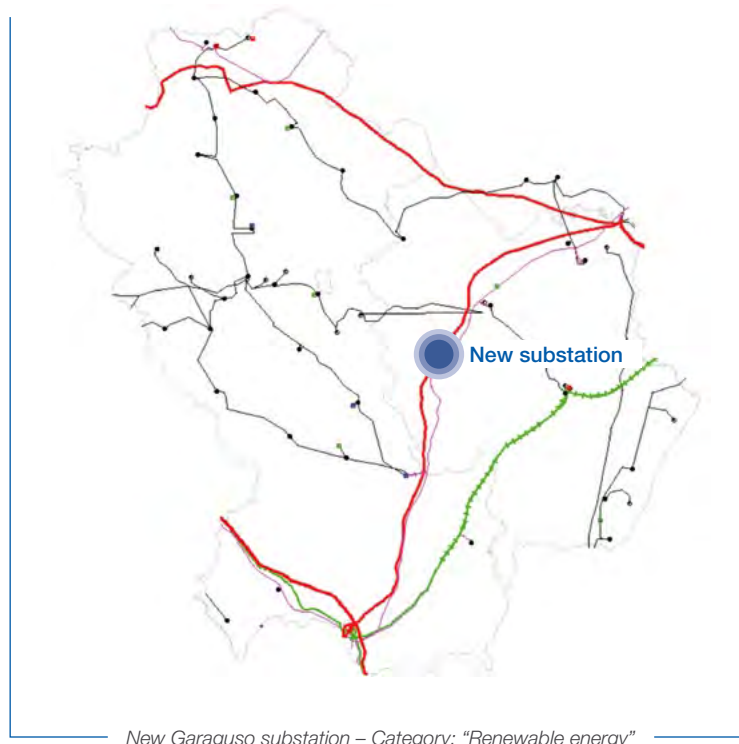
The following pages show key technical and financial data and details of the environmental benefits for four representative projects in the four categories of benefit taken into account.

Category: Renewable Energy - New Electricity Substation at Garaguso (MT)

The new 380/150kV Garaguso substation has been built to connect renewable energy plants in the Basilicata region to the HV Matera–Aliano line.

Applications for the connection of renewable energy plants to the NTG have been received from 11 plants, making a total of 293 MW, of which 40 MW has already been connected to the substation. The expected increase in renewable energy integrated into the NTG, linked to plants already connected to the Garigliano substation and future substations, is 668,471 MWh per year.

DESCRIPTION OF INDICATOR	AMOUNT
Total value of the project included in the Bond at 3 April 2019 (planned amount)	6,490,626 €
Proceeds from the green bond allocated to the project at 31 December 2023 (final amount)	7,586,273 €
Connections of renewable energy plants	293 MW
Increase in renewable energy production	668,473 MWh



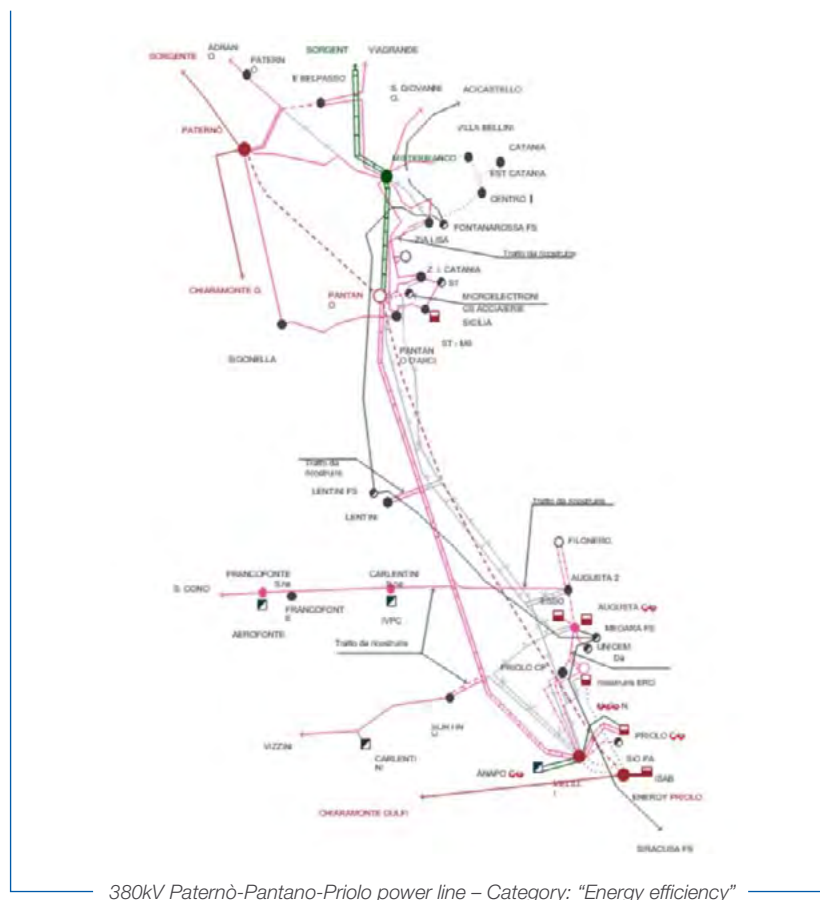
Category: Energy Efficiency - 380kV Paternò - Pantano - Priolo Power Line (Sicily)

Construction of the 380kV Paternò-Pantano-Priolo power line will result in interconnection of the 380kV grid with the 150kV grid in south-eastern Sicily. This will help to drive not only production at renewable energy plants in the area, but also an increase in service continuity and voltage stability in eastern Sicily.

The upgrade and enlargement of the Melilli, Priolo and Pantano D'Arce electricity substations is also significant as this will strengthen the grid and improve meshing, resulting in further benefits in terms of grid reliability.

Thanks to the above works, we expect to be able to reduce grid losses by at least 13,200 MWh a year, as shown in the following table.

DESCRIPTION OF INDICATOR	AMOUNT
Total value of the project included in the Bond at 2 February 2022 (planned amount)	81,273,362 €
Proceeds from the green bond allocated to the project at 31 December 2023 (final amount)	23,882,901€
Reduction in grid losses	13,200 MWh



Category: Quality, Security and Resilience of Electricity Transmission Infrastructure - 220kV Schio Substation and Grid Upgrade

To boost transformer capacity for the 132kV grid, ensure security at local level and improve the voltage profile in the load area to the west of Vicenza, the grid is to be subject to a wide-ranging reorganisation, with the construction of a new 220/132kV transformer substation, to be appropriately linked to the 132kV grid.

At the same time, the 132kV grid is to be strengthened by removing constraints and increasing quality and security of service.

The overall project is expected to reduce the quantity of energy not supplied by at least 453 MWh per year, as the following table shows.

DESCRIPTION OF INDICATOR	AMOUNT
Total value of the project included in the Bond at 16 June 2021 (planned amount)	7,654,036 €
Proceeds from the green bond allocated to the project at 31 December 2023 (final amount)	7,608,369 €
Reduction in energy not supplied	453 MWh



220kV Schio substation and grid upgrade – Category:
“Quality, security and resilience of electricity transmission infrastructure”



INDEPENDENT AUDITOR'S REPORT ON THE SECTIONS "ALLOCATION REPORTING" AND "IMPACT REPORTING" OF THE GREEN BOND REPORT

To the Management of
Terna S.p.A.

We have undertaken to perform a limited assurance engagement on the sections "Allocation reporting" and "Impact reporting" included in the Green Bond Report 2023 (the "Report") as of December 31st, 2023. The Report has been prepared by Terna S.p.A. (the "Company") on the basis of the following frameworks ("Frameworks"): the Framework issued in July 2018 for the Green Bond issued on 3 April 2019 ("GB3"), the Framework issued in July 2020 for the Green Bond issued on 17 July 2020 ("GB 4"), the Framework issued in June 2021 for the Green Bond issued on 16 June 2021 ("GB5") and the Framework issued in January 2022 for Green Bonds issued on February 2, 2022 ("GB 6") and July 17, 2023 ("GB 7"). These Frameworks were defined by the Company in accordance with, respectively: the Green Bond Principles issued by ICMA "2018 edition" for the Frameworks issued in July 2018 and in July 2020 and the Green Bond Principles issued by ICMA "2021 edition" for the Frameworks issued in June 2021 and in January 2022.

Management's Responsibility for the Report

The Management is responsible for the preparation of the Report in accordance with the Frameworks, developed by the Company in accordance with the Green Bond Principles. In particular, the Management is responsible for the preparation of the sections "Allocation reporting" and "Impact reporting" of the Report. The Management is also responsible for such internal control is necessary to enable the preparation of the Report that is free from material misstatement, whether due to fraud or error.

Auditor's Independence and quality control

We have complied with the independence and other ethical requirements of the *International Code of Ethics for Professional Accountants (including International Independence Standards) (IESBA Code)* issued by the *International Ethics Standards Board for Accountants*, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

During the year covered by this assurance engagement, our auditing firm applied *International Standard on Quality Control 1 (ISQC Italia 1)* and, accordingly, maintained a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Ancône Bari Bergamo Bologna Brescia Cagliari Firenze Genova Milano Napoli Padova Parma Roma Torino Treviso Udine Verona

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Auditor's responsibility

Our responsibility is to express a conclusion on sections "Allocation reporting" and "Impact reporting" of the Report based on the procedures performed. We conducted our work in accordance with the criteria established in the *"International Standard on Assurance Engagements ISAE 3000 (Revised) – Assurance Engagements Other than Audits or Reviews of Historical Financial Information"* (hereinafter "ISAE 3000 Revised"), issued by the *International Auditing and Assurance Standards Board* (IAASB) for limited assurance engagements. The standard requires that we plan and perform the engagement to obtain limited assurance whether the sections "Allocation reporting" and "Impact reporting" of the Report are free from material misstatement. Therefore, the procedures performed in a limited assurance engagement are less than those performed in a reasonable assurance engagement in accordance with ISAE 3000 Revised, and, therefore, do not enable us to obtain assurance that we would become aware of all significant matters and events that might be identified in a reasonable assurance engagement.

The procedures performed on the sections "Allocation reporting" and "Impact reporting" of the Report are based on our professional judgement and included inquiries primarily with company personnel responsible for the preparation of information included in the sections "Allocation reporting" and "Impact reporting" of the Report, analysis of documents, recalculations and other procedures aimed to obtain evidence as appropriate.

Specifically, we carried out the following procedures:

- analysis of the Green Bond Frameworks adopted by Terna S.p.A. and the Second Party Opinion, which includes assessing the conformity of the Frameworks to the Green Bond Principles defined by ICMA and the applicability of the categories of 'Eligible Green Projects' for the allocation of proceeds and the definition of environmental impacts;
- interviews with the Management and relevant corporate functions of Terna S.p.A. aimed at understanding the criteria and underlying processes for identifying Eligible Green Projects, as well as the generation, identification, and management of significant qualitative and quantitative information included in the 'Allocation reporting' and 'Impact reporting' sections of the Report;
- analysis of the structure and implementation of reporting processes and controls related to the data on the use of proceeds and environmental benefits of the Green Bonds;
- verification of quantitative data included in the 'Allocation reporting' and 'Impact reporting' sections of the Report and sampling analysis conducted through the collection and examination of documentation of Terna S.p.A., aimed at verifying the consistency of information included in the 'Allocation reporting' and 'Impact reporting' sections of the Report with the Green Bond Principles;
- obtaining the representation letter regarding the accuracy and the completeness of the information included in the Report and of those provided to us.

Conclusion

Based on the work performed, nothing has come to our attention that causes us to believe that the 'Allocation reporting' and 'Impact reporting' sections included in the Green Bond Report of Terna S.p.A as of December 31, 2023 is not prepared, in all material respects, in accordance with the criteria established by the Frameworks.

DELOITTE & TOUCHE S.p.A.

Signed by
Domenico Falcone
Partner

Rome, Italy
April 17, 2024

This report has been translated into the English language solely for the convenience of international readers.