



Terna

GREEN BOND REPORT 2022

Green Bond Report 2022

Since 2018, Terna has issued **five green bonds** as part of its €9,000,000,000 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 successfully 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, Terna successfully placed a new green bond amounting to €500 million and having a 12-year term;
- on 16 June 2021, Terna launched a new 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.

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 2022, Terna had drawn up and published four **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 and the third on 15 June 2021, whilst the fourth was published on 12 January 2022. These Frameworks and the second party opinions provided by the independent advisor, Vigeo Eiris (now 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 was issued in compliance with the updated Green Bond Framework of January 2022.

Vigeo Eiris has assessed the contribution of all Terna’s bond issues to sustainability, assigning them the best possible rating. Vigeo Eiris has also expressed an opinion on the issuer’s overall approach to managing ESG issues, judging Terna to be at an “advanced” level¹. In its latest Second Party Opinion, the rating agency also classed Terna’s framework to be consistent with the recommendations in the Taxonomy Climate Delegated Act². This consistency was confirmed, with regard to 2022, 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 and modern energy services.



Build resilient infrastructure, promote 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 and June 2021, this edition of the Green Bond Report provides information for the first time on the issue carried out in February 2022.

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 following 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”.

¹ Level of evaluation used by Vigeo Eiris – Performance: Advanced, Robust, Moderate, Weak.

² Delegated Regulation (EU) 2021/2139 of the European Commission, dated 4 June 2021.

The various categories of environmental benefit indicated in the four Green Bond Frameworks published as of 31 December 2022 are shown below:

CATEGORY OF ENVIRONMENTAL BENEFIT	DESCRIPTION
Renewable energy	<p>Projects designed to boost renewable energy production:</p> <ul style="list-style-type: none"> • 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	<p>Projects designed to reduce the CO₂ emissions produced by the electricity system by reducing grid losses:</p> <ul style="list-style-type: none"> • Grid infrastructure that enhances transmission efficiency (reducing the difference between power produced and energy consumed, all other conditions being equal).
Soil use & Biodiversity	<p>Projects that aim to reduce soil use and the impact on terrestrial biodiversity:</p> <ul style="list-style-type: none"> • 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	<p>Projects that aim to ensure the quality, security and resilience of electricity transmission infrastructure:</p> <ul style="list-style-type: none"> • Projects included in the National Development Plan, focusing on the quality and security of the service by resolving operational issues that are in part linked with the ecological 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).

Allocation reporting

Information on how the proceeds from the bond issues of April 2019, July 2020, June 2021 and February 2022 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 2022.

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.

Issue of 3 April 2019

DESCRIPTION OF INDICATOR	AMOUNT (€)
Total amount for basket of projects included in the Green Bond	528,177,132
- % of basket refinanced	44
Net Green Bond proceeds	498,430,000
Green Bond proceeds allocated at 31 December 2022	448,466,871
Funds/equivalent funds held by the issuer at 31 December 2022	49,963,129



CATEGORY OF ELIGIBLE GREEN PROJECT	ELIGIBLE GREEN PROJECT	AMOUNT INCLUDED IN GB (€)	PROCEEDS ALLOCATED AT 31 DECEMBER 2022 (€)
Renewable energy	CAPRI-MAINLAND AND SORRENTO INTERCONNECTION	67,446,846	6,573,823
	150kV OPPIDO SUBSTATION	5,419,541	5,560,760
	150kV FOGGIA SUBSTATION/ CONNECTION OF RENEWABLES	3,850,529	3,970,114
	UPGRADE 150kV PUGLIA WIND FARM COLLECTOR	14,430,564	16,631,144
	380kV FOGGIA - BENEVENTO II POWER LINE	74,088,460	75,093,872
	REORGANISATION NORTH CALABRIA GRID	5,998,089	4,864,346
	380kV SORGENTE – RIZZICONI POWER LINE	3,810,065	3,968,233
	CARDANO-NEW ARMoured CABLE	9,611,345	9,884,306
	150kV CASTROCUCO – MARATEA LINE	2,000,000	-
	380kV SUBSTATION FOR FOGGIA-BENEVENTO AREA WIND FARMS	55,849,694	47,027,106
	RATIONALISATION 220/132kV IN VALLE SABBIA	35,012,603	6,654,886
	WIND ENERGY S.R.L. BONORVA PLANT	4,578,795	4,589,401
	RENEWABLE ENERGY COLLECTOR IN SICILY	10,674,566	10,732,240
	150kV FIUME SANTO-PORTO TORRES LINE	4,801,527	8,295,332
	PHOENIX RENEWABLES CANINO PHOTOVOLTAIC PLANT	203,605	260,216
	132kV PIETRAMALA (FI) – ALL, PARCO E. SUBSTATION	6,592,286	6,689,527
	220kV GLORENZA SUBSTATION	2,918,236	44,167
	380kV BRINDISI SOUTH SUBSTATION	1,936,947	2,227,907
	380kV GARAGUSO SUBSTATION AND CONNECTIONS	6,490,626	7,586,273
	EISACKWERK RIO PUSTERIA	3,405,397	147,340
	WORK ON GRID IN NAPLES-CASERTA AREA	4,028,000	4,881,469
	150kV PICERNO SUBSTATION FOR CONNECTIONS	233,663	133,200
GRID TO COLLECT RENEWABLE ENERGY IN FOGGIA-BARLETTA AREA	6,339,481	6,368,804	
150kV SAN SEVERO SUBSTATION FOR CONNECTIONS	12,394,098	12,563,076	
TOTAL renewable energy		342,114,963	314,747,542
Energy efficiency	UPGRADE OF THE GRID IN UMBRIA	5,006,665	4,962,020
	ITALY-AUSTRIA INTERCONNECTION	3,901,548	3,931,584
	RATIONALISATION 132kV PIOMBINO AREA	6,270,246	5,833,803
	UPGRADE OF MONTECORVINO SUBSTATION	7,030,552	4,943,919
	PATERNÒ - PANTANO - PRIOLO	66,871,640	21,993,990
	NEW CONNECTION IN PROVINCE OF TREVISO	10,043,436	9,787,123
	RATIONALISATION 220kV CITY OF TURIN	38,997,412	34,204,955
	220kV SCHIO SUBSTATION	347,463	347,463
	REORGANISATION OF HV TERAMO VILLANOVA GRID	4,645,945	4,795,571
	220kV GLORENZA-TIRANO-PREMADIO LINE	8,787,424	8,873,986
TOTAL energy efficiency		151,902,332	99,674,414
Soil use & Biodiversity	REORGANISATION 220kV GRID CITY OF NAPLES	31,995,143	33,868,932
	REORGANISATION FLORENCE METROPOLITAN AREA	2,164,694	175,982
TOTAL Soil use & Biodiversity		34,159,837	34,044,914
GRAND TOTAL		528,177,132	448,466,871

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 (€)
Total amount for basket of projects included in the Green Bond	505,609,230
- % of basket refinanced	43
Net Green Bond proceeds	496,865,000
Green Bond proceeds allocated at 31 December 2022	441,842,390
Funds/equivalent funds held by the issuer at 31 December 2022	55,022,610

CATEGORY OF ELIGIBLE GREEN PROJECT	ELIGIBLE GREEN PROJECT	AMOUNT INCLUDED IN GB (€)	PROCEEDS ALLOCATED AT 31 DECEMBER 2022 (€)
Renewable Energy	380KV VOLPAGO SUBSTATION	3,280,832	3,280,832
	WORK ON THE HV GRID FOR RENEWABLE ENERGY COLLECTION IN BASILICATA	6,214,013	4,303,734
	WORK ON THE HV GRID FOR RENEWABLE ENERGY COLLECTION IN PUGLIA	1,138,831	1,121,963
	WORK ON THE HV GRID FOR RENEWABLE ENERGY COLLECTION IN CAMPANIA	1,412,125	-
	OPPIMITTI CONNECTION	8,293,917	8,921,016
	ROTELLO SUBSTATION	23,895,048	24,182,909
	ASCOLI SATRIANO SUBSTATION	4,152,349	4,152,349
	WORK ON THE HV GRID FOR RENEWABLE ENERGY COLLECTION IN BETWEEN CAMPANIA AND MOLISE	892,830	892,830
	220KV GLORENZA SUBSTATION	10,247,198	12,685,829
	150KV GOLETO-AVELLINO NORTH POWER LINE	819,844	720,798
	TERME DI BRENNERO-BOLZANO RAILWAY LINE	370,000	-
	ARVIER HYDROELECTRIC CONNECTION	620,134	610,191
	AW2 WIND FARM CONNECTION	268,363	306,222
	150KV CASTELNUOVO DI CONZA INTERCONNECTOR SUBSTATION	259,340	261,279
	INERZIA STORNARELLA CONNECTION	50,000	-
	BELEOLICO TORRE TRIOLO CONNECTION	4,500,000	6,406,523
	LIGURIA-TUSCANY WIND FARM CONNECTION	1,253,825	1,868,330
	SYNCHRONOUS COMPENSATORS FOR MAIDA SUBSTATION	27,408,667	31,175,883
	SYNCHRONOUS COMPENSATORS FOR MATERA SUBSTATION	27,368,308	28,872,246
	SYNCHRONOUS COMPENSATORS FOR FOGGIA SUBSTATION	19,456,523	19,811,872
	SYNCHRONOUS COMPENSATORS FOR CANDIA SUBSTATION	14,583,015	15,956,843
	SYNCHRONOUS COMPENSATORS FOR FANO SUBSTATION	16,005,007	14,326,280
	SYNCHRONOUS COMPENSATORS FOR GARIGLIANO SUBSTATION	17,483,534	17,784,967
	380KV FOGGIA – VILLANOVA POWER LINE	103,157,397	103,406,271
	VALLE SABBIA	20,058,007	624,469
	SYNCHRONOUS COMPENSATORS FOR BRINDISI PIGNICELLE SUBSTATION	24,111,378	26,508,436
	TOTAL Renewable energy	337,300,485	328,182,071
Energy efficiency	RATIONALISATION IN CITY OF MILAN	5,498,475	5,818,251
	RATIONALISATION OF NORTH-WEST TURIN AREA	2,226,968	2,225,677
	REORGANISATION OF ROME METROPOLITAN AREA	2,912,034	615,462
	REORGANISATION OF PALERMO METROPOLITAN AREA	38,893,036	38,849,884
380KV MAGENTA SUBSTATION	28,199,834	11,139,109	
TOTAL Energy efficiency	77,730,346	58,648,383	
Soil use & Biodiversity	RATIONALISATION IN CITY OF TURIN	6,662,775	6,671,091
	380KV SORGENTE – RIZZICONI POWER LINE	35,188,011	5,972,649
	REORGANISATION OF 220KV GRID IN CITY OF NAPLES	36,386,859	32,094,692
	REORGANISATION OF FLORENCE METROPOLITAN AREA	11,398,963	8,430,743
150KV CASTROCUCO – MARATEA POWER LINE	941,790	1,842,760	
TOTAL Soil use & Biodiversity	90,578,399	55,011,936	
GRAND TOTAL	505,609,230	441,842,390	

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 (€)
Total amount for basket of projects included in the Green Bond	615,049,714
- % of basket refinanced ³	11
Net Green Bond proceeds	597,594,000
Green Bond proceeds allocated at 31 December 2022	163,128,129
Funds/equivalent funds held by the issuer at 31 December 2022	434,465,871

CATEGORY OF ELIGIBLE GREEN PROJECT	ELIGIBLE GREEN PROJECT	AMOUNT INCLUDED IN GB (€)	PROCEEDS ALLOCATED AT 31 DECEMBER 2022 (€)
Renewable energy	SYNCHRONOUS COMPENSATOR VILLANOVA	38,754,349	31,308,444
	SYNCHRONOUS COMPENSATOR CODRONGIANOS	30,151,656	12,890,014
	SYNCHRONOUS COMPENSATOR SUVERETO	27,048,257	-
	SYNCHRONOUS COMPENSATOR ROSARA	28,789,035	-
	132KV PRATI DI VIZZE-STEINACH POWER LINE	10,680,389	14,470,794
	132KV APECCHIO SUBSTATION	2,271,044	2,474,383
TOTAL Renewable energy		137,694,729	61,143,635
Quality, security and resiliency of electricity transportation Infrastructure	UPGRADE 132KV GENOVA METROPOLITAN AREA	23,441,188	25,636,347
	380-150KV PALO DEL COLLE SUBSTATION	9,260,109	9,262,291
	UPGRADE OF NORD SCHIO GRID	7,654,036	7,608,369
	REORGANISATION UPPER BELLUNESE AREA	30,355,790	22,204,540
	380KV UDINE WEST-REDIPUGLIA POWER LINE	15,853,347	14,982,357
	ITALY-FRANCE INTERCONNECTOR	155,384,449	-
	132KV ELBA-MAINLAND POWER LINE	89,862,355	12,206,223
	REORGANISATION OF SORRENTINA PENINSULA GRID	7,027,677	8,908,222
	380KV COLUNGA-CALENZANO POWER LINE	92,938,967	1,176,145
132KV RICCIONE-RIMINI RING	45,577,068	-	
TOTAL Quality, security and resiliency of electricity transportation Infrastructure		477,354,985	101,984,494
GRAND TOTAL		615,049,714	163,128,129

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Issue of 2 February 2022

DESCRIPTION OF INDICATOR	AMOUNT (€)
Total amount for basket of projects included in the Green Bond	1,033,816,843
- % of basket refinanced ⁴	75
Net Green Bond proceeds	991,360,000
Green Bond proceeds allocated at 31 December 2022	811,871,484
Funds/equivalent funds held by the issuer at 31 December 2022	179,488,516

³ 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).

⁴ 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).

CATEGORY OF ELIGIBLE GREEN PROJECT	ELIGIBLE GREEN PROJECT	AMOUNT INCLUDED IN GB (€)	PROCEEDS ALLOCATED AT 31 DECEMBER 2022 (€)	
Renewable Energy	BELCASTRO SUBSTATION	37,318,406	34,062,968	
	ARIANO IRPINO SUBSTATION	19,701,651	-	
	SCANDALE-MAGISANO CONNECTIONS	3,870,042	4,070,928	
	FOIANO SUBSTATION	11,040,453	-	
	FOIANO-GINESTRA-ARIANO POWER LINE	9,709,331	-	
	ITALY-MONTENEGRO INTERCONNECTOR	621,899,399	619,056,574	
	MORCONE SUBSTATION	10,036,507	10,043,990	
	PONTELANDOLFO SUBSTATION	13,850,365	13,850,365	
	PONTELANDOLFO-CASTELPAGANO POWER LINE	9,661,239	9,676,739	
	RUMIANCA SUBSTATION	1,140,786	1,140,786	
	ENLARGEMENT MATERA SUBSTATION	7,594,699	7,186,045	
	ENLARGEMENT CATANZARO SUBSTATION	454,511	454,885	
	TANNA – PARTANNA SUBSTATION OVERHEAD CONNECTION	406,362	614,437	
	CONNECTIONS FOR RENEWABLE ENERGY	9,500,000	10,150,123	
	METORA CONNECTION	5,400,000	9,379,418	
	PRATI DI VIZZE-STEINACH POWER LINE	1,599,576	1,310,005	
	RATIONALISATION IN CITY OF AREZZO	9,483,996	7,046,185	
	REMOVAL OF CONSTRAINTS SOUTH-CENTRAL – NORTH CENTRAL	20,670,511	8,751,459	
	TOTAL Renewable energy		793,337,833	736,794,908
	Energy efficiency	PATERNÒ - PANTANO – PRIOLO POWER LINE	81,273,362	-
TOTAL Energy efficiency		81,273,362	-	
Quality, security and resiliency of electricity transportation Infrastructure	CELANO SUBSTATION	16,505,315	16,486,505	
	RATIONALISATION IN CITY OF MILAN	8,739,572	450,000	
	CAMIN-DOLO LINE	7,178,383	7,120,328	
	BARI NORTH SUBSTATION	1,105,970	1,105,970	
	CATANIA NORTH SUBSTATION	14,843,130	-	
	RATIONALISATION IN CITY OF NAPLES	17,083,243	17,278,878	
	SCHIO SUBSTATION	10,995,262	-	
	RATIONALISATION OF THE SORRENTINO PENINSULA	31,801,840	-	
	RATIONALISATION OF ROME WEST-ROME SOUTH-WEST GRID	14,896,685	-	
	COSTALUNGA PRIMARY SUBSTATION	699,079	955,948	
	BORGONOVO - BARDI – BORGOTARO POWER LINE	3,857,520	3,936,780	
	UPGRADE OF GRID BETWEEN NOVARA AND BIELLA	4,612,704	1,802,191	
	TERESA-BUDDUSÒ SUBSTATION	7,922,026	7,922,026	
	UPGRADE OF TERNI ROME HV GRID	10,734,382	9,854,542	
	WORK ON RAGUSA GRID	3,681,457	3,713,864	
	COLLECTION OF RENEWABLES ABRUZZO/LAZIO	1,880,032	1,891,963	
	ROMA SOUTH-CIAMPINO	2,669,049	2,557,581	
TOTAL Quality, security and resiliency of electricity transportation Infrastructure		159,205,648	75,076,576	
GRAND TOTAL		1,033,816,843	811,871,484	

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.

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 and February 2022) may have financed different parts of the same project. For this reason, a number of eligible projects, represented by different amounts, have been financed by more than one bond⁵.

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.

⁵ For example: reorganisation of Florence metropolitan area, reorganisation of the grid serving the city of Naples and the 150kV Castrocuoco-Maratea power line.

Impact reporting

This section details the impacts and the benefits associated with the four categories of Eligible Green Project – described on page 562 - financed by each of the four 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 2022.

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 over 8 million tonnes of CO₂ a year . 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).

⁶ The total value is given by the sum of the contributions of the single bonds divided approximately as follows: 2.3 million tonnes of CO₂ for the issue of 3 April 2019, 3.9 million tonnes of CO₂ for the issue of 17 July 2020, 60 thousand tonnes of CO₂ for the issue of 16 June 2021 and 1.8 million tonnes of CO₂ for the issue of 2 February 2022. The total value has been calculated taking into account the share of total Italian electricity production represented by thermoelectric production in 2022. Allocation for the purposes of the production mix was based on the December 2022 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	1,118	98	4,764,025	90						
Energy efficiency					264,098	49				
Soil use & biodiversity							18	-	31	-

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	2,315	99	8,108,782	93						
Energy efficiency					265,094	91				
Soil use & biodiversity							42	67	275	87

Issue of 16 June 2021

CATEGORY OF ELIGIBLE GREEN PROJECT	OUTPUT & IMPACT INDICATORS					
	A		B		F	
	CONNECTIONS TO RENEWABLE ENERGY PLANTS (MW)	% AT 31/12	INCREASED PRODUCTION FROM RENEWABLE SOURCES (MWh)	% AT 31/12	REDUCTION IN ENERGY NOT SUPPLIED (MWh per year)	% AT 31/12
Renewable energy			10	100	126,141	18
Quality, security and resiliency of electricity transportation Infrastructure						3,573

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	1,670	39	3,841,469	39				
Energy efficiency					13,200	-		
Quality, security and resiliency of electricity transportation Infrastructure							16,060	10

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.

Examples of Eligible Green Projects

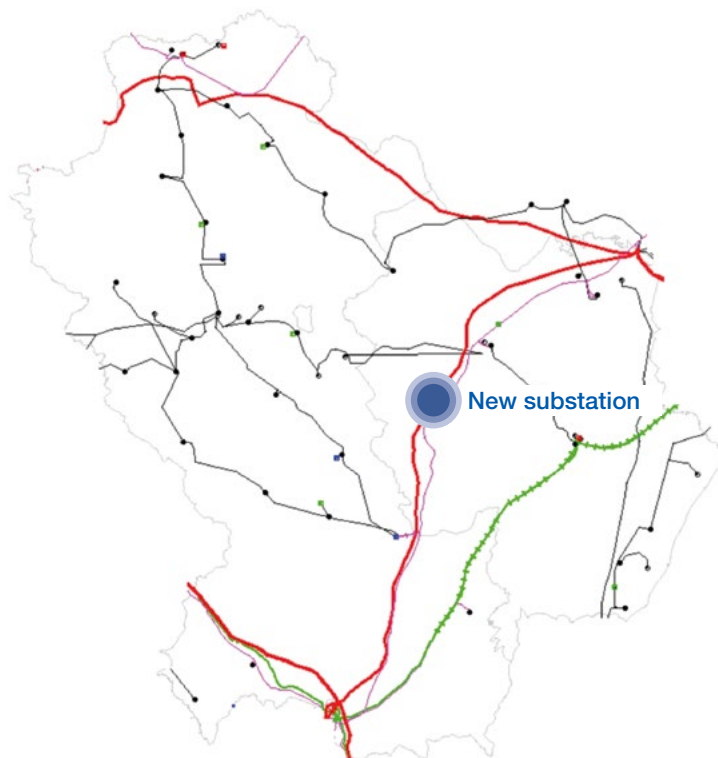
The following pages show key technical and financial data and details of the environmental benefits for four representative projects in the four categories of benefit taken into account.

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

The new 380/150 kV 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 (the National Transmission Grid) have been received from 11 plants, making a total of 253 MW. The expected increase in renewable energy integrated into the NTG, linked to plants already connected to the Garigiano substation and future substations, is 668,473 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 2022 (final amount)	7,586,273 €
Future connections of renewable energy plants	253 MW
Increase in renewable energy production	668,473 MWh



New Garaguso substation – Category: “Renewable energy”

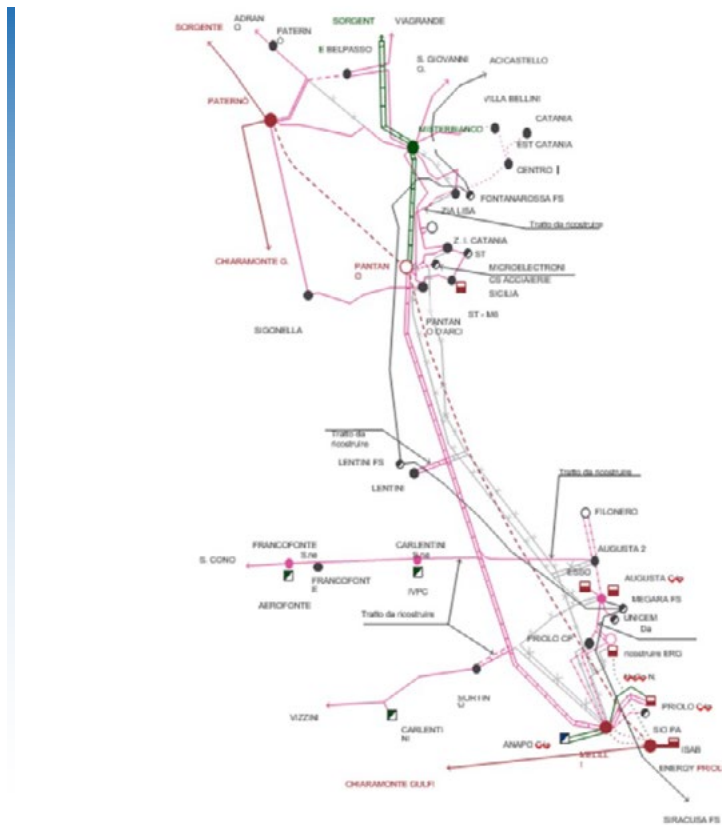
Category: Energy Efficiency – 380 kV Paternò-Pantano-Priolo Power Line (Sicily)

Construction of the 380 kV Paternò-Pantano-Priolo power line will result in interconnection of the 380 kV grid with the 150 kV 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 3 April 2019 (planned amount)	66,871,640 €
Proceeds from the green bond allocated to the project at 31 December 2022 (final amount)	21,993,990 €
Reduction in grid losses	13,200 MWh



380kV Paternò-Pantano-Priolo power line – Category: “Energy efficiency”

Category: Environmentally Sustainable Management of Land Use – Reorganisation of the Grid in the City of Naples

In order to improve the security of the grid in Naples and eliminate operational constraints, the Company has devised a development plan involving the construction of three new 220 kV power lines, reconstruction of the “Main Naples – Caselluccia” line and the demolition of extensive sections of the “Casoria – Naples Levante” line.

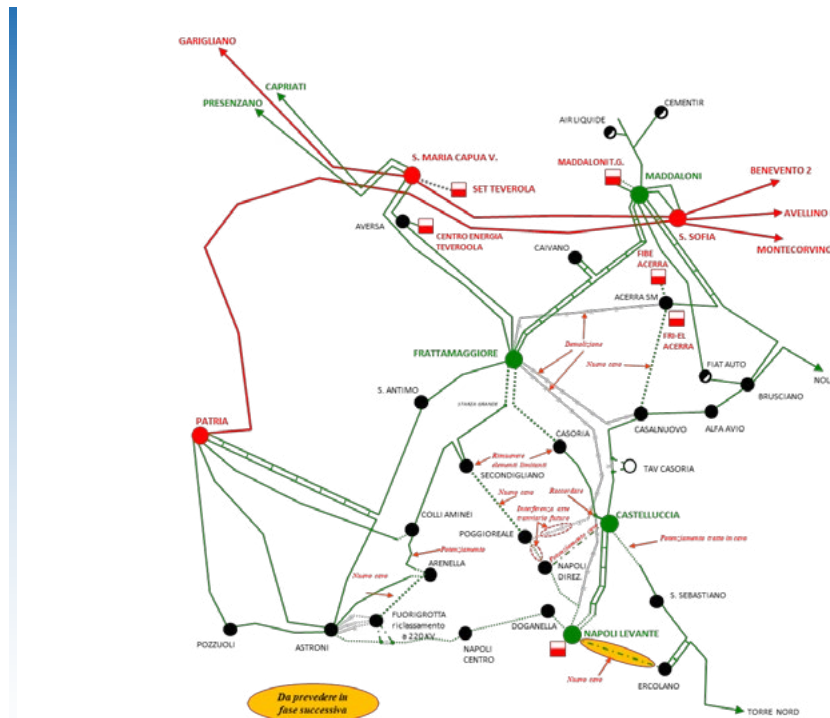
The “Naples Centre” distribution substation is of strategic importance and will be involved in work designed to boost the reliability of the grid.

In addition to laying new cable connections, the project also envisages the decommissioning of a number of 220 kV overhead power lines with environmental and social in terms of the reduced amount of land occupied.

Finally, given the age and reliability of the 60 kV grid in Naples, many of these lines are due to be reorganised or decommissioned, with major benefits for the quality of electricity supply.

The above works will bring benefits in terms of freeing up land, as the following table shows.

DESCRIPTION OF INDICATOR	AMOUNT
Total value of the project included in the Bond at 3 April 2019 (planned amount)	31,995,143 €
Proceeds from the green bond allocated to the project at 31 December 2022 (final amount)	33,868,932 €
Construction of underground cable	18 km
Demolition of lines	31 km



Reorganisation of the grid in the city of Naples – Category: “Environmentally sustainable management of land use”

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

To boost transformer capacity for the 132 kV 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 220/132 kV transformer substation, to be appropriately linked to the 132 kV grid.

At the same time, the 132 kV 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 2022 (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

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 been engaged to perform a limited assurance engagement on the sections "Allocation reporting" and "Impact reporting" included in the Green Bond Report 2022 (the "Report"). The Report has been prepared by Terna S.p.A. (the "Company") on the basis of the following frameworks (the "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 on January 2022 for the Green Bond issued on 2 February 2022 ("GB 6"). Those Frameworks were defined by the Company in accordance respectively: with the Green Bond Principles issued by ICMA "2018 edition" for the Frameworks of July 2018 and July 2020, and with the Green Bond Principles issued by ICMA "2021 edition" for the Frameworks of June 2021 and 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, that are in accordance to the Green Bond Principles. In particular, the Management is responsible for the preparation of the sections "Allocation reporting" and "Impact reporting". The Management is also responsible for such internal control as they determine 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 *Code of Ethics for Professional Accountants* 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.

Our firm applies International Standard on Quality Control 1 (ISQC Italia 1) and, accordingly, maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Auditor's responsibility

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

Specifically, we carried out the following main procedures:

- analysis of the second party opinion which addresses the applicability of the Eligible Green Project categories used in the preparation of the use of proceeds data and the environmental benefits;
- analysis of the design and the implementation of the reporting processes and controls regarding the use of proceeds data and the environmental benefits related to the Green Bonds;
- interviews with the Management in order to understand criteria and processes underlying the generation, the detection and the management of relevant qualitative and quantitative information included in the sections "Allocation reporting" and "Impact reporting";
- reconciliation and verification of quantitative data included in the sections "Allocation reporting" and "Impact reporting";
- interviews with relevant staff at corporate and business level responsible for the use of proceeds and the environmental benefits data gathering and consolidation;
- sample analysis performed through the internal and external documentation gathering and analysis, in order to verify the coherence of the information included in the sections "Allocation reporting" and "Impact reporting" to the Green Bond Principles;
- obtaining the representation letter about 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 sections “Allocation reporting” and “Impact reporting” included in the 2022 Green Bond Report of Terna S.p.A., are not prepared, in all material aspects, in accordance with the Frameworks.

DELOITTE & TOUCHE S.p.A.

Signed by
Monica Palumbo
Partner

Milan, Italy
April 17, 2023

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



