

# Green Lucca Spa



## *Green Bond Impact & Allocation Report*

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## 1. Introduction

Green Lucca S.p.A., as an investment company of the Green Utility S.p.a., holding of Green Utility group, has repowered and developed 55 photovoltaic plants for a current power of about 44 MWp. The production of energy from renewable sources must meet the growing demand for green energy, facing the great challenge of the future: global warming and securing the energy supply. For this reason, the Green Lucca S.p.A. on 9 December 2021 issued a Euro 72,300,000 Senior Secured, Bearer Form Bond, the proceeds of which were used to refinance financial debt arising from some existing photovoltaic projects and to finance the acquisition of additional photovoltaic plants.

The documents under the Green Finance Framework will be published on the company's website ([www.greenlucca.it](http://www.greenlucca.it)) by the end of September 2024.

The Green Bond has been listed on the Italian Stock Exchange in the ExtraMOT PRO Cube segment.

### 1.1 About the Company

Established in 2007 with the aim of reaching a leading position in the Italian renewable energy market, Green Utility Group (following "the Group") has since its inception invested in green initiatives alone or alongside large financial players (e.g., mutual funds, investment companies, Institutional investors, banks, family offices). Green Utility Group's largest investment is Green Lucca S.p.A., an investment company where the 49% is owned by "Fondazione Cassa di Risparmio di Lucca", an Institutional investor with assets equal to Euro 1,195,000,000.

Green Lucca's mission, is to deliver competitive and sustainable renewable energy in Italy. The main sustainability pillars contribute to achieve these goals:

- Annual renewable energy generation in MWh (electricity);
- Capacity of renewable energy plant(s) constructed or restored in MWp;
- Annual CO2 emissions reduced/avoided.

Sustainability is an integral part of the Group's being, and embedded in all business units, including project development, solutions/execution, asset management and operations. Development of solar projects may have environmental and social impacts. The Group thus endeavours to contribute facing the climate challenge and bridging the Italian energy gap.

## 2. Impact Report

On average, the equivalent of 2.56 kWh in the form of fossil fuels are burned to produce 1 kWh, consequently about 0.531 kg of carbon dioxide is emitted into the air. Based on the energy output from the acquired plants, it is estimated that in 2023, the emission of approximately 2,725,077 kg of CO2 was avoided. Projections at regime suggest that a total of 6,049,999 kg of CO2 emissions will be prevented. To calculate the avoided CO2 emissions, Green Lucca determines the amount of energy produced by PV systems acquired through the Green Bond fund. This calculation is based on the average output of these PV systems over the past five years. In cases where revamping work has been carried out, the calculation

system has been appropriately adjusted to ensure accuracy and reflect the improved efficiency of the systems.

Finally, these outputs have been multiplied by the amount of emissions that each kWh produced by the PV systems avoided. This final value is identified by the AIB report and is equal to 0.531kg of CO<sub>2</sub> for each kWh produced.

Project - Category	Investment attributable to the bond €m			Generating capacity attributable to the bond (MWp)			Emissions avoided attributable to the bond (Kg CO2)		
	2022 Green Senior Bond	2023 Green Senior Bond	2024 Green Senior Bond	2022 Green Senior Bond	2023 Green Senior Bond	2024 Green Senior Bond	2022 Green Senior Bond	2023 Green Senior Bond	2024 Green Senior Bond
SOLAR	7.46	1.7	5.67	2.72	2.46	2.98	1,635,483	2,020,366	1,916,090

Note: Plant capacities are inclusive of Revamping/Repowering work.

### 3. Use of Proceeds

Green Lucca allocated an amount equal to the net proceeds of the Green Bond issue to:

- i. reimburse all current financial indebtedness arising in connection with existing photovoltaic projects and cancel the related security documents as well as the ones connected to specific leasing agreements;
- ii. finance the acquisition electricity generation facilities that produce electricity using solar photovoltaic (PV) technology, as well as the installation, maintenance and repair of renewable energy technologies (**4.1 EU Taxonomy for sustainable activities**); finance the assets or activities that meet the eligibility requirements defined below and provide distinct environmental benefits (e.g., additional photovoltaic plants);
- iii. finance the revamping/repowering of the Group's photovoltaic plants to recover productivity and increase performance. Revamping involves upgrading or replacing existing components of PV systems to restore or improve their efficiency and output. Repowering refers to the process of enhancing the capacity and performance of existing plants by integrating advanced technologies and optimizing the use of available surfaces to maximize energy production and efficiency.
- iv. finance the acquisition of solar plants on industrial areas/roofs and/or environmentally compromised areas to recover them for productive use;

such criteria meet the Eligibility Criteria (as defined below) (collectively, the "Green Eligible Assets"). Green Lucca has allocated 79,5% of the proceeds in refinancing and repayment transactions and the remaining 20,5% in financing activities.

The investments related to the Green Bond are shown below:

- **QUALIFIED INVESTMENT ACQUIRED DURING 2022:**
  - Bellante 3 project: The Bellante 3 project involves the acquisition and subsequent revamping and repowering of a photovoltaic plant with an installed capacity of 737,31 kWp, located in Chiareto, within the municipality of Bellante, Abruzzo. Initially developed and owned by UE Spa, the plant was officially connected to the grid on October 28, 2011. The revamping process aims to replace existing older generation photovoltaic modules with modern, high-efficiency models, alongside the installation of new inverters and other components. The project also includes expanding capacity with an additional non-incentivized section of about 160 kWp. The comprehensive investment totals approximately 1.6 million euros.

- Porto Torres project: A photovoltaic plant with a total capacity of 1.81 MWp, including revamping work, with an investment of 5.9 million euros. This project involves the acquisition and partial revamping of two operational photovoltaic plants in Porto Torres, Sardinia, named "Capannone Vivaldi" and "Pensiline Vivaldi." The Capannone Vivaldi plant has a capacity of 675 kWp and is installed on the roofs of an industrial building, while the Pensiline Vivaldi plant, with a capacity of 785 kWp, is located on car park canopies. The investment also includes revamping and repowering activities to enhance plant performance by installing new-generation bifacial photovoltaic modules and updating inverters.

- **QUALIFIED INVESTMENT ACQUIRED DURING 2023:**

- Sole in Sicilia (Solvestia) project: Includes photovoltaic plants with a total capacity of 2.45 MWp, including revamping work, and an investment of 1.7 million euros. This project involves the acquisition and revamping of two photovoltaic plants in Sicily: the Portachiusa Plant in Francofonte with a capacity of 977.13 kWp and the Masseria Orfanelle Plant in Belpasso with a capacity of 977.60 kWp. The Portachiusa Plant benefits from the "V Conto Energia" Feed-in-Tariff until 2033, while the Masseria Orfanelle Plant operates under a Power Purchase Agreement.

The project includes revamping work, particularly replacing the inverter at the Masseria Orfanelle Plant to boost efficiency, aiming for a production of 1,573 kWh/kWp.

- **QUALIFIED INVESTMENT ACQUIRED DURING 2024:**

- Deca project: This project involves the acquisition and revamping of two photovoltaic plants in the Piedmont region of Northern Italy, specifically in the municipality of Canelli. The total capacity of these plants is 1,993.7 kWp, comprising the Canelli 3 Plant (997.92 kWp) and the Canelli 2 Plant (995.76 kWp). Both plants benefit from the "II Conto Energia" Feed-in-Tariff, ensuring a fixed rate for energy production until December 2030.

The revamping work aims to enhance the performance and efficiency of the plants, potentially increasing annual production by 15% to 20%. This involves technological upgrades and maintenance to improve overall productivity. The total investment for this project is 5.6 million euros.

A total of 14.8 million euros has been allocated for new acquisitions.





Project	Plant	Date	Region	Type	Power (MWp)	Revamping & Repowering	Annual Production (MWh)	CO2 Avoided (Kg)
<b>BELLANTE</b>	Bellante	05/2022	Abruzzo (TE)	Solar Ground	0,90	Yes	1.259	668.481
<b>PORTO TORRES</b>	Capannoni Vivaldi	12/2022	Sardegna (SS)	Solar Roof	0,68	No	1.013	537.638
	Pensiline Vivaldi	12/2022	Sardegna (SS)	Solar Solar Carport	1,14	Yes	1.709	907.425
<b>SOLVESTIA</b>	Masseria Orfanelle	03/2023	Sicilia (CT)	Solar Ground	1,48	Yes	2.290	1.216.139
	Portachiusa	03/2023	Sicilia (CT)	Solar Ground	0,98	No	1.515	804.227
<b>DECA</b>	Canelli 2	03/2024	Piemonte (AT)	Solar Ground	1,49	Yes	1.804	958.045
	Canelli 3	03/2024	Piemonte (AT)	Solar Ground	1,49	Yes	1.804	958.045
<b>TOTAL</b>					<b>8,15</b>		<b>11.394</b>	<b>6.049.999</b>

The investments in Green Eligible Assets made by Green Lucca have contributed to reducing the carbon



footprint in the geographic areas where Green Lucca operates, thus having a strong positive environmental impact.

The Green Eligible Assets are defined as investments that promote the green energy transition, such as direct investments in renewable energy. This may include the acquisition of such projects and investment by acquiring the capital of companies that own such assets.

Eligible Green Activity	Project category	Contribution to SDGs and to the EnBW key performance indicators	Contribution to the EU taxonomy
Renewable energies	Solar (photovoltaic) energy generation	<ul style="list-style-type: none"> <li>Expand renewable energies (RE): Installed output of RE in GW and the generation capacity accounted for by RE in %</li> <li>Climate protection: CO2 intensity in g/kWh</li> </ul>	    4.1 Electricity generation using solar photovoltaic technology





GBP Eligible Project Category	Eligibility Criteria and Example Projects	SDG's Alignment
Renewable Energy	Investment activities, acquisitions and expenditures related to the construction, development, construction, operation, improvement and maintenance of electricity generation facilities that produce electricity from solar power.	   

Figure 2 GBP Eligible Project Category

Through the issue of the Green Bond, Green Lucca has contributed to the achievement of one or more of the following environmental objectives of the EU Sustainable Finance Taxonomy:

1. Climate change mitigation;
2. Climate change adaptation;

The use of proceeds helped Italy support the 2030 SDGs, by contributing to:

- a. Goal 7: Affordable and Clean Energy;
- b. Goal 11: Sustainable Cities and Communities;
- c. Goal 12: Responsible Consumption and Production;
- d. Goal 13: Climate Action.

Eligible Green Assets are considered to provide environmental benefits that mainly contribute to:

- e. Avoid and reduce CO2 emissions;
- f. Create independence of supply sources;
- g. Reduce energy loss to the grid through on-site energy consumption;
- h. Provide renewable energy production facilities to the Italian energy grid;
- i. Diversify the national energy grid and stabilize the cost of electricity from renewable energy for consumers.

## 4. Process for asset evaluation and selection

### 4.1 Selection of Green Eligible Assets and Eligibility Criteria

The screening process for eligible green projects is executed and coordinated by Green Lucca Board of Directors, with the support of senior management of Green Utility's Investment Management Department, such as the Financial Director, the General Managers of the Property Management Division and the System Integration Division. Green Lucca has conducted a screening and selection process for each Eligible Green Asset to ensure that it meets the eligibility criteria described in this Green Bond Framework. Green Lucca has periodically published data on its website regarding disputes or potential ESG risks identified in the framework agreement in order to ensure transparent administration.

Listed below are the main stages of the investment selection and implementation process that has been carried out by Green Lucca:

**Acquisition and analysis of the dossier:** Preliminary analysis of the technical documentation received and economic evaluation of the opportunity, verifying that this opportunity is in line with the investment process and the business plan of the Company;

**Drafting of an information memorandum:** Drafting of a description document of the investment project and summary of the preliminary technical and economic analysis. This activity is carried out with the support of the outsourcer Green Utility; signature of a Non-Binding Offer;

**BoD:** The Board of Directors verifies (i) Investment convenience for Green Lucca (ii) Consistency with defined investment principles;

**Due Diligence analysis:** Due diligence activities through the analysis of the full technical, fiscal and administrative documentation, as well as the appropriate site visits necessary to verify the technical maintenance status of the solar plant. These activities are entrusted to primary advisors;

**Definition of final transfer agreements:** Includes Binding Offer, share transfer agreement (if needed), business unit transfer appraisals and accessory investment agreements;

**BoD (investment resolution):** The Board of Directors verifies (i) completeness of the due diligence activities and (ii) congruity with respect to business plan.

Eligible Green Assets must meet all of the following criteria:

- a. all projects meet local environmental legal requirements, including an environmental impact assessment.
- b. all projects, or portions thereof, are not currently assigned to another green financing instrument issued by Green Lucca or its subsidiaries or affiliates; and
- c. all projects will undergo an evaluation to ensure that development, construction and operation have been and are being performed in accordance with Green Lucca's corporate governance and regulatory policies, social responsibility policies and/or corporate sustainability guidelines and strategies, and compliance policies,

(collectively, the "**Eligibility Criteria**").

## 5. External Review

## 5.1 Second party opinion

ISS ESG, an internationally specialized sustainability rating agency, has confirmed that all the Green Bond complies with the Green Bond Principles based on the criteria of the International Capital Market Association (ICMA). Capital Market Association (ICMA). In addition, ISS ESG confirmed our compliance in relation to Green Bond Principles, sustainability of selection criteria, and alignment with EU taxonomy.